

Version 1.1

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- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

CALIFORNIA, USA ONLY

The Lithium battery adopted on this motherboard contains Perchlorate, a toxic substance controlled in Perchlorate Best Management Practices (BMP) regulations passed by the California Legislature. When you discard the Lithium battery in California, USA, please follow the related regulations in advance.

“Perchlorate Material-special handling may apply, see www.dtsc.ca.gov/hazardouswaste/perchlorate”

ASRock Website: <http://www.asrock.com>

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Fatal1ty Story

Who knew that at age 19, I would be a World Champion PC gamer. When I was 13, I actually played competitive billiards in professional tournaments and won four or five games off guys who played at the highest level. I actually thought of making a career of it, but at that young age situations change rapidly. Because I've been blessed with great hand-eye coordination and a grasp of mathematics (an important element in video gaming) I gravitated to that activity.

GOING PRO

I started professional gaming in 1999 when I entered the CPL (Cyberathlete Professional League) tournament in Dallas and won \$4,000 for coming in third place. Emerging as one of the top players in the United States, a company interested in sponsoring me flew me to Sweden to compete against the top 12 players in the world. I won 18 straight games, lost none, and took first place, becoming the number one ranked Quake III player in the world in the process. Two months later I followed that success by traveling to Dallas and defending my title as the world's best Quake III player, winning the \$40,000 grand prize. From there I entered competitions all over the world, including Singapore, Korea, Germany, Australia, Holland and Brazil in addition to Los Angeles, New York and St. Louis.

WINNING STREAK

I was excited to showcase my true gaming skills when defending my title as CPL Champion of the year at the CPL Winter 2001 because I would be competing in a totally different first person shooter (fps) game, Alien vs. Predator II. I won that competition and walked away with a new car. The next year I won the same title playing Unreal Tournament 2003, becoming the only three-time CPL champion of the year. And I did it playing a different game each year, something no one else has ever done and a feat of which I am extremely proud.

At QuakeCon 2002, I faced off against my rival ZeRo4 in one of the most highly anticipated matches of the year, winning in a 14 to (-1) killer victory. Competing at Quakecon 2004, I became the World's 1st Doom3 Champion by defeating Daler in a series of very challenging matches and earning \$25,000 for the victory.

Since then Fatal1ty has traveled the globe to compete against the best in the world, winning prizes and acclaim, including the 2005 CPL World Tour Championship in New York City for a \$150,000 first place triumph. In August 2007, Johnathan was awarded the first ever Lifetime Achievement Award in the four year history of the eSports-Award for "showing exceptional sportsmanship, taking part in shaping eSports into what it is today and for being the prime representative of this young sport. He has become the figurehead for eSports worldwide".

LIVIN' LARGE

Since my first big tournament wins, I have been a “Professional Cyberathlete”, traveling the world and livin' large with lots of International media coverage on outlets such as MTV, ESPN and a 60 Minutes segment on CBS to name only a few. It's unreal - it's crazy. I'm living a dream by playing video games for a living. I've always been athletic and took sports like hockey and football very seriously, working out and training hard. This discipline helps me become a better gamer and my drive to be the best has opened the doors necessary to become a professional.

A DREAM

Now, another dream is being realized – building the ultimate gaming computer, made up of the best parts under my own brand. Quality hardware makes a huge difference in competitions...a couple more frames per second and everything gets really nice. It's all about getting the computer processing faster and allowing more fluid movement around the maps.

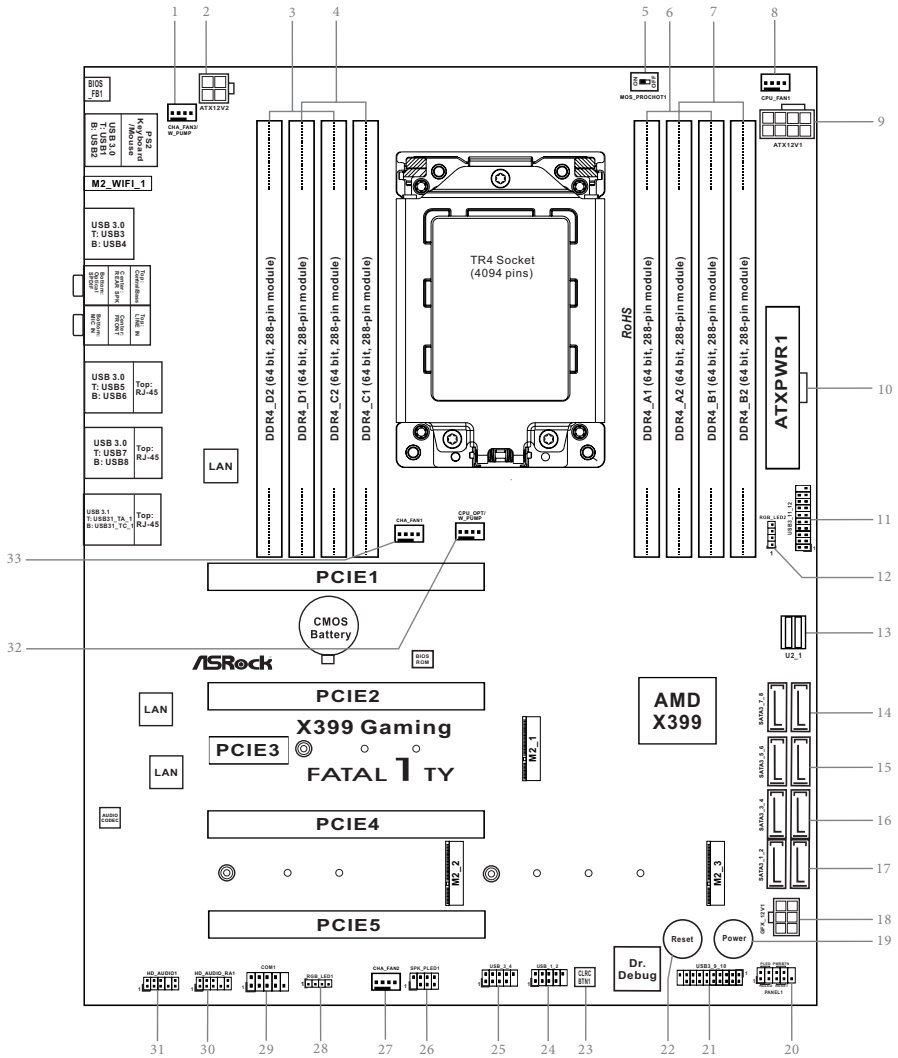
My vision for Fatal1ty hardware is to allow gamers to focus on the game without worrying about their equipment, something I've preached since I began competing. I don't want to worry about my equipment. I want to be there – over and done with - so I can focus on the game. I want it to be the fastest and most stable computer equipment on the face of the planet, so quality is what Fatal1ty Brand products represent.



Johnathan “Fatal1ty” Wendel

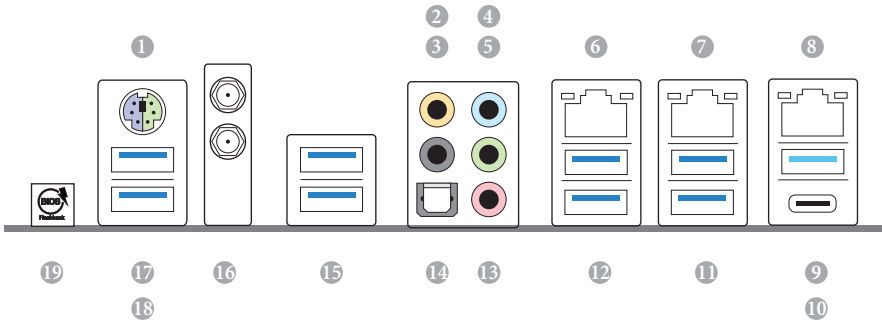


Motherboard Layout



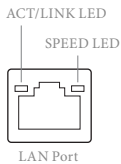
No.	Description
1	Chassis Fan / Waterpump Fan Connector (CHA_FAN3/W_PUMP)
2	4 pin 12V Power Connector (ATX12V2)
3	2 x 288-pin DDR4 DIMM Slots (DDR4_D2, DDR4_C2)
4	2 x 288-pin DDR4 DIMM Slots (DDR4_D1, DDR4_C1)
5	CPU Xtreme OC Switch (MOS_PROCHOT1)
6	2 x 288-pin DDR4 DIMM Slots (DDR4_A1, DDR4_B1)
7	2 x 288-pin DDR4 DIMM Slots (DDR4_A2, DDR4_B2)
8	CPU Fan Connector (CPU_FAN1)
9	8 pin 12V Power Connector (ATX12V1)
10	ATX Power Connector (ATXPWR1)
11	USB 3.0 Header (USB3_11_12)
12	RGB LED Header (RGB_LED2)
13	U.2 Connector (U2_1)
14	SATA3 Connectors (SATA3_7_8)
15	SATA3 Connectors (SATA3_5_6)
16	SATA3 Connectors (SATA3_3_4)
17	SATA3 Connectors (SATA3_1_2)
18	Graphics 12V Power Connector (GFX_12V1)
19	Power Switch (PWRBTN1)
20	System Panel Header (PANEL1)
21	USB 3.0 Header (USB3_9_10)
22	Reset Switch (RSTBTN1)
23	Clear CMOS Switch (CLRCBTN1)
24	USB 2.0 Header (USB_1_2)
25	USB 2.0 Header (USB_3_4)
26	Power LED and Speaker Header (SPK_PLED1)
27	Chassis Fan Connector (CHA_FAN2)
28	RGB LED Header (RGB_LED1)
29	COM Port Header (COM1)
30	Right Angle Front Panel Audio Header (HD_AUDIO_RA1)
31	Front Panel Audio Header (HD_AUDIOI1)
32	CPU Fan / Waterpump Fan Connector (CPU_OPT/W_PUMP)
33	Chassis Fan Connector (CHA_FAN1)

I/O Panel



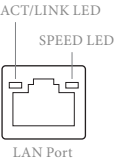
No.	Description	No.	Description
1	PS/2 Mouse/Keyboard Port (PS2_KB1)	11	USB 3.0 Ports (USB3_7_8)
2	Central / Bass (Orange)	12	USB 3.0 Ports (USB3_5_6)****
3	Rear Speaker (Black)	13	Microphone (Pink)
4	Line In (Light Blue)	14	Optical SPDIF Out Port
5	Front Speaker (Lime)***	15	USB 3.0 Ports (USB3_3_4)
6	10 GLAN RJ-45 Port (AQUANTIA® AQC107)**	16	Antenna Ports
7	LAN RJ-45 Port (Intel® I211AT)*	17	Fatal1ty Mouse Port (USB3_1)
8	LAN RJ-45 Port (Intel® I211AT)*	18	USB 3.0 Port (USB3_2)
9	USB 3.1 Type-A Port (USB31_TA_1)	19	BIOS Flashback Switch
10	USB 3.1 Type-C Port (USB31_TC_1)		

* There are two LEDs on each LAN port. Please refer to the table below for the LAN port LED indications.



Activity / Link LED		Speed LED	
Status	Description	Status	Description
Off	No Link	Orange	10Mbps connection
Blinking	Data Activity	Orange	100Mbps connection
On	Link	Green	1Gbps connection

** There are two LEDs on each LAN port. Please refer to the table below for the LAN port LED indications.



Activity / Link LED		Speed LED	
Status	Description	Status	Description
Off	No Link	Orange	100Mbps/1Gbps/2.5Gbps connection
Blinking	Data Activity	Green	10Gbps connection
On	Link		

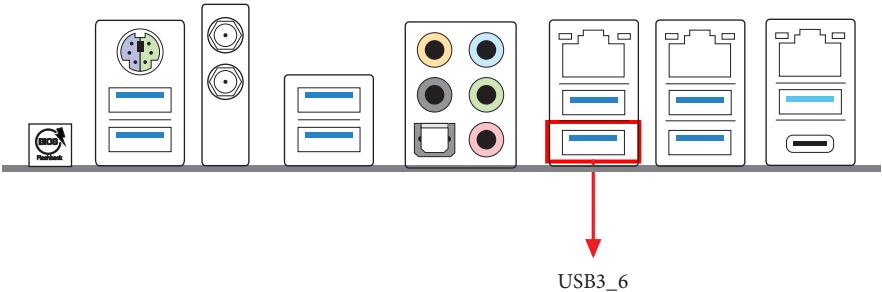
*** If you use a 2-channel speaker, please connect the speaker's plug into "Front Speaker Jack". See the table below for connection details in accordance with the type of speaker you use.

Audio Output Channels	Front Speaker (No. 5)	Rear Speaker (No. 3)	Central / Bass (No. 2)	Line In (No. 4)
2	V	--	--	--
4	V	V	--	--
6	V	V	V	--
8	V	V	V	V



To enable Multi-Streaming, you need to connect a front panel audio cable to the front panel audio header. After restarting your computer, you will find the "Mixer" tool on your system. Please select "Mixer ToolBox" , click "Enable playback multi-streaming", and click "ok". Choose "2CH", "4CH", "6CH", or "8CH" and then you are allowed to select "Realtek HDA Primary output" to use the Rear Speaker, Central/Bass, and Front Speaker, or select "Realtek HDA Audio 2nd output" to use the front panel audio.

**** ACPI wake-up function is not supported on USB3_6 port.



Chapter 1 Introduction

Thank you for purchasing ASRock Fatal1ty X399 Professional Gaming Series motherboard, a reliable motherboard produced under ASRock's consistently stringent quality control. It delivers excellent performance with robust design conforming to ASRock's commitment to quality and endurance.



Because the motherboard specifications and the BIOS software might be updated, the content of this documentation will be subject to change without notice. In case any modifications of this documentation occur, the updated version will be available on ASRock's website without further notice. If you require technical support related to this motherboard, please visit our website for specific information about the model you are using. You may find the latest VGA cards and CPU support list on ASRock's website as well. ASRock website <http://www.asrock.com>.

1.1 Package Contents

- ASRock Fatal1ty X399 Professional Gaming Series Motherboard (ATX Form Factor)
- ASRock Fatal1ty X399 Professional Gaming Series Quick Installation Guide
- ASRock Fatal1ty X399 Professional Gaming Series Support CD
- 1 x I/O Panel Shield
- 4 x Serial ATA (SATA) Data Cables (Optional)
- 1 x ASRock 3-Way SLI Bridge Card (Optional)
- 1 x ASRock 4-Way SLI-S111 Bridge Card (Optional)
- 1 x ASRock SLI_HB_Bridge_3S Card (Optional)
- 2 x ASRock WiFi 2.4/5 GHz Antennas (Optional)
- 3 x Screws for M.2 Sockets (Optional)

1.2 Specifications

- Platform**
- ATX Form Factor
 - 8 Layer PCB
 - 2oz Copper PCB

- CPU**
- Supports AMD TR4 Socket Ryzen Threadripper Series CPUs
 - IR Digital PWM
 - 11 Power Phase design
 - Supports ASRock Hyper BCLK Engine III

- Chipset**
- AMD X399

- Memory**
- Quad Channel DDR4 Memory Technology
 - 8 x DDR4 DIMM Slots
 - Supports DDR4 3600+(OC)/3200(OC)/2933(OC)/2667/2400/2133 ECC & non-ECC, un-buffered memory*
 - * Please refer to Memory Support List on ASRock's website for more information. (<http://www.asrock.com/>)
 - Max. capacity of system memory: 128GB
 - 15μ Gold Contact in DIMM Slots

- Expansion Slot**
- 4 x PCI Express 3.0 x16 Slots (PCIe1/PCIe2/PCIe4/PCIe5: single at x16 (PCIe1); dual at x16 (PCIe1) / x16 (PCIe4); triple at x16 (PCIe1) / x8 (PCIe2) / x16 (PCIe4); quad at x16 (PCIe1) / x8 (PCIe2) / x16 (PCIe4) / x8 (PCIe5))*
 - * Supports NVMe SSD as boot disks
 - 1 x PCI Express 2.0 x1 Slot
 - Supports AMD Quad CrossFireX™, 4-Way CrossFireX™, 3-Way CrossFireX™ and CrossFireX™
 - Supports NVIDIA® Quad SLI™, 4-Way SLI™, 3-Way SLI™ and SLI™
 - 1 x Vertical M.2 Socket (Key E) with the bundled WiFi-802.11ac module (on the rear I/O)
 - 15μ Gold Contact in VGA PCIe Slot (PCIe1 and PCIe4)

- Audio**
- 7.1 CH HD Audio with Content Protection (Realtek ALC1220 Audio Codec)
 - Premium Blu-ray Audio support

- Supports Surge Protection
- Nichicon Fine Gold Series Audio Caps
- 120dB SNR DAC with Differential Amplifier
- TI® NE5532 Premium Headset Amplifier for Front Panel Audio Connector (Supports up to 600 Ohm headsets)
- Pure Power-In
- Direct Drive Technology
- PCB Isolate Shielding
- Impedance Sensing on Line Out port
- Individual PCB Layers for R/L Audio Channel
- RGB LED
- Gold Audio Jacks
- 15μ Gold Audio Connector
- Supports Creative SoundBlaster Cinema3

LAN

1 x 10 Gigabit LAN 100/1000/2500/5000/10000 Mb/s (AQUANTIA® AQC107):

- Supports Wake-On-LAN
- Supports Lightning/ESD Protection
- Supports PXE

2 x Intel Gigabit LAN 10/100/1000 Mb/s (2 x Intel® I211AT):

- Supports Wake-On-LAN
- Supports Lightning/ESD Protection
- Supports Energy Efficient Ethernet 802.3az
- Supports PXE

Wireless

LAN

- Intel® 802.11ac WiFi Module (Free Bundle)
- Supports IEEE 802.11a/b/g/n/ac
- Supports Dual-Band (2.4/5 GHz)
- Supports high speed wireless connections up to 433Mbps
- Supports Bluetooth 4.2 / 3.0 + High speed class II

Rear Panel I/O

- 2 x Antenna Ports
- 1 x PS/2 Mouse/Keyboard Port
- 1 x Optical SPDIF Out Port
- 1 x USB 3.1 Type-A Port (10 Gb/s) (Supports ESD Protection)
- 1 x USB 3.1 Type-C Port (10 Gb/s) (Supports ESD Protection)

- 8 x USB 3.0 Ports (Supports ESD Protection)
- * Ultra USB Power is supported on USB3_6 port.
- * ACPI wake-up function is not supported on USB3_6 port.
- * 1 x FatalIty Mouse Port (USB 3.0) is included
- 3 x RJ-45 LAN Ports with LED (ACT/LINK LED and SPEED LED)
- 1 x BIOS Flashback Switch
- HD Audio Jacks: Rear Speaker / Central / Bass / Line in / Front Speaker / Microphone (Gold Audio Jacks)

Storage

- 8 x SATA3 6.0 Gb/s Connectors, support RAID (RAID 0, RAID 1 and RAID 10), NCQ, AHCI and Hot Plug
- 2 x Ultra M.2 Sockets (M2_1 and M2_2), support M Key type 2242/2260/2280 M.2 SATA3 6.0 Gb/s module and M.2 PCI Express module up to Gen3 x4 (32 Gb/s)*
- 1 x Ultra M.2 Socket (M2_3), supports M Key type 2230/2242/2260/2280 M.2 SATA3 6.0 Gb/s module and M.2 PCI Express module up to Gen3 x4 (32 Gb/s)*
- * Supports NVMe SSD as boot disks
- * Supports ASRock U.2 Kit
- 1 x U.2 Connector
- * If U.2 Connector is plugged, M2_1 will be disabled

Connector

- 1 x COM Port Header
- 1 x Power LED and Speaker Header
- 2 x RGB LED Headers
- * Each header supports up to 12V/3A, 36W LED Strip
- 1 x CPU Fan Connector (4-pin)
- * The CPU Fan Connector supports the CPU fan of maximum 1A (12W) fan power.
- 1 x CPU Optional/Water Pump Fan Connector (4-pin) (Smart Fan Speed Control)
- * The CPU Optional/Water Pump Fan supports the water cooler fan of maximum 1.5A (18W) fan power.
- 2 x Chassis Fan Connectors (4-pin) (Smart Fan Speed Control)
- 1 x Chassis Optional/Water Pump Fan Connector (4-pin) (Smart Fan Speed Control)

* The Chassis Optional/Water Pump Fan supports the water cooler fan of maximum 1.5A (18W) fan power.

* CPU_FAN1, CHA_FAN1, CHA_FAN2, CPU_OPT/W_PUMP and CHA_FAN3/W_PUMP can auto detect if 3-pin or 4-pin fan is in use.

- 1 x 24 pin ATX Power Connector (Hi-Density Power Connector) (for Motherboard)
- 1 x 8 pin 12V Power Connector (Hi-Density Power Connector) (for Motherboard)
- 1 x 4 pin 12V Power Connector (Hi-Density Power Connector) (for Motherboard)
- 1 x 6 pin 12V Power Connector (Hi-Density Power Connector) (for PCIe graphics card)
- 1 x Front Panel Audio Connector (15μ Gold Audio Connector)*
- 1 x Right Angle Front Panel Audio Connector*

* Connect the audio device to either one of the audio connectors.

- 2 x USB 2.0 Headers (Support 4 USB 2.0 ports) (Supports ESD Protection)
- 2 x USB 3.0 Headers (Support 4 USB 3.0 ports) (Supports ESD Protection)
- 1 x Clear CMOS Switch
- 1 x Dr. Debug with LED
- 1 x Power Switch with LED
- 1 x Reset Switch with LED
- 1 x CPU Xtreme OC Switch

BIOS Feature

- AMI UEFI Legal BIOS with GUI support
- Supports “Plug and Play”
- ACPI 5.1 compliance wake up events
- Supports jumperfree
- SMBIOS 2.3 support
- CPU, VCORE_NB, DRAM, VPPM, PCH 1.05V, +1.8V, VDDP, PROM 2.5V, Voltage Multi-adjustment

Hardware Monitor

- Temperature Sensing: CPU, CPU Optional/Water Pump, Chassis, Chassis Optional/Water Pump Fans
- Fan Tachometer: CPU, CPU Optional/Water Pump, Chassis, Chassis Optional/Water Pump Fans

- Quiet Fan (Auto adjust chassis fan speed by CPU temperature): CPU, CPU Optional/Water Pump, Chassis, Chassis Optional/Water Pump Fans
- Fan Multi-Speed Control: CPU, CPU Optional/Water Pump, Chassis, Chassis Optional/Water Pump Fans
- Voltage monitoring: +12V, +5V, +3.3V, CPU Vcore, VCORE_NB, DRAM, PCH 1.05V, +1.8V, VDDP

OS

- Microsoft® Windows® 10 64-bit
- * Windows® 10 RS2 is supported.
- * For the updated Windows® 10 driver, please visit ASRock's website for details: <http://www.asrock.com>

Certifications

- FCC, CE
- ErP/EuP ready (ErP/EuP ready power supply is required)

* For detailed product information, please visit our website: <http://www.asrock.com>



Please realize that there is a certain risk involved with overclocking, including adjusting the setting in the BIOS, applying Untied Overclocking Technology, or using third-party overclocking tools. Overclocking may affect your system's stability, or even cause damage to the components and devices of your system. It should be done at your own risk and expense. We are not responsible for possible damage caused by overclocking.

1.3 WiFi-802.11ac Module and ASRock WiFi 2.4/5 GHz Antenna

WiFi-802.11ac + BT Module

This motherboard comes with an exclusive WiFi 802.11 a/b/g/n/ac + BT v4.2 module (pre-installed on the rear I/O panel) that offers support for WiFi 802.11 a/b/g/n/ac connectivity standards and Bluetooth v4.2. WiFi + BT module is an easy-to-use wireless local area network (WLAN) adapter to support WiFi + BT. Bluetooth v4.2 standard features Smart Ready technology that adds a whole new class of functionality into the mobile devices. BT 4.2 also includes Low Energy Technology and ensures extraordinary low power consumption for PCs.

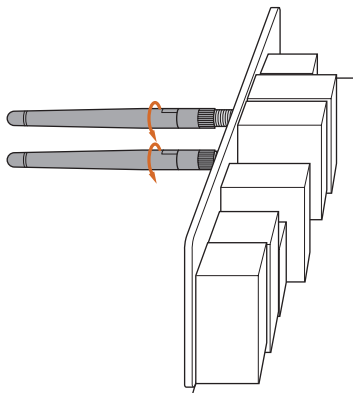
* The transmission speed may vary according to the environment.

WiFi Antennas Installation Guide



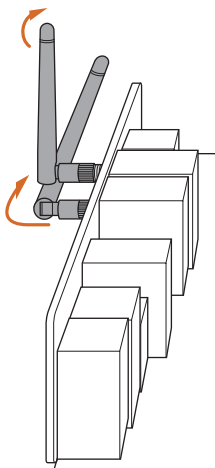
Step 1

Prepare the WiFi 2.4/5 GHz Antennas that come with the package.



Step 2

Connect the two WiFi 2.4/5 GHz Antennas to the antenna connectors. Turn the antenna clockwise until it is securely connected.



Step 3

Set the WiFi 2.4/5 GHz Antenna as shown in the illustration.

*You may need to adjust the direction of the antenna for a stronger signal.

Chapter 2 Installation

This is an ATX form factor motherboard. Before you install the motherboard, study the configuration of your chassis to ensure that the motherboard fits into it.

Pre-installation Precautions

Take note of the following precautions before you install motherboard components or change any motherboard settings.

- Make sure to unplug the power cord before installing or removing the motherboard components. Failure to do so may cause physical injuries and damages to motherboard components.
- In order to avoid damage from static electricity to the motherboard's components, NEVER place your motherboard directly on a carpet. Also remember to use a grounded wrist strap or touch a safety grounded object before you handle the components.
- Hold components by the edges and do not touch the ICs.
- Whenever you uninstall any components, place them on a grounded anti-static pad or in the bag that comes with the components.
- When placing screws to secure the motherboard to the chassis, please do not over-tighten the screws! Doing so may damage the motherboard.

2.1 Installing the CPU

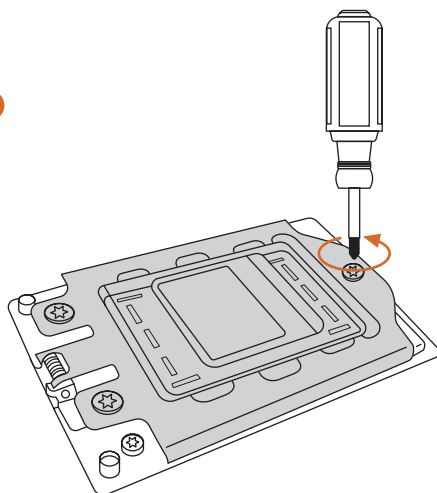


Tutorial Video

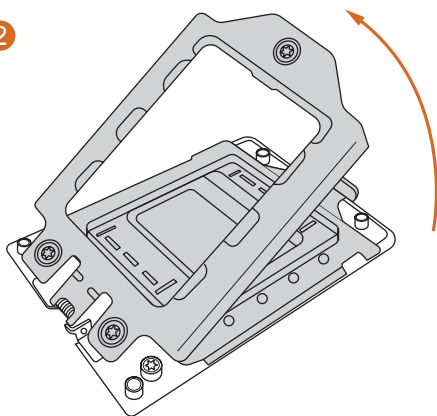


Unplug all power cables before installing the CPU.

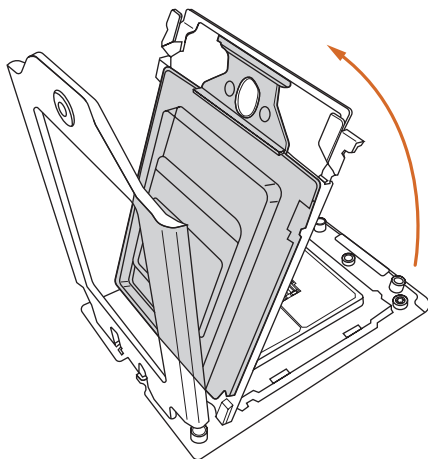
1



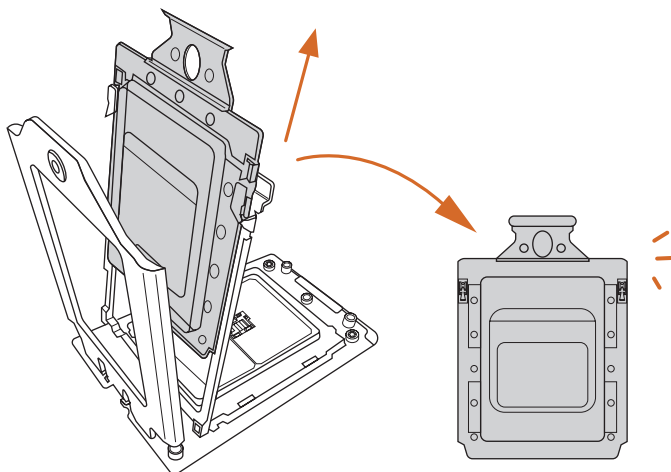
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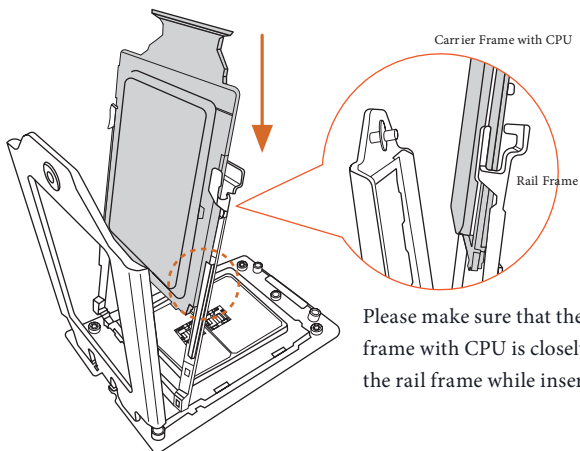
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4



5

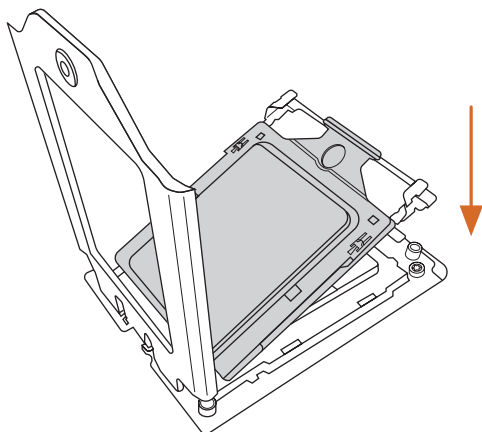


Please make sure that the carrier frame with CPU is closely attached to the rail frame while inserting it.

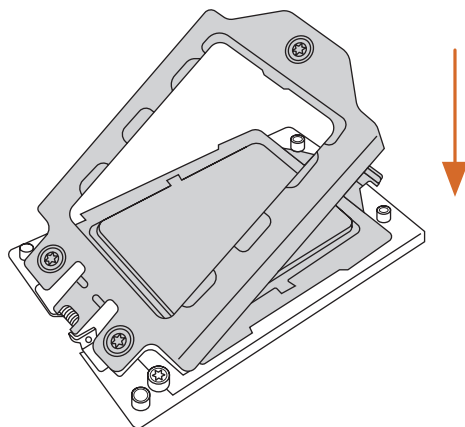


Install the orange carrier frame with CPU. Don't separate them.

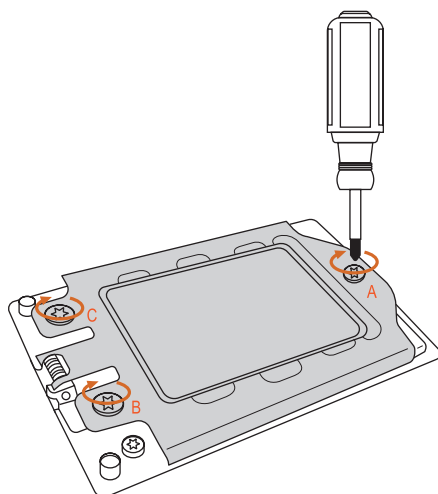
6



7



8



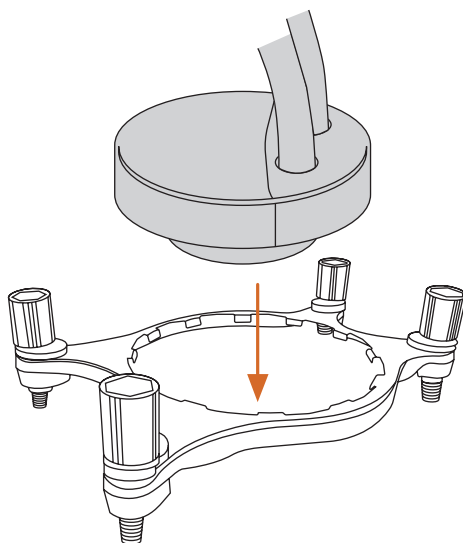
2.2 Installing the CPU Liquid Cooler

After you install the CPU into this motherboard, it is necessary to install a larger heatsink and cooling fan to dissipate heat. You also need to spray thermal grease between the CPU and the heatsink to improve heat dissipation. Make sure that the CPU and the heatsink are securely fastened and in good contact with each other.

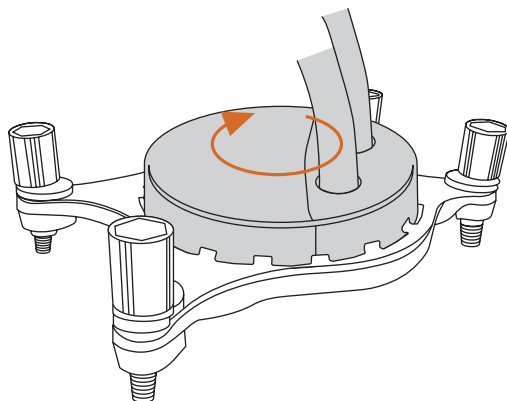


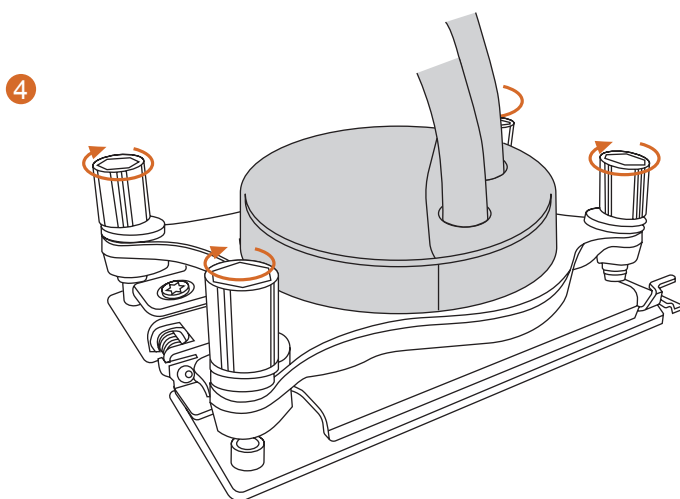
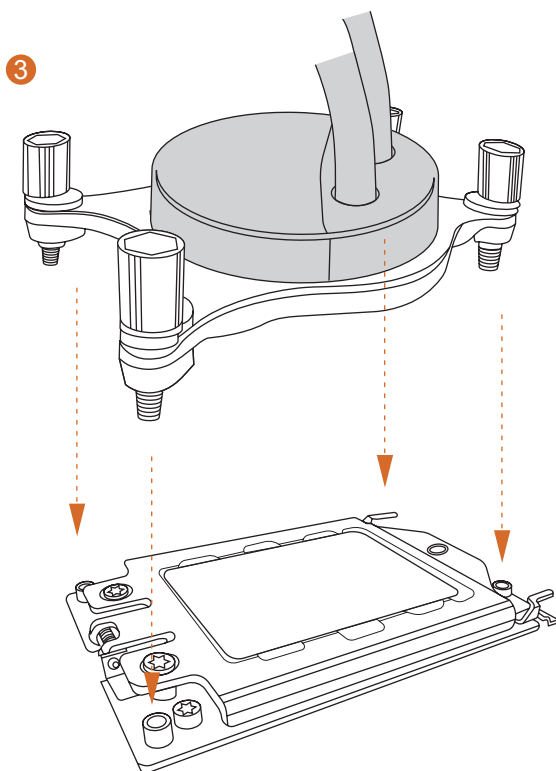
Please turn off the power or remove the power cord before changing a CPU or heatsink.

1



2





2.3 Installation of Memory Modules (DIMM)

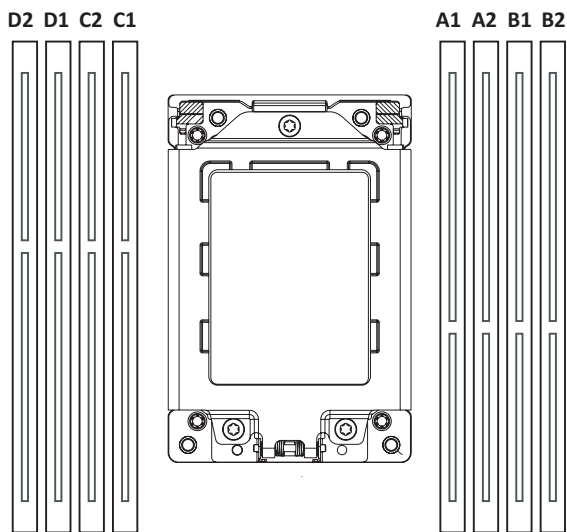
This motherboard provides eight 288-pin DDR4 (Double Data Rate 4) DIMM slots, and supports Quad Channel Memory Technology.



1. For quad channel configuration, you always need to install identical (the same brand, speed, size and chip-type) DDR4 DIMM pairs.
2. It is not allowed to install a DDR, DDR2 or DDR3 memory module into a DDR4 slot; otherwise, this motherboard and DIMM may be damaged.
3. The DIMM only fits in one correct orientation. It will cause permanent damage to the motherboard and the DIMM if you force the DIMM into the slot at incorrect orientation.

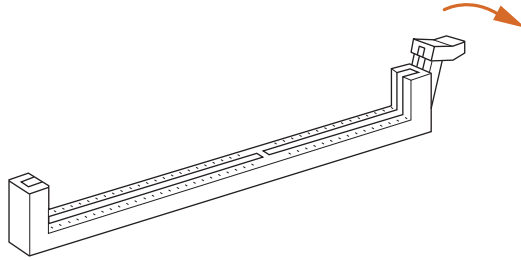
Memory Configuration

	2 - DIMM	4 - DIMM	8 - DIMM
Priority	1	2	3
DDR4_D2		Populated	Populated
DDR4_D1			Populated
DDR4_C2		Populated	Populated
DDR4_C1			Populated
DDR4_A1			Populated
DDR4_A2	Populated	Populated	Populated
DDR4_B1			Populated
DDR4_B2	Populated	Populated	Populated

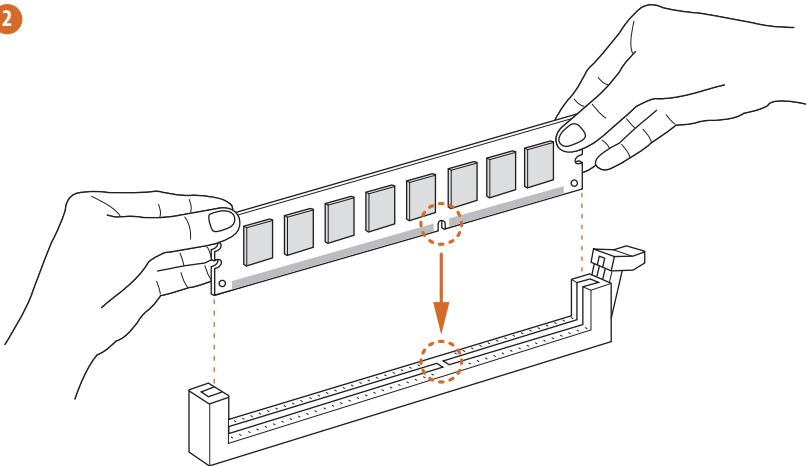


- If only two memory modules are installed in the DDR4 DIMM slots, then Dual Channel Memory Technology is activated. If three memory modules are installed, then Triple Channel Memory Technology is activated. If more than four memory modules are installed in the DDR4 DIMM slots, then Quad Channel Memory Technology is activated.

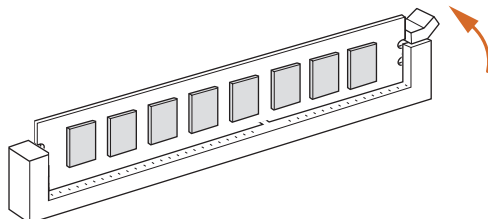
1



2



3



2.4 Expansion Slots (PCI Express Slots)

There are 5 PCI Express slots on the motherboard.



Before installing an expansion card, please make sure that the power supply is switched off or the power cord is unplugged. Please read the documentation of the expansion card and make necessary hardware settings for the card before you start the installation.

PCIe slots:

PCIE1 (PCIe 3.0 x16 slot) is used for PCI Express x16 lane width graphics cards.

PCIE2 (PCIe 3.0 x16 slot) is used for PCI Express x8 lane width graphics cards.

PCIE3 (PCIe 2.0 x1 slot) is used for PCI Express x1 lane width cards.

PCIE4 (PCIe 3.0 x16 slot) is used for PCI Express x16 lane width graphics cards.

PCIE5 (PCIe 3.0 x16 slot) is used for PCI Express x8 lane width graphics cards.

PCIe Slot Configurations

	PCIE1	PCIE2	PCIE4	PCIE5
Single Graphics Card	x16	N/A	N/A	N/A
Two Graphics Cards in CrossFireX™ or SLI™ Mode	x16	N/A	x16	N/A
Three Graphics Cards in 3-Way CrossFireX™ Mode or 3-Way SLI™ Mode	x16	x8	x16	N/A
Four Graphics Cards in 4-Way CrossFireX™ Mode or 4-Way SLI™ Mode	x16	x8	x16	x8



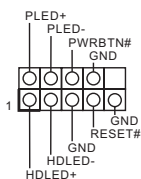
For a better thermal environment, please connect a chassis fan to the motherboard's | chassis fan connector (CHA_FAN1, CHA_FAN2 or CHA_FAN3) when using multiple graphics cards.

2.5 Onboard Headers and Connectors



Onboard headers and connectors are NOT jumpers. Do NOT place jumper caps over these headers and connectors. Placing jumper caps over the headers and connectors will cause permanent damage to the motherboard.

System Panel Header
(9-pin PANEL1)
(see p.1, No. 20)



Connect the power switch, reset switch and system status indicator on the chassis to this header according to the pin assignments below. Note the positive and negative pins before connecting the cables.



PWRBTN (Power Switch):

Connect to the power switch on the chassis front panel. You may configure the way to turn off your system using the power switch.

RESET (Reset Switch):

Connect to the reset switch on the chassis front panel. Press the reset switch to restart the computer if the computer freezes and fails to perform a normal restart.

PLED (System Power LED):

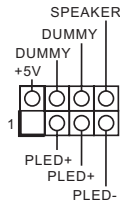
Connect to the power status indicator on the chassis front panel. The LED is on when the system is operating. The LED keeps blinking when the system is in S1/S3 sleep state. The LED is off when the system is in S4 sleep state or powered off (S5).

HDLED (Hard Drive Activity LED):

Connect to the hard drive activity LED on the chassis front panel. The LED is on when the hard drive is reading or writing data.

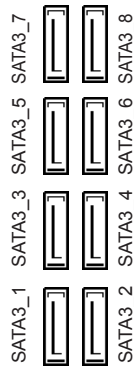
The front panel design may differ by chassis. A front panel module mainly consists of power switch, reset switch, power LED, hard drive activity LED, speaker and etc. When connecting your chassis front panel module to this header, make sure the wire assignments and the pin assignments are matched correctly.

Power LED and Speaker
Header
(7-pin SPK_PLED1)
(see p.1, No. 26)



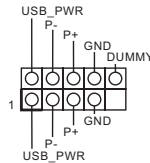
Please connect the
chassis power LED and
the chassis speaker to this
header.

Serial ATA3 Connectors
(SATA3_1_2:
see p.1, No. 17)
(SATA3_3_4:
see p.1, No. 16)
(SATA3_5_6:
see p.1, No. 15)
(SATA3_7_8:
see p.1, No. 14)



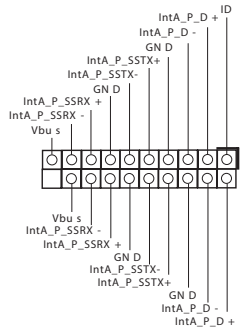
These eight SATA3
connectors support SATA
data cables for internal
storage devices with up to
6.0 Gb/s data transfer rate.

USB 2.0 Headers
(9-pin USB_1_2)
(see p.1, No. 24)
(9-pin USB_3_4)
(see p.1, No. 25)



There are two headers
on this motherboard.
Each USB 2.0 header can
support two ports.

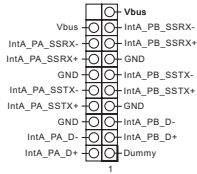
USB 3.0 Headers
(19-pin USB3_9_10)
(see p.1, No. 21)



There are two headers
on this motherboard.
Each USB 3.0 header can
support two ports.

(19-pin USB3_11_12)

(see p.1, No. 11)



Front Panel Audio

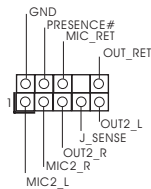
Headers

(9-pin HD_AUDIO1)

(see p.1, No. 31)

(9-pin HD_AUDIO_RA1)

(see p.1, No. 30)



This header is for connecting audio devices to the front audio panel.

* Connect the audio device to either one of the audio connectors.



1. High Definition Audio supports Jack Sensing, but the panel wire on the chassis must support HDA to function correctly. Please follow the instructions in our manual and chassis manual to install your system.
2. If you use an AC'97 audio panel, please install it to the front panel audio header by the steps below:
 - A. Connect Mic_IN (MIC) to MIC2_L.
 - B. Connect Audio_R (RIN) to OUT2_R and Audio_L (LIN) to OUT2_L.
 - C. Connect Ground (GND) to Ground (GND).
 - D. MIC_RET and OUT_RET are for the HD audio panel only. You don't need to connect them for the AC'97 audio panel.
 - E. To activate the front mic, go to the "FrontMic" Tab in the Realtek Control panel and adjust "Recording Volume".

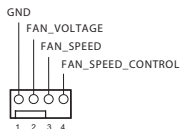
Chassis Fan Connectors

(4-pin CHA_FAN1)

(see p.1, No. 33)

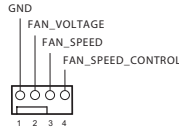
(4-pin CHA_FAN2)

(see p.1, No. 27)



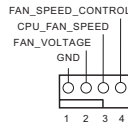
Please connect fan cables to the fan connectors and match the black wire to the ground pin.

Chassis Optional/Water
Pump Fan Connector
(4-pin CHA_FAN3/W_
PUMP)
(see p.1, No. 1)



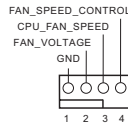
This motherboard provides a 4-Pin water cooling chassis fan connectors. If you plan to connect a 3-Pin chassis water cooler fan, please connect it to Pin 1-3.

CPU Fan Connector
(4-pin CPU_FAN1)
(see p.1, No. 8)



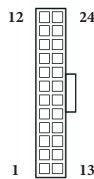
This motherboard provides a 4-Pin CPU fan (Quiet Fan) connector. If you plan to connect a 3-Pin CPU fan, please connect it to Pin 1-3.

CPU Optional/Water
Pump Fan Connector
(4-pin CPU_OPT/W_
PUMP)
(see p.1, No. 32)



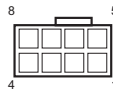
This motherboard provides a 4-Pin water cooling CPU fan connector. If you plan to connect a 3-Pin CPU water cooler fan, please connect it to Pin 1-3.

ATX Power Connector
(24-pin ATXPWR1)
(see p.1, No. 10)



This motherboard provides a 24-pin ATX power connector. To use a 20-pin ATX power supply, please plug it along Pin 1 and Pin 13.

ATX 12V Power
Connector
(8-pin ATX12V1)
(see p.1, No. 9)



This motherboard provides a 8-pin ATX 12V power connector. Connect the 8-pin ATX 12V connector from your power supply.

ATX 12V Power
Connector
(4-pin ATX12V2)
(see p.1, No. 2)



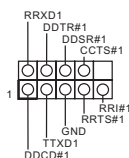
Please connect an ATX 12V power supply to this connector.
*The power supply plug fits into this connector in only one orientation.

Graphics 12V Power
Connector
(6-pin GFX_12V1)
(see p.1, No. 18)



This motherboard provides a 6-pin Graphics 12V power connector.
* Install the PSU's power cable to this connector when 4 graphics cards are installed.

Serial Port Header
(9-pin COM1)
(see p.1, No. 29)



This COM1 header supports a serial port module.

RGB LED Headers
(4-pin RGB_LED1)
(see p.1, No. 28)



These two RGB headers are used to connect RGB LED extension cable which allows users to choose from various LED lighting effects.

(4-pin RGB_LED2)
(see p.1, No. 12)



Caution: Never install the RGB LED cable in the wrong orientation; otherwise, the cable may be damaged.

*Please refer to page 43 for further instructions on these two headers.

U.2 Connector
(36-pin U2_1)
(see p.1, No. 13)



This connector supports U.2
NVM Express storage devices up
to Gen3 x4 (32 Gb/s).

* If U.2 Connector is plugged,
M2_1 will be disabled.

2.6 Smart Switches

The motherboard has five smart switches: Power Switch, Reset Switch, Clear CMOS Switch, CPU Xtreme OC Switch and BIOS Flashback Switch.

Power Switch
(PWRBTN)
(see p.1, No. 19)



Power Switch allows users to quickly turn on/off the system.

Reset Switch
(RSTBTN)
(see p.1, No. 22)



Reset Switch allows users to quickly reset the system.

Clear CMOS Switch
(CLRCBTN)
(see p.1, No. 23)



Clear CMOS Switch allows users to quickly clear the CMOS values.



This function is workable only when you power off your computer and unplug the power supply.

CPU Xtreme OC Switch
(MOS_PROCHOT1)
(see p.1, No. 5)



PROCHOT = ON (default)
(Disable CPU Extreme OC mode)

PROCHOT = OFF
(Enable CPU Extreme OC mode)

Warning: Overclocking may cause damage to your CPU and motherboard. It should be done at your own risk and expense.

BIOS Flashback Switch
(BIOS_FBI)
(see p.3, No. 19)

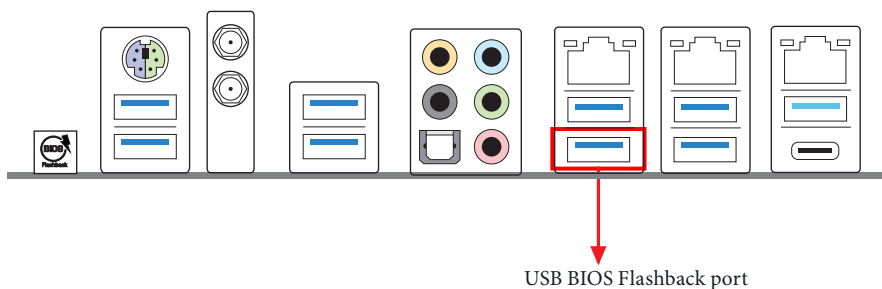


BIOS Flashback Switch allows users
to flash the BIOS.

ASRock BIOS Flashback feature allows you to update BIOS without powering on the system, even without CPU.

To use the USB BIOS Flashback function, Please follow the steps below.

1. Download the latest BIOS file from ASRock's website : <http://www.asrock.com>.
2. Copy the BIOS file to your USB flash drive. Please make sure the file system of your USB flash drive must be FAT32.
3. Extract BIOS file from the zip file.
4. Rename the file to "**creative.rom**".
5. Plug the 24 pin power connector to the motherboard. Then turn on the power supply's AC switch.
*There is no need to power on the system.
6. Then plug your USB drive to the USB BIOS Flashback port.
7. Press the BIOS Flashback Switch for about three seconds. Then the LED starts to blink.
8. Wait until the LED stops blinking, indicating that BIOS flashing has been completed.
*If the LED light turns solid green, this means that the BIOS Flashback is not operating properly. Please make sure that you plug the USB drive to the USB BIOS Flashback port.



2.7 Dr. Debug

Dr. Debug is used to provide code information, which makes troubleshooting even easier. Please see the diagrams below for reading the Dr. Debug codes.

Code	Description
00	Please check if the CPU is installed correctly and then clear CMOS.
0d	Problem related to memory, VGA card or other devices. Please clear CMOS, re-install the memory and VGA card, and remove other USB, PCI devices.
01 - 54 (except 0d), 5A- 60	Problem related to memory. Please re-install the CPU and memory then clear CMOS. If the problem still exists, please install only one memory module or try using other memory modules.
55	The Memory could not be detected. Please re-install the memory and CPU. If the problem still exists, please install only one memory module or try using other memory modules.
61 - 91	Chipset initialization error. Please press reset or clear CMOS.
92 - 99	Problem related to PCI-E devices. Please re-install PCI-E devices or try installing them in other slots. If the problem still exists, please remove all PCI-E devices or try using another VGA card.
A0 - A7	Problem related to IDE or SATA devices. Please re-install IDE and SATA devices. If the problem still exists, please clear CMOS and try removing all SATA devices.
b0	Problem related to memory. Please re-install the CPU and memory. If the problem still exists, please install only one memory module or try using other memory modules.

b4	Problem related to USB devices. Please try removing all USB devices.
b7	Problem related to memory. Please re-install the CPU and memory then clear CMOS. If the problem still exists, please install only one memory module or try using other memory modules.
d6	The VGA could not be recognized. Please clear CMOS and try re-installing the VGA card. If the problem still exists, please try installing the VGA card in other slots or use other VGA cards.
d7	The Keyboard and mouse could not be recognized. Please try re-installing the keyboard and mouse.
d8	Invalid Password.
FF	Please check if the CPU is installed correctly and then clear CMOS.

b4 Problem related to USB devices. Please try removing all USB devices.

b7 Problem related to memory. Please re-install the CPU and memory then clear CMOS. If the problem still exists, please install only one memory module or try using other memory modules.

d6 The VGA could not be recognized. Please clear CMOS and try re-installing the VGA card. If the problem still exists, please try installing the VGA card in other slots or use other VGA cards.

d7 The Keyboard and mouse could not be recognized. Please try re-installing the keyboard and mouse.

d8 Invalid Password.

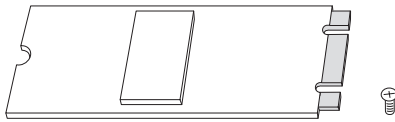
FF Please check if the CPU is installed correctly and then clear CMOS.

2.8 M.2_SSD (NGFF) Module Installation Guide (M2_1 and M2_2)

The M.2, also known as the Next Generation Form Factor (NGFF), is a small size and versatile card edge connector that aims to replace mPCIe and mSATA. The Ultra M.2 Socket (M2_1 and M2_2) support SATA3 6.0 Gb/s module and M.2 PCI Express module up to Gen3 x4 (32 Gb/s).

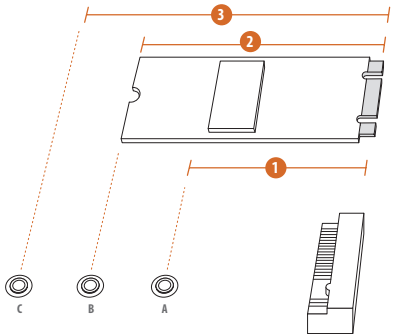
* If U.2 Connector is plugged, M2_1 will be disabled

Installing the M.2_SSD (NGFF) Module



Step 1

Prepare a M.2_SSD (NGFF) module and the screw.



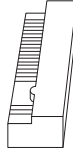
Step 2

Depending on the PCB type and length of your M.2_SSD (NGFF) module, find the corresponding nut location to be used.

No.	1	2	3
Nut Location	A	B	C
PCB Length	4.2cm	6cm	8cm
Module Type	Type 2242	Type 2260	Type 2280



Step 3



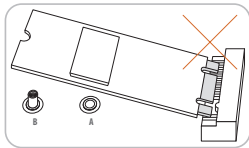
Move the standoff based on the module type and length. The standoff is placed at the nut location D by default. Skip Step 3 and 4 and go straight to Step 5 if you are going to use the default nut. Otherwise, release the standoff by hand.



Step 4

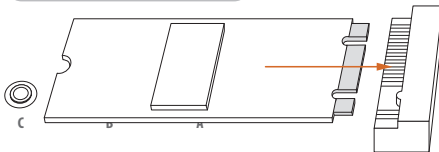


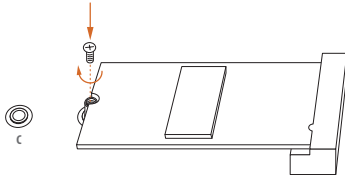
Peel off the yellow protective film on the nut to be used. Hand tighten the standoff into the desired nut location on the motherboard.



Step 5

Align and gently insert the M.2 (NGFF) SSD module into the M.2 slot. Please be aware that the M.2 (NGFF) SSD module only fits in one orientation.





Step 6

Tighten the screw with a screwdriver to secure the module into place. Please do not overtighten the screw as this might damage the module.

M.2_SSD (NGFF) Module Support List

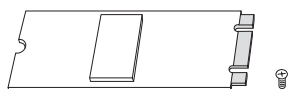
Vendor	Interface	Length	P/N
ADATA	SATA3	2280	AXNS381E-128GM-B
ADATA	SATA3	2280	ASU800NS38-256GT-C
ADATA	SATA3	2280	AXNS381E-256GM-B
ADATA	SATA3	2280	ASU800NS38-512GT-C
ADATA	PCIe3 x4	2280	ASX7000NP-128GT-C
ADATA	PCIe3 x4	2280	ASX8000NP-256GM-C
ADATA	PCIe3 x4	2280	ASX7000NP-256GT-C
ADATA	PCIe3 x4	2280	ASX7000NP-512GT-C
ADATA	PCIe3 x4	2280	ASX8000NP-512GM-C
Corsair	PCIe3 x4	2280	CSSD-F240GBMP500
Crucial	SATA3	2280	CT120M500SSD4
Crucial	SATA3	2280	CT240M500SSD4
Intel	SATA3	2280	Intel SSDSCCKGW080A401/80G
Intel	PCIe3 x4	2280	SSDPEKKF256G7
Intel	PCIe3 x4	2280	SSDPEKKF512G7
Kingston	SATA3	2280	SM2280S3
Kingston	PCIe2 x4	2280	SH2280S3/480G
OCZ	PCIe3 x4	2280	RVD400 -M2280-512G (NVME)
Plextor	PCIe3 x4	2280	PX-128M8PeG
Plextor	PCIe3 x4	2280	PX-1TM8PeG
Plextor	PCIe3 x4	2280	PX-256M8PeG
Plextor	PCIe3 x4	2280	PX-512M8PeG
Plextor	PCIe	2280	PX-G256M6e
Plextor	PCIe	2280	PX-G512M6e
Samsung	PCIe3 x4	2280	SM961 MZVPW128HEGM (NVME)
Samsung	PCIe3 x4	2280	PM961 MZVLW128HEGR (NVME)
Samsung	PCIe3 x4	2280	960 EVO (MZ-V6E250) (NVME)
Samsung	PCIe3 x4	2280	960 EVO (MZ-V6E250BW) (NVME)
Samsung	PCIe3 x4	2280	SM951 (NVME)
Samsung	PCIe3 x4	2280	SM951 (MZHPV256HDGL)
Samsung	PCIe3 x4	2280	SM951 (MZHPV512HDGL)
Samsung	PCIe3 x4	2280	SM951 (NVME)
Samsung	PCIe x4	2280	XP941-512G (MZHPU512HCGL)
SanDisk	PCIe	2260	SD6PP4M-128G
SanDisk	PCIe	2260	SD6PP4M-256G
Team	SATA3	2242	TM4PS4128GMC105
Team	SATA3	2242	TM4PS4256GMC105
Team	SATA3	2280	TM8PS4128GMC105
Team	SATA3	2280	TM8PS4256GMC105
TEAM	PCIe3 x4	2280	TM8FP2240G0C101
TEAM	PCIe3 x4	2280	TM8FP2480GC110

Transcend	SATA3	2242	TS256GMTS400
Transcend	SATA3	2260	TS512GMTS600
Transcend	SATA3	2280	TS512GMTS800
V-Color	SATA3	2280	VLM100-120G-2280B-RD
V-Color	SATA3	2280	VLM100-240G-2280B-RD
V-Color	SATA3	2280	VLM100-240G-2280RGB
V-Color	SATA3	2280	VSM100-240G-2280
WD	SATA3	2280	WDS100T1B0B-00AS40
WD	SATA3	2280	WDS240G1G0B-00RC30
WD	PCIe3 x4	2280	WDS256G1X0C-00ENX0 (NVME)
WD	PCIe3 x4	2280	WDS512G1X0C-00ENX0 (NVME)

2.9 M.2_SSD (NGFF) Module Installation Guide (M2_3)

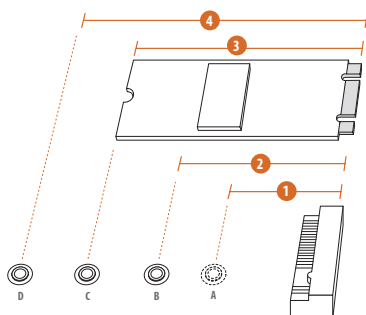
The M.2, also known as the Next Generation Form Factor (NGFF), is a small size and versatile card edge connector that aims to replace mPCIe and mSATA. The Ultra M.2 Socket (M2_3) support SATA3 6.0 Gb/s module and M.2 PCI Express module up to Gen3 x4 (32 Gb/s).

Installing the M.2_SSD (NGFF) Module



Step 1

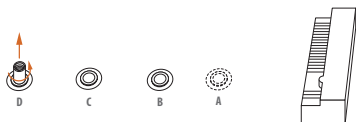
Prepare a M.2_SSD (NGFF) module and the screw.



Step 2

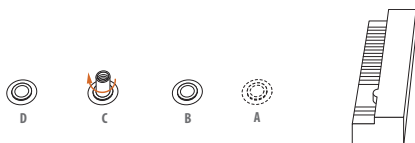
Depending on the PCB type and length of your M.2_SSD (NGFF) module, find the corresponding nut location to be used.

No.	1	2	3	4
Nut Location	A	B	C	D
PCB Length	3cm	4.2cm	6cm	8cm
Module Type	Type2230	Type 2242	Type2260	Type 2280



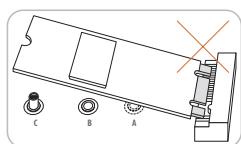
Step 3

Move the standoff based on the module type and length. The standoff is placed at the nut location D by default. Skip Step 3 and 4 and go straight to Step 5 if you are going to use the default nut. Otherwise, release the standoff by hand.



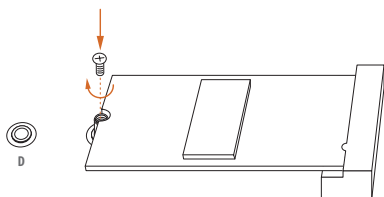
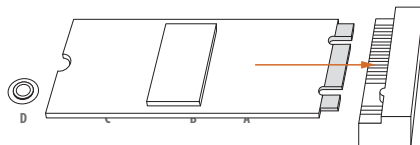
Step 4

Peel off the yellow protective film on the nut to be used. Hand tighten the standoff into the desired nut location on the motherboard.



Step 5

Align and gently insert the M.2 (NGFF) SSD module into the M.2 slot. Please be aware that the M.2 (NGFF) SSD module only fits in one orientation.



Step 6

Tighten the screw with a screwdriver to secure the module into place. Please do not overtighten the screw as this might damage the module.

M.2_SSD (NGFF) Module Support List

Vendor	Interface	Length	P/N
ADATA	SATA3	2230	AXNS330E-32GM-B
ADATA	SATA3	2280	AXNS381E-128GM-B
ADATA	SATA3	2280	ASU800NS38-256GT-C
ADATA	SATA3	2280	AXNS381E-256GM-B
ADATA	SATA3	2280	ASU800NS38-512GT-C
ADATA	PCIe3 x4	2280	ASX7000NP-128GT-C
ADATA	PCIe3 x4	2280	ASX8000NP-256GM-C
ADATA	PCIe3 x4	2280	ASX7000NP-256GT-C
ADATA	PCIe3 x4	2280	ASX7000NP-512GT-C
ADATA	PCIe3 x4	2280	ASX8000NP-512GM-C
Corsair	PCIe3 x4	2280	CSSD-F240GBMP500
Crucial	SATA3	2280	CT120M500SSD4
Crucial	SATA3	2280	CT240M500SSD4
Intel	SATA3	2280	Intel SSDSCKGW080A401/80G
Intel	PCIe3 x4	2280	SSDPEKKF256G7
Intel	PCIe3 x4	2280	SSDPEKKF512G7
Kingston	SATA3	2280	SM2280S3
Kingston	PCIe2 x4	2280	SH2280S3/480G
OCZ	PCIe3 x4	2280	RVD400 -M2280-512G (NVME)
Plextor	PCIe3 x4	2280	PX-128M8PeG
Plextor	PCIe3 x4	2280	PX-1TM8PeG
Plextor	PCIe3 x4	2280	PX-256M8PeG
Plextor	PCIe3 x4	2280	PX-512M8PeG
Plextor	PCIe	2280	PX-G256M6e
Plextor	PCIe	2280	PX-G512M6e
Samsung	PCIe3 x4	2280	SM961 MZVPW128HEGM (NVM)
Samsung	PCIe3 x4	2280	PM961 MZVLW128HEGR (NVME)
Samsung	PCIe3 x4	2280	960 EVO (MZ-V6E250) (NVME)
Samsung	PCIe3 x4	2280	960 EVO (MZ-V6E250BW) (NVME)
Samsung	PCIe3 x4	2280	SM951 (NVME)
Samsung	PCIe3 x4	2280	SM951 (MZHPV256HDGL)
Samsung	PCIe3 x4	2280	SM951 (MZHPV512HDGL)
Samsung	PCIe3 x4	2280	SM951 (NVME)
Samsung	PCIe x4	2280	XP941-512G (MZHPU512HCGL)
SanDisk	PCIe	2260	SD6PP4M-128G
SanDisk	PCIe	2260	SD6PP4M-256G
Team	SATA3	2242	TM4PS4128GMC105
Team	SATA3	2242	TM4PS4256GMC105
Team	SATA3	2280	TM8PS4128GMC105
Team	SATA3	2280	TM8PS4256GMC105
TEAM	PCIe3 x4	2280	TM8FP2240G0C101
TEAM	PCIe3 x4	2280	TM8FP2480GC110

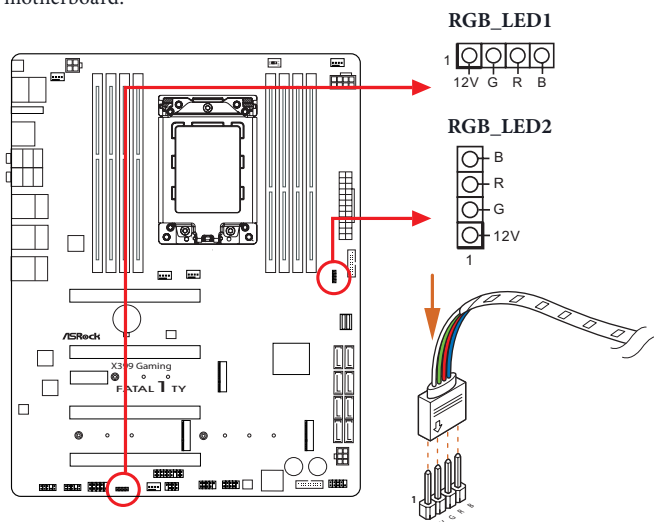
Transcend	SATA3	2242	TS256GMTS400
Transcend	SATA3	2260	TS512GMTS600
Transcend	SATA3	2280	TS512GMTS800
V-Color	SATA3	2280	VLM100-120G-2280B-RD
V-Color	SATA3	2280	VLM100-240G-2280B-RD
V-Color	SATA3	2280	VLM100-240G-2280RGB
V-Color	SATA3	2280	VSM100-240G-2280
WD	SATA3	2280	WDS100T1B0B-00AS40
WD	SATA3	2280	WDS240G1G0B-00RC30
WD	PCIe3 x4	2280	WDS256G1X0C-00ENX0 (NVME)
WD	PCIe3 x4	2280	WDS512G1X0C-00ENX0 (NVME)

2.10 ASRock RGB LED

ASRock RGB LED is a lighting control utility specifically designed for unique individuals with sophisticated tastes to build their own stylish colorful lighting system. Simply by connecting the LED strip, you can customize various lighting schemes and patterns, including Static, Breathing, Strobe, Cycling, Music, Wave and more.

Connecting the LED Strip

Connect your RGB LED strips to the **RGB LED Headers (RGB_LED1, RGB_LED2)** on the motherboard.



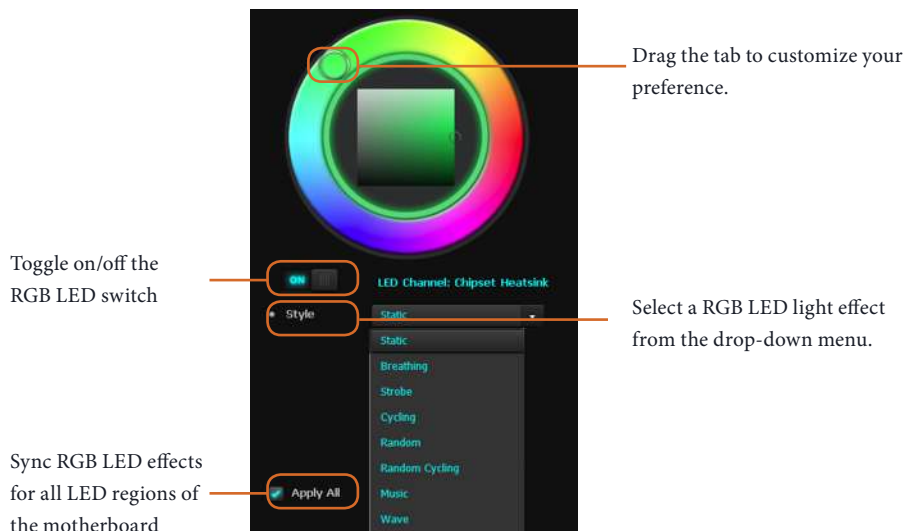
1. Never install the RGB LED cable in the wrong orientation; otherwise, the cable may be damaged.
2. Before installing or removing your RGB LED cable, please power off your system and unplug the power cord from the power supply. Failure to do so may cause damages to motherboard components.



1. Please note that the RGB LED strips do not come with the package.
2. The RGB LED header supports standard 5050 RGB LED strip (12V/G/R/B), with a maximum power rating of 3A (12V) and length within 2 meters.

ASRock RGB LED Utility

Now you can adjust the RGB LED color through the ASRock RGB LED utility. Download this utility from the ASRock Live Update & APP Shop and start coloring your PC style your way!



1 Einleitung

Vielen Dank, dass Sie sich für die Fatal1ty X399 Professional Gaming Series von ASRock entschieden haben – ein zuverlässiges Motherboard, das konsequent unter der strengen Qualitätskontrolle von ASRock hergestellt wurde. Es liefert ausgezeichnete Leistung mit robustem Design, das ASRock Streben nach Qualität und Beständigkeit erfüllt.



Da die technischen Daten des Motherboards sowie die BIOS-Software aktualisiert werden können, kann der Inhalt dieser Dokumentation ohne Ankündigung geändert werden. Falls diese Dokumentation irgendwelchen Änderungen unterliegt, wird die aktualisierte Version ohne weitere Hinweise auf der ASRock-Webseite zur Verfügung gestellt. Sollten Sie technische Hilfe in Bezug auf dieses Motherboard benötigen, erhalten Sie auf unserer Webseite spezifischen Informationen über das von Ihnen verwendete Modell. Auch finden Sie eine aktuelle Liste unterstützter VGA-Karten und Prozessoren auf der ASRock-Webseite: ASRock-Website <http://www.asrock.com>.

1.1 Lieferumfang

- ASRock Fatal1ty X399 Professional Gaming Series-Motherboard (ATX-Formfaktor)
- ASRock Fatal1ty X399 Professional Gaming Series-Schnellinstallationsanleitung
- ASRock Fatal1ty X399 Professional Gaming Series-Support-CD
- 1 x E/A-Blendenabschirmung
- 4 x Serial-ATA- (SATA) Datenkabel (optional)
- 1 x ASRock 3-Wege-SLI-Bridge-Karte (optional)
- 1 x ASRock 4-Wege-SLI-S111-Bridge-Karte (optional)
- 1 x ASRock SLI_HB_Bridge_3S-Karte (optional)
- 2 x ASRock-WiFi-2,4/5-GHz-Antennen (optional)
- 3 x Schrauben für M.2-Sockel (optional)

1.2 Technische Daten

Plattform

- ATX-Formfaktor
- 8-Layer-PCB
- Platine mit zwei Unzen Kupfergehalt

Prozessor

- Unterstützt AMD-TR4-Socket-Ryzen-Threadripper-CPU's
- Digitaler IR-PWM
- 11-Leistungsphasendesign
- Unterstützt ASRock Hyper-BCLK-Engine III

Chipsatz

- AMD X399

Speicher

- Vierkanal-DDR4-Speichertechnologie
- 8 x DDR4-DIMM-Steckplätze
- Unterstützt ungepufferten DDR4-3600+(OC)/3200(OC)/2933(OC)/2667/2400/2133-ECC- und -Non-ECC-Speicher*
- * Weitere Informationen finden Sie in der Speicherkompatibilitätsliste auf der ASRock-Webseite. (<http://www.asrock.com/>)
- Systemspeicher, max. Kapazität: 128GB
- 15-µ-Goldkontakt in DIMM-Steckplätze

Erweiterungssteckplatz

- 4 x PCI-Express 3.0-x16-Steckplätze (PCI-E1/PCI-E2/PCI-E4/PCI-E5; einzeln bei x16 (PCI-E1); doppelt bei x16 (PCI-E1) / x16 (PCI-E4); dreifach bei x16 (PCI-E1) / x8 (PCI-E2) / x16 (PCI-E4); vierfach bei x16 (PCI-E1) / x8 (PCI-E2) / x16 (PCI-E4) / x8 (PCI-E5))*
- * Unterstützt NVMe-SSD als Bootplatte
- 1 x PCI-Express 2.0-x1-Steckplatz
- Unterstützt AMD Quad CrossFireX™, 4-Wege-CrossFireX™, 3-Wege-CrossFireX™ und CrossFireX™
- Unterstützt NVIDIA® Quad SLI™, 4-Wege-SLI™, 3-Wege-SLI™ und SLI™
- 1 x vertikaler M.2-Sockel (Key E) mit dem mitgelieferten 802.11ac-WLAN-Modul (an den rückseitigen I/O)
- 15-µ-Goldkontakt in VGA-PCIe-Steckplatz (PCI-E1 und PCI-E4)

Audio

- 7.1-Kanal-HD-Audio mit Inhaltsschutz (Realtek ALC1220-Audiocodec)
- Erstklassige Blu-ray-Audiounterstützung
- Unterstützt Überspannungsschutz
- Nichicon-Audiokappen der Fine Gold-Serie
- 120-dB-SRV-DAC mit Differentialverstärker
- TT® NE5532 – erstklassiger Headset-Verstärker für Audioanschluss an der Frontblende (unterstützt Headsets mit bis zu 600 Ohm)
- Reiner Stromeingang
- Direct Drive Technology
- PCB-isolierte Abschirmung
- Impedanzerkennung am Line-Ausgang
- Individuelle PCB-Layer für rechten/linken Audiokanal
- RGB-LED
- Goldene Audioanschlüsse
- 15-µ-Gold-Audioanschluss
- Unterstützt Creative SoundBlaster Cinema3

LAN

1 x 10-Gigabit-LAN 100/1000/2500/5000/10000 Mb/s (AQUANTIA® AQC107):

- Unterstützt Wake-On-LAN
- Unterstützt Schutz gegen Blitzschlag/elektrostatische Entladung
- Unterstützt PXE

2 x Intel-Gigabit-LAN 10/100/1000 Mb/s (2 x Intel® I211AT):

- Unterstützt Wake-On-LAN
- Unterstützt Schutz gegen Blitzschlag/elektrostatische Entladung
- Unterstützt energieeffizientes Ethernet 802.3az
- Unterstützt PXE

Wireless LAN

- Intel®-802.11ac-WLAN-Modul (ohne Zusatzkosten)
- Unterstützt IEEE 802.11a/b/g/n/ac
- Unterstützt Dualband (2,4/5 GHz)
- Unterstützt drahtlose Hochgeschwindigkeitsverbindungen bis 433 Mb/s
- Unterstützt Bluetooth 4.2 / 3.0 + High-Speed, Klasse II

Rückblende, E/A

- 2 x Antennenanschluss
- 1 x PS/2-Maus-/Tastaturanschluss
- 1 x Optischer SPDIF-Ausgang
- 1 x USB 3.1-Typ-A-Port (10 Gb/s) (unterstützt Schutz gegen elektrostatische Entladung)
- 1 x USB 3.1-Typ-C-Port (10 Gb/s) (unterstützt Schutz gegen elektrostatische Entladung)

- 8 x USB-3.0-Ports (unterstützt Schutz gegen elektrostatische Entladung)
- * Ultra-USB-Stromversorgung wird an den Port USB3_6 unterstützt.
- * ACPI-Weckfunktion wird an USB3_6-Port nicht unterstützt.
- * 1 x Fatal1ty-Mausanschluss (USB 3.0) ist inklusive
 - 3 x RJ-45-LAN-Port mit LED (Aktivität/Verbindung-LED und Geschwindigkeit-LED)
 - 1 x BIOS-Flashback-Schalter
 - HD-Audioanschlüsse: Hintere Lautsprecher / Zentral / Bass / Line-in / Vorderer Lautsprecher / Mikrofon (goldene Audioanschlüsse)

Speicher

- 8 x SATA-III-6,0-Gb/s-Anschlüsse, unterstützt RAID (RAID 0, RAID 1 und RAID 10), NCQ, AHCI und Hot-Plugging
- 2 x Ultra-M.2-Sockel (M2_1 und M2_2), unterstützt M-Key-Typ-2242/2260/2280-M.2-SATA-III-6,0-Gb/s-Modul und M.2-PCI-Express-Modul bis Gen3 x 4 (32 Gb/s)*
- 1 x Ultra-M.2-Sockel (M2_3), unterstützt M-Key-Typ-2230/2242/2260/2280-M.2-SATA-III-6,0-Gb/s-Modul und M.2-PCI-Express-Modul bis Gen3 x 4 (32 Gb/s)*
- * Unterstützt NVMe-SSD als Bootplatte
- * Unterstützt ASRock U.2-Kit
 - 1 x U.2-Anschluss
- * Wenn ein U.2-Anschluss verbunden ist, wird M2_1 deaktiviert

Anschluss

- 1 x COM-Anschluss-Stiftleiste
- 1 x Betrieb-LED- und Lautsprecher-Stiftleiste
- 2 x RGB-LED-Stiftleisten
- * Jede Stiftleiste unterstützt bis zu 12 V/3 A, 36-W-LED-Streifen
- 1 x CPU-Lüfteranschluss (4-polig)
- * Der CPU-Lüfteranschluss unterstützt einen CPU-Lüfter mit einer maximalen Lüfterleistung von 1 A (12 W).
 - 1 x Anschluss für Optionale-CPU-/Wasserpumpenlüfter (4-polig) (intelligente Lüftergeschwindigkeitssteuerung)
- * Der Optionale-CPU-/Wasserpumpenlüfter unterstützt einen Wasserkühlerlüfter mit einer maximalen Lüfterleistung von 1,5 A (18 W).
- 2 x Gehäuselüfteranschlüsse (4-polig) (intelligente Lüftergeschwindigkeitssteuerung)
- 1 x Anschluss für Optionales-Gehäuse-/Wasserpumpenlüfter (4-polig) (intelligente Lüftergeschwindigkeitssteuerung)

* Der Optionales-Gehäuse-/Wasserpumpenlüfter unterstützt einen Wasserkühlerlüfter mit einer maximalen Lüfterleistung von 1,5 A (18 W).

* CPU_FAN1, CHA_FAN1, CHA_FAN2, CPU_OPT/W_PUMP und CHA_FAN3/W_PUMP können automatisch erkennen, ob ein 3- oder 4-poliger Lüfter verwendet wird.

- 1 x 24-poliger ATX-Netzanschluss (hochdichter Netzanschluss) (für Motherboard)
- 1 x 8-poliger 12-V-Netzanschluss (hochdichter Netzanschluss) (für Motherboard)
- 1 x 4-poliger 12-V-Netzanschluss (hochdichter Netzanschluss) (für Motherboard)
- 1 x 6-poliger 12-V-Netzanschluss (hochdichter Netzanschluss) (für PCIe-Grafikkarte)
- 1 x Audioanschluss an der Frontblende (15µ goldene Audioanschluss)*
- 1 x Rechtwinkliger Audioanschluss an Frontblende*

* Verbinden Sie das Audiogerät mit einem der Audioanschlüsse.

- 2 x USB 2.0-Stiftleisten (unterstützt 4 USB 2.0-Ports) (unterstützt Schutz gegen elektrostatische Entladung)
- 2 x USB 3.0-Stiftleisten (unterstützt 4 USB 3.0-Ports) (unterstützt Schutz gegen elektrostatische Entladung)
- 1 x CMOS-löschen-Schalter
- 1 x Dr. Debug mit LED
- 1 x Ein-/Austaste mit LED
- 1 x Reset-Taste mit LED
- 1 x CPU-Xtreme-OC-Schalter

BIOS-Funktion

- AMI-UEFI-Legal-BIOS mit Unterstützung grafischer Benutzerschnittstellen
- Unterstützt „Plug-and-Play“
- ACPI 5.1-konforme Aufweckereignisse
- Jumper-frei
- SMBIOS 2.3-Unterstützung
- CPU, VCORE_NB, DRAM, VPPM, PCH 1,05V, +1,8V, VDDP, PROM 2,5V Mehrfachspannungsanpassung

Hardwareüberwachung

- Temperaturerkennung: CPU-, Optionale-CPU-/Wasserpumpen-, Gehäuse-, Optionales-Gehäuse-/Wasserpumpenlüfter

- Lüftertachometer: CPU-, Optionale-CPU-/Wasserpumpen-, Gehäuse-, Optionales-Gehäuse-/Wasserpumpenlüfter
- Lautloser Lüfter (automatische Anpassung der Gehäuselüftergeschwindigkeit durch CPU-Temperatur): CPU-, Optionale-CPU-/Wasserpumpen-, Gehäuse-, Optionales-Gehäuse-/Wasserpumpenlüfter
- Mehrfachgeschwindigkeitssteuerung: CPU-, Optionale-CPU-/Wasserpumpen-, Gehäuse-, Optionales-Gehäuse-/Wasserpumpenlüfter
- Spannungsüberwachung: +12 V, +5 V, +3,3 V, CPU Vcore, VCORE_NB, DRAM, PCH 1,05V, +1,8V, VDDP

Betriebssystem

- Microsoft® Windows® 10, 64 Bit
- * Einzelheiten zum aktualisierten Windows® 10-Treiber entnehmen Sie bitte der ASRock-Webseite:<http://www.asrock.com>

Zertifizierungen

- FCC, CE
- ErP/EuP ready (ErP/EuP ready-Netzteil erforderlich)

* Detaillierte Produktinformationen finden Sie auf unserer Webseite: <http://www.asrock.com>



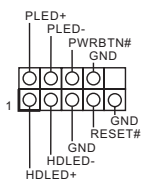
Bitte beachten Sie, dass mit einer Übertaktung, zu der die Anpassung von BIOS-Einstellungen, die Anwendung der Untied Overclocking Technology oder die Nutzung von Übertaktungswerkzeugen von Drittanbietern zählen, bestimmte Risiken verbunden sind. Eine Übertaktung kann sich auf die Stabilität Ihres Systems auswirken und sogar Komponenten und Geräte Ihres Systems beschädigen. Sie sollte auf eigene Gefahr und eigene Kosten durchgeführt werden. Wir übernehmen keine Verantwortung für mögliche Schäden, die durch eine Übertaktung verursacht wurden.

1.3 Integrierte Stiftleisten und Anschlüsse



Integrierte Stiftleisten und Anschlüsse sind KEINE Jumper. Bringen Sie KEINE Jumper-Kappen an diesen Stiftleisten und Anschlüssen an. Durch Anbringen von Jumper-Kappen an diesen Stiftleisten und Anschlüssen können Sie das Motherboard dauerhaft beschädigen.

Systemblende-Stiftleiste
(9-polig, PANEL1)
(siehe S. 1, Nr. 20)



Verbinden Sie Netzschalter, Reset-Taste und Systemstatusanzeige am Gehäuse entsprechend der nachstehenden Pinbelegung mit dieser Stiftleiste. Beachten Sie vor Anschließen der Kabel die positiven und negativen Kontakte.



PWRBTN (Ein-/Austaste):

Mit der Ein-/Austaste an der Frontblende des Gehäuses verbinden. Sie können die Abschaltung Ihres Systems über die Ein-/Austaste konfigurieren.

RESET (Reset-Taste):

Mit der Reset-Taste an der Frontblende des Gehäuses verbinden. Starten Sie den Computer über die Reset-Taste neu, wenn er abstürzt oder sich nicht normal neu starten lässt.

PLED (Systembetriebs-LED):

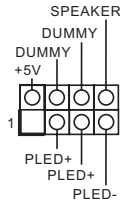
Mit der Betriebsstatusanzeige an der Frontblende des Gehäuses verbinden. Die LED leuchtet, wenn das System läuft. Die LED blinkt, wenn sich das System im S1/S3-Ruhezustand befindet. Die LED ist aus, wenn sich das System im S4-Ruhezustand befindet oder ausgeschaltet ist (S5).

HDLED (Festplattenaktivitäts-LED):

Mit der Festplattenaktivitäts-LED an der Frontblende des Gehäuses verbinden. Die LED leuchtet, wenn die Festplatte Daten liest oder schreibt.

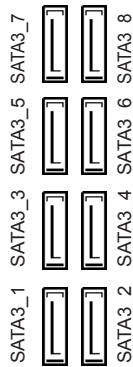
Das Design der Frontblende kann je nach Gehäuse variieren. Ein Frontblendenmodul besteht hauptsächlich aus Ein-/Austaste, Reset-Taste, Betrieb-LED, Festplattenaktivitäts-LED, Lautsprecher etc. Stellen Sie beim Anschließen Ihres Frontblendenmoduls an diese Stiftleiste sicher, dass Kabel- und Pinbelegung richtig abgestimmt sind.

Betrieb-LED- und
Lautsprecher-Stiftheiste
(7-polig, SPK_PLED1)
(siehe S. 1, Nr. 26)



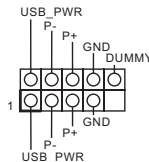
Bitte verbinden Sie
die Betrieb-LED des
Gehäuses und den
Gehäuselautsprecher mit
dieser Stiftheiste.

Serial-ATA-III-Anschlüsse
(SATA3_1_2:
siehe S. 1, Nr. 17)
(SATA3_3_4:
siehe S. 1, Nr. 16)
(SATA3_5_6:
siehe S. 1, Nr. 15)
(SATA3_7_8:
siehe S. 1, Nr. 14)



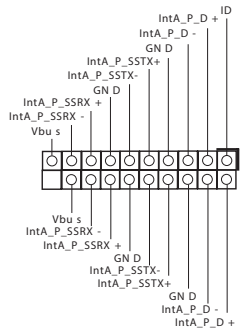
Diese acht SATA-III-
Anschlüsse unterstützen
SATA-Datenkabel für
interne Speichergeräte mit
einer Datenübertragungsge-
schwindigkeit bis 6,0 Gb/s.

USB 2.0-Stiftheisten
(9-polig, USB_1_2)
(siehe S. 1, Nr. 24)
(9-polig, USB_3_4)
(siehe S. 1, Nr. 25)



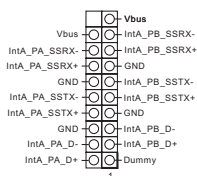
Es gibt zwei Stiftheisten an
diesem Motherboard. Jede
USB 2.0-Stiftheiste kann
zwei Ports unterstützen.

USB 3.0-Stiftheisten
(19-polig, USB3_9_10)
(siehe S. 1, Nr. 21)

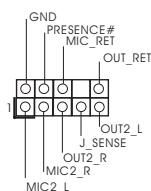


Es gibt zwei Stiftheisten an
diesem Motherboard. Jede
USB 3.0-Stiftheiste kann
zwei Ports unterstützen.

(19-polig, USB3_11_12)
(siehe S. 1, Nr. 11)



Audiostiftleisten
(Frontblende)
(9-polig, HD_AUDIO1)
(siehe S. 1, Nr. 31)
(9-polig, HD_AUDIO_RA1)
(siehe S. 1, Nr. 30)



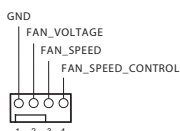
Diese Stiftleiste dient
dem Anschließen von
Audiogeräten an der
Frontblende.

* Verbinden Sie das Audiogerät
mit einem der Audioanschlüsse.



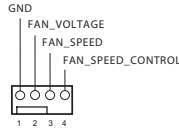
1. High Definition Audio unterstützt Anschlusserkennung, der Draht am Gehäuse muss dazu jedoch HDA unterstützen. Bitte befolgen Sie zum Installieren Ihres Systems die Anweisungen in unserer Anleitung und der Anleitung zum Gehäuse.
2. Bei Nutzung eines AC'97-Audiopanels dieses bitte anhand folgender Schritte an der Audiostiftleiste der Frontblende installieren:
 - A. Mic_IN (Mikrofon) mit MIC2_L verbinden.
 - B. Audio_R (RIN) mit OUT2_R und Audio_L (LIN) mit OUT2_L verbinden.
 - C. Erde (GND) mit Erde (GND) verbinden.
 - D. MIC_RET und OUT_RET sind nur für das HD-Audiopanel vorgesehen. Sie müssen sie nicht für das AC'97-Audiopanel verbinden.
 - E. Rufen Sie zum Aktivieren des vorderen Mikrofons das „FrontMic (Vorderes Mikrofon)“-Register in der Realtek-Systemsteuerung auf und passen „Recording Volume (Aufnahmelautstärke)“ an.

Gehäuselüfteranschlüsse
(4-polig, CHA_FAN1)
(siehe S. 1, Nr. 33)
(4-polig, CHA_FAN2)
(siehe S. 1, Nr. 27)



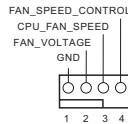
Bitte verbinden Sie die
Lüfterkabel mit den
Lüfteranschlüssen; der
schwarze Draht gehört
zum Erdungskontakt.

Optionales-Gehäuse-/
Wasserpumpen-
Lüfteranschluss
(4-polig, CHA_FAN3/W_
PUMP)
(siehe S. 1, Nr. 1)



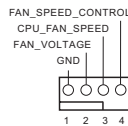
Dieses Motherboard bietet ein 4-polige Wasserkühlung-Gehäuselüfteranschlüsse. Falls Sie einen 3-poligen Gehäuse-Wasserkühlerlüfter anschließen möchten, verbinden Sie ihn bitte mit Kontakt 1 bis 3.

CPU-Lüfteranschluss
(4-polig, CPU_FAN1)
(siehe S. 1, Nr. 8)



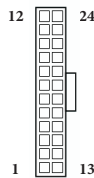
Dieses Motherboard bietet einen 4-poligen CPU-Lüfteranschluss (lautloser Lüfter). Falls Sie einen 3-poligen CPU-Lüfter anschließen möchten, verbinden Sie ihn bitte mit Kontakt 1 bis 3.

Optionale-CPU-/
Wasserpumpen-
Lüfteranschluss
(4-polig, CPU_OPT/W_
PUMP)
(siehe S. 1, Nr. 32)



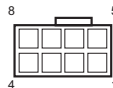
Dieses Motherboard bietet einen 4-poligen Wasserkühlung-CPU-Lüfteranschluss. Falls Sie einen 3-poligen CPU-Wasserkühlerlüfter anschließen möchten, verbinden Sie ihn bitte mit Kontakt 1 bis 3.

ATX-Netzanschluss
(24-polig, ATXPWR1)
(siehe S. 1, Nr. 10)



Dieses Motherboard bietet einen 24-poligen ATX-Netzanschluss. Bitte schließen Sie es zur Nutzung eines 20-poligen ATX-Netzteils entlang Kontakt 1 und Kontakt 13 an.

ATX-12-V-Netzanschluss
(8-polig, ATX12V1)
(siehe S. 1, Nr. 9)



Dieses Motherboard bietet einen 8-poligen ATX-12-V-Netzanschluss. Verbinden Sie den 8-poligen ATX-12-V-Anschluss von Ihrem Netzteil.

ATX-12-V-Netzanschluss
(4-polig, ATX12V2)
(siehe S. 1, Nr. 2)



An diesen Anschluss schließen Sie ein ATX-12-V-Netzteil an.

*Der Netzteilstecker passt nur in einer Richtung in diesen Anschluss.

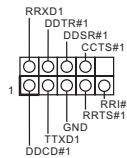
Grafikkarten-12-V-Netzanschluss
(6-polig, GFX_12V1)
(siehe S. 1, Nr. 18)



Dieses Motherboard bietet einen 6-poligen Grafikkarten-12-V-Netzanschluss.

* Installieren Sie das Netzkabel des Netzteils an diesem Anschluss, wenn 4 Grafikkarten installiert sind.

Serieller-Port-Stiftleiste
(9-polig, COM1)
(siehe S. 1, Nr. 29)



Diese COM1-Stiftleiste unterstützt ein Modul für serielle Ports.

RGB-LED-Stiftleisten
(4-polig, RGB_LED1)
(siehe S. 1, Nr. 28)



Diese beiden RGB-Stiftleisten dienen dem Anschließen eines RGB-LED-Erweiterungskabels, das dem Nutzer die Auswahl zwischen verschiedenen LED-Lichteffekten ermöglicht.

Achtung: Installieren Sie das RGB-LED-Kabel niemals falsch herum; andernfalls könnte das Kabel beschädigt werden.

*Weitere Anweisungen zu diesen beiden Stiftleisten finden Sie auf Seite 43.

(4-polig, RGB_LED2)
(siehe S. 1, Nr. 12)



U.2-Anschluss
(36-polig, U2_1)
(siehe S. 1, Nr. 13)



Dieser Anschluss unterstützt U.2-NVM-Express-Speichergerät bis Gen. 3 x 4 (32 Gb/s).

* Wenn ein U.2-Anschluss verbunden ist, wird M2_1 deaktiviert.

1.4 Intelligente Schalter

Das Motherboard hat fünf intelligente Schalter: Ein-/Ausschalter, Reset-Schalter, CMOS-löschen-Schalter, CPU-Xtreme-OC-Schalter und BIOS-Flashback-Schalter.

Ein-/Ausschalter
(PWRBTN)
(siehe S. 1, Nr. 19)



Mit dem Ein-/Ausschalter kann der Benutzer das System schnell ein-/abschalten.

Reset-Schalter
(RSTBTN)
(siehe S. 1, Nr. 22)



Der Reset-Taste ermöglicht das schnelle Rücksetzen des Systems.

CMOS-löschen-Schalter
(CLRCBTN)
(siehe S. 1, Nr. 23)



Mit dem CMOS-löschen-Schalter können Benutzer die CMOS-Werte schnell löschen.



Diese Funktion ist nur verfügbar, wenn Sie Ihren Computer abschalten und die Stromversorgung unterbrechen.

CPU-Xtreme-OC-Schalter
(MOS_PROCHOT1)
(siehe S. 1, Nr. 5)



PROCHOT = Ein (Standard)
(CPU-Extreme-OC-Modus deaktivieren)

PROCHOT = Aus
(CPU-Extreme-OC-Modus aktivieren)

Warnung: Eine Übertaktung kann Schäden an CPU und Motherboard verursachen. Sie sollte auf eigene Gefahr und eigene Kosten durchgeführt werden.

BIOS-Flashback-Schalter
(BIOS_FB1)
(siehe S. 3, Nr. 19)



BIOS-Flashback-Schalter ermöglicht Nutzern die Leerung des BIOS.

1 Introduction

Nous vous remercions d'avoir acheté cette carte mère ASRock de ASRock Fatal1ty X399 Professional Gaming Series, une carte mère fiable fabriquée conformément au contrôle de qualité rigoureux et constant appliqué par ASRock. Fidèle à son engagement de qualité et de durabilité, ASRock vous garantit une carte mère de conception robuste aux performances élevées.



Les spécifications de la carte mère et du logiciel BIOS pouvant être mises à jour, le contenu de ce document est soumis à modification sans préavis. En cas de modifications du présent document, la version mise à jour sera disponible sur le site Internet ASRock sans notification préalable. Si vous avez besoin d'une assistance technique pour votre carte mère, veuillez visiter notre site Internet pour plus de détails sur le modèle que vous utilisez. La liste la plus récente des cartes VGA et des processeurs pris en charge est également disponible sur le site Internet de ASRock. Site Internet ASRock <http://www.asrock.com>.

1.1 Contenu de l'emballage

- Carte mère ASRock Fatal1ty X399 Professional Gaming Series (facteur de forme ATX)
- Guide d'installation rapide ASRock Fatal1ty X399 Professional Gaming Series
- CD d'assistance ASRock Fatal1ty X399 Professional Gaming Series
- 1 x panneau de protection E/S
- 4 x câbles de données Serial ATA (SATA) (Optionnel)
- 1 x carte ASRock SLI Bridge 3 voies (Optionnel)
- 1 x carte ASRock SLI-S111 Bridge 4 voies (Optionnel)
- 1 x carte ASRock SLI_HB_Bridge_3S (Optionnel)
- 2 x antenne Wi-Fi 2,4/5 GHz ASRock (Optionnel)
- 3 x vis pour sockets M.2 (Optionnel)

1.2 Spécifications

Plateforme

- Facteur de forme ATX
- PCB 8 couches
- PCB cuivre 2 onces

Processeur

- Prend en charge les CPU AMD série Ryzen Threadripper avec socket TR4
- PWM numérique IR
- Alimentation à 11 phases
- Prend en charge le moteur Hyper BCLK III ASRock

Chipset

- AMD X399

Mémoire

- Technologie mémoire quadruple canal DDR4
- 8 x fentes DIMM DDR4
- Prend en charge les mémoires sans tampon* ECC et non ECC DDR4 3600+(OC)/3200(OC)/2933(OC)/ 2667/2400/2133
- * Veuillez consulter la liste de prise en charge des mémoires sur le site Web d'ASRock pour de plus amples informations. (<http://www.asrock.com/>)
- Capacité max. de la mémoire système : 128Go
- Contacts dorés 15µ sur fentes DIMM

Fente d'expansion

- 4 x fentes PCI Express 3.0 x16 (PCIe1/PCIe2/PCIe4/PCIe5:simple en mode x16 (PCIe1) ; double en mode x16 (PCIe1) / x16 (PCIe4) ; triple en mode x16 (PCIe1) / x8 (PCIe2) / x16 (PCIe4) ; quadruple en mode x16 (PCIe1) / x8 (PCIe2) / x16 (PCIe4) / x8 (PCIe5))*
- * Prend en charge les SSD NVMe comme disques de démarrage
- 1 x fente PCI Express 2.0 x1
- Prend en charge AMD Quad CrossFireX™, 4-Way CrossFireX™, 3-Way CrossFireX™ and CrossFireX™
- Prend en charge NVIDIA® Quad SLI™, 4-Way SLI™, 3-Way SLI™ et SLI™
- 1 x socket M.2 vertical (touche E) avec le module Wi-Fi 802.11ac fourni (sur l'E/S arrière)
- Contact doré 15µ dans fente VGA PCIe (PCIe1 et PCIe4)

Audio

- Audio 7.1 CH HD avec protection du contenu (codec audio Realtek ALC1220)
- Compatible audio Blu-ray Premium
- Prend en charge la protection contre les surtensions
- Couvercles audio série en or fin Nichicon
- 120dB SNR DAC avec amplificateur différentiel
- Amplificateur de casque TI® NE5532 Premium pour connecteur audio sur panneau avant (prend en charge les casques jusqu'à 600 Ohms)
- Entrée d'alimentation Pure Power
- Technologie Direct Drive
- Blindage isolant PCB
- Détection d'impédance sur le port de sortie ligne
- Couches de PCB individuelles pour canal audio D/G
- LED RVB
- Connecteurs jack audio or
- Connecteur audio or 15µ
- Prend en charge Creative SoundBlaster Cinema3

Réseau

1 x 10 Gigabit LAN 100/1000/2500/5000/10000 Mb/s (AQUANTIA® AQC107):

- Prend en charge la fonction Wake-On-LAN
- Prend en charge la protection contre la foudre/les décharges électrostatiques
- Prend en charge PXE

2 x Intel Gigabit LAN 10/100/1000 Mb/s (2 x Intel® I211AT):

- Prend en charge la fonction Wake-On-LAN
- Prend en charge la protection contre la foudre/les décharges électrostatiques
- Prend en charge la fonction d'économie d'énergie Ethernet 802.3az
- Prend en charge PXE

Réseau sans-fil

- Module Wi-Fi 802.11ac Intel® (lot gratuit)
- Prend en charge IEEE 802.11a/b/g/n/ac
- Prend en charge le mode Dual-Band (2,4/5 GHz)
- Prend en charge la connexion sans-fil à haute vitesse jusqu'à 433Mbps
- Prend en charge Bluetooth 4.2 / 3.0 + haute vitesse classe II

Connectique du panneau arrière

- 2 x ports antenne
- 1 x port souris/clavier PS/2
- 1 x port sortie optique SPDIF
- 1 x port USB 3.1 type A (10 Go/s) (Protection contre les décharges électrostatiques)
- 1 x port USB 3.1 type C (10 Go/s) (Protection contre les décharges électrostatiques)

- 8 x ports USB 3.0 (Protection contre les décharges électrostatiques)
- * L'alimentation Ultra USB est prise en charge sur les port USB3_6.
- * La fonction de sortie du mode veille ACPI n'est pas prise en charge sur les port USB3_6.
- * 1 x port souris Fatal1ty (USB 3.0) est inclus
- 3 x port RJ-45 LAN avec LED (LED ACT/LIEN et LED VITESSE)
- 1 x Bouton BIOS Flashback
- Connecteurs jack audio HD : Haut-parleur arrière / central / basses / entrée ligne / haut-parleur avant / microphone (Connecteurs jack audio or)

Stockage

- 8 x connecteurs SATA3 6,0 Gbit/s, prise en charge de RAID (RAID 0, RAID 1 et RAID 10), NCQ, AHCI et branchement à chaud
- 2 x sockets Ultra M.2 (M2_1 et M2_2), prend en charge les modules M.2 SATA3 6,0 Gb/s type 2242/2260/2280 touche M et M.2 PCI Express jusqu'à Gen3 x4 (32 Gb/s)*
- 1 x socket Ultra M.2 (M2_3), prend en charge les modules M.2 SATA3 6,0 Go/s type 2230/2242/2260/2280 touche M et M.2 PCI Express jusqu'à Gen3 x4 (32 Go/s)*
- * Prend en charge les SSD NVMe comme disques de démarrage
- * Prend en charge le kit ASRock U.2
- 1 x connecteur U.2
- * En cas de branchement sur le connecteur U.2, M2_1 est désactivé

Connecteur

- 1 x embase pour port COM
- 1 x prise LED d'alimentation et haut-parleur
- 2 x embase LED RVB
- * Chaque embase prend en charge les rubans LED jusqu'à 12 V/3 A, 36 W
- 1 x connecteur pour ventilateur de CPU (4 broches)
- * Le connecteur pour ventilateur de CPU prend en charge un ventilateur de CPU d'une puissance maximale de 1 A (12 W).
- 1 x connecteur pour ventilateur de processeur optionnel/pompe à eau (4 broches) (contrôle de vitesse de ventilateur intelligent)
- * Le ventilateur de processeur optionnel/pompe à eau prend en charge un ventilateur de refroidisseur d'eau d'une puissance maximale de 1,5 A (18 W).
- 2 x connecteurs pour ventilateur du châssis (4 broches) (contrôle de vitesse de ventilateur intelligent)
- 1 x connecteur pour ventilateur de châssis optionnel/pompe à eau (4 broches) (contrôle de vitesse de ventilateur intelligent)

* Le ventilateur de châssis optionnel/pompe à eau prend en charge un ventilateur de refroidisseur d'eau d'une puissance maximale de 1,5 A (18 W).

* CPU_FAN1, CHA_FAN1, CHA_FAN2, CPU_OPT/W_PUMP et CHA_FAN3/W_PUMP peuvent détecter automatiquement si un ventilateur 3 broches ou 4 broches est utilisé.

- 1 x connecteur d'alimentation ATX 24 broches (connecteur d'alimentation haute densité) (pour carte mère)
- 1 x connecteur d'alimentation 12V 8 broches (connecteur d'alimentation haute densité) (pour carte mère)
- 1 x connecteur d'alimentation 12V 4 broches (connecteur d'alimentation haute densité) (pour carte mère)
- 1 x connecteur d'alimentation 12V 6 broches (connecteur d'alimentation haute densité) (pour carte graphique PCIe)
- 1 x connecteur audio panneau avant (15µ Connecteur audio or)*
- 1 x connecteur audio à angle droit sur panneau avant*

* Connectez l'appareil audio sur l'un des connecteurs audio.

- 2 x embases USB 2.0 (4 ports USB 2.0 pris en charge) (Protection contre les décharges électrostatiques)
- 2 x embases USB 3.0 (4 ports USB 3.0 pris en charge) (Protection contre les décharges électrostatiques)
- 1 x bouton Clear CMOS
- 1 x Dr Debug avec témoin LED
- 1 x bouton de mise en marche avec témoin LED
- 1 x bouton de réinitialisation avec témoin LED
- 1 x bouton OC Xtreme CPU

Caractéristiques du BIOS

- BIOS UEFI AMI avec prise en charge d'interface graphique
- Prend en charge la fonction « Plug and Play »
- Compatible ACPI 5.1 Wake Up Events
- Prend en charge la configuration Jumpfree
- Compatible SMBIOS 2.3
- Réglage de la tension CPU, VCORE_NB, DRAM, VPPM, PCH 1,05V, +1,8V, VDDP, PROM 2.5V

Surveillance du matériel

- Détection de température : CPU, CPU optionnel/pompe à eau, Châssis, Châssis optionnel/ventilateurs de pompe à eau

- Tachymètre de ventilateur : CPU, CPU optionnel/pompe à eau, Châssis, Châssis optionnel/ventilateurs de pompe à eau
- Ventilateur silencieux (réglage automatique de la vitesse du ventilateur du châssis d'après la température du CPU) : CPU, CPU optionnel/pompe à eau, Châssis, Châssis optionnel/ventilateurs de pompe à eau
- Contrôle simultané des vitesses du ventilateur : CPU, CPU optionnel/pompe à eau, Châssis, Châssis optionnel/ventilateurs de pompe à eau
- Surveillance de la tension d'alimentation : +12V, +5V, +3,3V, CPU Vcore, VCORE_NB, DRAM, PCH 1.05V, +1.8V, VDDP

Système d'exploitation

- Microsoft® Windows® 10 64 bits
- * Pour le pilote mis à jour pour Windows® 10, veuillez visiter le site Web d'ASRock pour plus de détails : <http://www.asrock.com>

Certifications

- FCC, CE
- ErP/EuP Ready (alimentation ErP/EuP ready requise)

* pour des informations détaillées de nos produits, veuillez visiter notre site : <http://www.asrock.com>



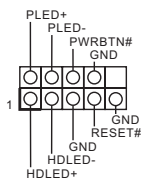
Il est important de signaler que l'overclocking présente certains risques, incluant des modifications du BIOS, l'application d'une technologie d'overclocking déliée et l'utilisation d'outils d'overclocking développés par des tiers. La stabilité de votre système peut être affectée par ces pratiques, voire provoquer des dommages aux composants et aux périphériques du système. L'overclocking se fait à vos risques et périls. Nous ne pourrions en aucun cas être tenus pour responsables des dommages éventuels provoqués par l'overclocking.

1.3 Embases et connecteurs de la carte mère



Les embases et connecteurs situés sur la carte NE SONT PAS des cavaliers. Ne placez JAMAIS de capuchons de cavaliers sur ces embases ou connecteurs. Placer un capuchon de cavalier sur ces embases ou connecteurs endommagera irrémédiablement votre carte mère.

Embase du panneau système
(PANNEAU1 à 9 broches)
(voir p.1, No. 20)



Branchez le bouton de mise en marche, le bouton de réinitialisation et le témoin d'état du système présents sur le châssis sur cette embase en respectant la configuration des broches illustrée ci-dessous. Repérez les broches positive et négative avant de brancher les câbles.



PWRBTN (bouton d'alimentation):

pour brancher le bouton d'alimentation du panneau frontal du châssis. Vous pouvez configurer la façon dont votre système doit s'arrêter à l'aide du bouton de mise en marche.

RESET (bouton de réinitialisation):

pour brancher le bouton de réinitialisation du panneau frontal du châssis. Appuyez sur le bouton de réinitialisation pour redémarrer l'ordinateur en cas de plantage ou de dysfonctionnement au démarrage.

PLED (LED d'alimentation du système) :

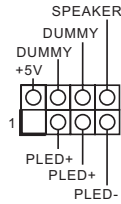
pour brancher le témoin d'état de l'alimentation du panneau frontal du châssis. Le LED est allumé lorsque le système fonctionne. Le LED clignote lorsque le système se trouve en mode veille S1/S3. Le LED est éteint lorsque le système se trouve en mode veille S4 ou hors tension (S5).

HDLED (LED d'activité du disque dur) :

pour brancher le témoin LED d'activité du disque dur du panneau frontal du châssis. Le LED est allumé lorsque le disque dur lit ou écrit des données.

La conception du panneau frontal peut varier en fonction du châssis. Un module de panneau frontal est principalement composé d'un bouton de mise en marche, bouton de réinitialisation, LED d'alimentation, LED d'activité du disque dur, haut-parleur etc. Lorsque vous reliez le module du panneau frontal de votre châssis sur cette embase, veuillez à parfaitement faire correspondre les fils et les broches.

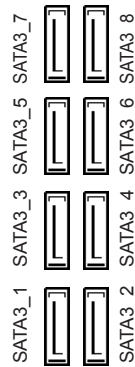
Prise LED d'alimentation
et haut-parleur
(SPK_PLED1 à 7 broches)
(voir p.1, No. 26)



Veuillez brancher la LED
d'alimentation du châssis
et le haut-parleur du
châssis sur ce connecteur.

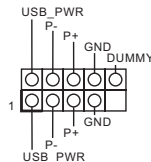
Connecteurs Serial ATA3

(SATA3_1_2:
voir p.1, No. 17)
(SATA3_3_4:
voir p.1, No. 16)
(SATA3_5_6:
voir p.1, No. 15)
(SATA3_7_8:
voir p.1, No. 14)



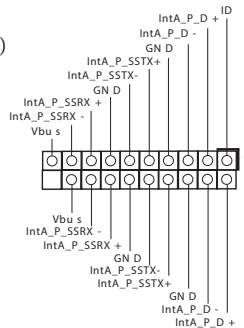
Ces huit connecteurs
SATA3 sont compatibles
avec les câbles de données
SATA pour les appareils de
stockage internes avec un
taux de transfert maximal
de 6,0 Go/s.

Embases USB 2.0
(USB_1_2 9 broches)
(voir p.1, No. 24)
(USB_3_4 à 9 broches)
(voir p.1, No. 25)



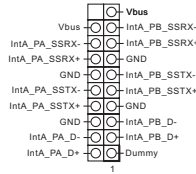
Cette carte mère comprend
deux connecteurs. Chaque
embase USB 2.0 peut
prendre en charge deux
ports.

Embases USB 3.0
(USB_9_10 à 19 broches)
(voir p.1, No. 21)

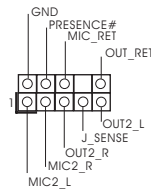


Cette carte mère comprend
deux connecteurs. Chaque
embase USB 3.0 peut
prendre en charge deux
ports.

(USB3_11_12 à 19
broches)
(voir p.1, No. 11)



Embases audio du
panneau frontal
(HD_AUDIO1 à 9
broches)
(voir p.1, No. 31)
(HD_AUDIO_RA1 à 9
broches)
(voir p.1, No. 30)



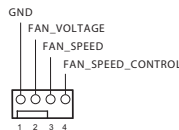
Cette embase sert au
branchement des appareils
audio au panneau audio
frontal.

* Connectez l'appareil audio sur
l'un des connecteurs audio.



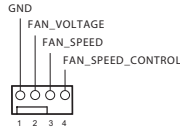
1. L'audio haute définition prend en charge la technologie Jack Sensing (détection de la fiche), mais le panneau grillagé du châssis doit être compatible avec la HDA pour fonctionner correctement. Veuillez suivre les instructions figurant dans notre manuel et dans le manuel du châssis pour installer votre système.
2. Si vous utilisez un panneau audio AC'97, veuillez le brancher sur l'embase audio du panneau frontal en procédant comme suit :
 - A. branchez Mic_IN (MIC) sur MIC2_L.
 - B. branchez Audio_R (RIN) sur OUT2_R et Audio_L (LIN) sur OUT2_L.
 - C. branchez la mise à terre (GND) sur mise à terre (GND).
 - D. MIC_RET et OUT_RET sont exclusivement réservés au panneau audio HD. Il est inutile de les brancher avec le panneau audio AC'97.
 - E. Pour activer le micro frontal, sélectionnez l'onglet « FrontMic » du panneau de contrôle Realtek et réglez le paramètre « Volume d'enregistrement ».

Connecteurs du ventila-
teur du châssis
(CHA_FAN1 à 4 broches)
(voir p.1, No. 33)
(CHA_FAN2 à 4 broches)
(voir p.1, No. 27)



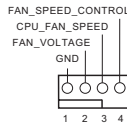
Veuillez brancher les câbles
du ventilateur sur les
connecteurs du ventilateur,
puis reliez le fil noir à la
broche de mise à terre.

Connecteur du ventilateur
de châssis optionnel/
pompe à eau
(CHA_FAN3/W_PUMP à
4 broches)
(voir p.1, No. 1)



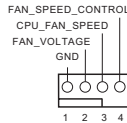
Cette carte mère est dotée de un
connecteurs pour ventilateur de
châssis à refroidissement par eau
à 4 broches. Si vous envisagez
de connecter un ventilateur de
refroidisseur d'eau pour châssis à
3 broches, veuillez le brancher sur
la Broche 1-3.

Connecteur du ventilateur
du processeur
(CPU_FAN1 à 4 broches)
(voir p.1, No. 8)



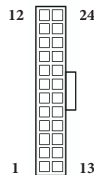
Cette carte mère est dotée d'un
connecteur pour ventilateur de
processeur (Quiet Fan) à 4 broch-
es. Si vous envisagez de connecter
un ventilateur de processeur à 3
broches, veuillez le brancher sur la
Broche 1-3.

Connecteur du ventilateur
de CPU optionnel/pompe
à eau
(CPU_OPT/W_PUMP à 4
broches)
(voir p.1, No. 32)



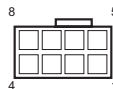
Cette carte mère est dotée d'un
connecteur pour ventilateur de
processeur à refroidissement par
eau à 4 broches. Si vous envisagez
de connecter un ventilateur de re-
froidisseur d'eau pour processeur
à 3 broches, veuillez le brancher
sur la Broche 1-3.

Connecteur d'alimentation
ATX
(ATXPWR1 à 24 broches)
(voir p.1, No. 10)



Cette carte mère est dotée d'un
connecteur d'alimentation ATX
à 24 broches. Pour utiliser une ali-
mentation ATX à 20 broches, veu-
illez effectuer les branchements
sur la Broche 1 et la Broche 13.

Connecteur d'alimentation
ATX 12V
(ATX12V1 à 8 broches)
(voir p.1, No. 9)



Cette carte mère est dotée d'un
connecteur d'alimentation ATX
12V à 8 broches. Raccordez le
connecteur ATX 12 V 8 broches
provenant de votre alimentation
électrique.

Connecteur d'alimentation
ATX 12V
(ATX12V2 à 4 broches)
(voir p.1, No. 2)



Veuillez connecter une source d'alimentation ATX 12 V à ce connecteur.

* La fiche d'alimentation électrique s'adapte à ce connecteur dans un seul sens.

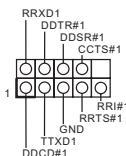
Connecteur d'alimentation
12 V graphique
(GFX_12V1 à 6 broches)
(voir p.1, No. 18)



Cette carte mère dispose d'un connecteur d'alimentation 12 V graphique 6 broches.

* Installez le câble d'alimentation de l'unité d'alimentation électrique sur ce connecteur lorsque 4 cartes graphiques sont installées.

Embase pour port série
(COM1 à 9 broches)
(voir p.1, No. 29)



Cette embase COM1 prend en charge un module de port série.

Embase LED RVB
(RGB_LED1 à 4 broches)
(voir p.1, No. 28)



Ces deux embases RVB servent à connecter le câble d'extension LED RVB qui permet aux utilisateurs de choisir parmi plusieurs effets lumineux LED.

(RGB_LED2 à 4 broches)
(voir p.1, No. 12)



Attention : N'installez jamais le câble LED RVB dans le mauvais sens ; dans le cas contraire, le câble peut être endommagé.

*Veuillez consulter la page 43 pour des instructions supplémentaires sur ces deux embases.

Connecteur U.2
(U2_1 à 36 broches)
(voir p.1, No. 13)



Ce connecteur prend en charge les périphériques de stockage NVM Express U.2 jusqu'à Gen3 x4 (32 Go/s).

* En cas de branchement sur le connecteur U.2, M2_1 est désactivé.

1.4 Boutons intelligents

La carte mère dispose de cinq boutons intelligents : Bouton de mise en marche, bouton Réinitialiser, bouton Effacer CMOS, bouton OC Xtreme CPU et bouton BIOS Flashback.

Bouton de mise en marche
(PWRBTN)
(voir p.1, No. 19)



Le bouton de mise en marche permet aux utilisateurs d'allumer le système rapidement.

Bouton de réinitialisation
(RSTBTN)
(voir p.1, No. 22)



Le bouton de réinitialisation permet aux utilisateurs de réinitialiser le système rapidement.

Bouton d'effacement CMOS
(CLRCBTN)
(voir p.1, No. 23)



Le bouton d'effacement CMOS permet aux utilisateurs d'effacer les valeurs CMOS rapidement.



Cette fonction est uniquement disponible lorsque l'ordinateur est éteint et son cordon d'alimentation débranché.

Bouton OC Xtreme CPU
(MOS_PROCHOT1)
(voir p.1, No. 5)



PROCHOT = MARCHE (par défaut)(Désactive le mode OC Extreme CPU)

PROCHOT = ARRÊT

(Activer mode OC Extreme CPU)
Avertissement : Le surcadencage peut endommager votre CPU et votre carte mère. L'overclocking se fait à vos risques et périls.

Bouton BIOS Flashback
(BIOS_FB1)
(voir p.3, N° 19)



Le bouton BIOS Flashback permet aux utilisateurs de flasher le BIOS.

1 Introduzione

Congratulazioni per l'acquisto della scheda madre ASRock Fatal1ty X399 Professional Gaming Series, una scheda madre affidabile prodotta secondo i severissimi controlli di qualità ASRock. La scheda madre offre eccellenti prestazioni con un design robusto che si adatta all'impegno di ASRock di offrire sempre qualità e durata.



Dato che le specifiche della scheda madre e del software BIOS possono essere aggiornate, il contenuto di questa documentazione sarà soggetto a variazioni senza preavviso. Nel caso di eventuali modifiche della presente documentazione, la versione aggiornata sarà disponibile sul sito Web di ASRock senza ulteriore preavviso. Per il supporto tecnico correlato a questa scheda madre, visitare il nostro sito Web per informazioni specifiche relative al modello attualmente in uso. È possibile trovare l'elenco di schede VGA più recenti e di supporto di CPU anche sul sito Web di ASRock. Sito Web di ASRock <http://www.asrock.com>.

1.1 Contenuto della confezione

- Scheda madre ASRock Fatal1ty X399 Professional Gaming Series (Form Factor ATX)
- Guida all'installazione rapida di ASRock Fatal1ty X399 Professional Gaming Series
- CD di supporto ASRock Fatal1ty X399 Professional Gaming Series
- 1 x mascherina metallica posteriore I/O
- 4 x cavi dati Serial ATA (SATA) (opzionali)
- 1 x scheda ASRock a 3 vie SLI Bridge (opzionali)
- 1 x scheda ASRock a 4 vie SLI-S111 Bridge (opzionali)
- 1 x scheda ASRock SLI_HB_Bridge_3S (opzionali)
- 2 x antenne ASRock WiFi da 2,4/5 GHz (opzionali)
- 3 x viti per Socket M.2 (opzionali)

1.2 Specifiche

Piattaforma

- Fattore di forma ATX
- PCB a 8 layer
- PCB 2oz rame

CPU

- Supporto di CPU AMD TR4 Socket Ryzen Threadripper Series
- PWM Digitale IR
- Potenza a 11 fasi
- Supporto di ASRock Hyper BCLK Engine III

Chipset

- AMD X399

Memoria

- Tecnologia memoria DDR4 Quad Channel
- 8 x alloggi DIMM DDR4
- Supporto di memoria* DDR4 3600+(OC)/3200(OC)/2933(OC)/ 2667/2400/2133 ECC e non-ECC, un-buffered
- * Per maggiori informazioni fare riferimento all'elenco dei supporti di memoria sul sito di ASRock. (<http://www.asrock.com/>)
- Capacità max. della memoria di sistema: 128GB
- Contatti d'oro 15µ negli alloggi DIMM

Alloggio d'espansione

- 4 x PCI Express 3.0 x16 slot (PCIE1/PCIE2/PCIE4/PCIE5:singolo a x16 (PCIE1); doppio a x16 (PCIE1) / x16 (PCIE4); triplo a x16 (PCIE1) / x8 (PCIE2) / x16 (PCIE4); quad a x16 (PCIE1) / x8 (PCIE2) / x16 (PCIE4) / x8 (PCIE5))*
- * Supporto di SSD NVMe come disco d'avvio
- 1 alloggi PCI Express 2.0 x1
- Supporto di AMD Quad CrossFireX™, 4-Way CrossFireX™, 3-Way CrossFireX™ e CrossFireX™
- Supporta NVIDIA® Quad SLI™, 4-Way SLI™, 3-Way SLI™ e SLI™
- 1 x Socket M.2 verticale (Key E) con il modulo WiFi-802.11ac fornito (sul pannello I/O posteriore)
- Contatti d'oro 15µ nell'alloggio VGA PCIe (PCIE1 e PCIE4)

Audio

- Audio HD a 7.1 canali con Content Protection (codec audio Realtek ALC1220)
- Supporto audio Blu-ray Premium
- Supporto protezione da sovratensione
- Cappucci audio Nichicon serie Fine Gold
- 120dB SNR DAC con amplificatore differenziale
- TI® NE5532 Premium Headset Amplifier per connettore audio pannello frontale (supporto cuffie fino a 600 Ohm)
- Ingresso Pure Power
- Tecnologia Direct Drive
- Schermatura isolata PCB
- Sensore impedenza sulla porta di uscita linea
- Layer PCB individuali per canali audio R/L
- LED RGB
- Connettori audio dorati
- Connettore audio dorato 15µ
- Supporto Creative SoundBlaster Cinema3

LAN

- 1 x 10 LAN Gigabit 100/1000/2500/5000/10000 Mb/s (AQUANTIA® AQC107):
- Supporto WOL (Wake-On-LAN)
 - Supporto protezione da fulmini/scariche elettrostatiche
 - Supporto PXE
- 2 x Intel Gigabit LAN 10/100/1000 Mb/s (2 x Intel® I211AT):
- Supporto WOL (Wake-On-LAN)
 - Supporto protezione da fulmini/scariche elettrostatiche
 - Supporto Energy Efficient Ethernet 802.3az
 - Supporto PXE

LAN wireless

- Modulo WiFi Intel® 802.11ac (fornito gratuitamente in dotazione)
- Supporto IEEE 802.11a/b/g/n/ac
- Supporto Dual-Band (2,4/5 GHz)
- Supporto la connessione wireless ad alta velocità fino a 433 Mbps
- Supporto di Bluetooth 4.2 / 3.0 + High speed Classe II

I/O pannello posteriore

- 2 x porte antenna
- 1 x porta mouse/tastiera PS/2
- 1 x porta uscita SPDIF ottico
- 1 x Porta USB 3.1 di tipo A (10 Gb/s) (Supporto protezione ESD)
- 1 x Porta USB 3.1 di tipo C (10 Gb/s) (Supporto protezione ESD)

- 8 x porte USB 3.0 (supporto protezione da scariche elettrostatiche)
- * Ultra USB Power è supportato su porta USB3_6.
- * La funzione di attivazione ACPI non è supportata sulle porta USB3_6.
- * È inclusa 1 porta mouse Fatal1ty (USB 3.0)
- 3 Porta RJ-45 LAN con LED (LED ACT/LINK e LED SPEED)
- 1 x interruttore BIOS Flashback
- Connettori audio HD: altoparlante posteriore/centrale/basso/ingresso linea/altoparlante anteriore/microfono (connettori audio dorati)

Archiviazione

- 8 x connettori SATA3 6,0 Gb/s, supporto RAID (RAID 0, RAID 1, e RAID 10), NCQ, AHCI e Hot Plug
- 2 x socket Ultra M.2 (M2_1 e M2_2), supporta il modulo M.2 SATA3 6,0 Gb/s di tipo M Key 2242/2260/2280 ed il modulo M.2 PCI Express fino a Gen3 x4 (32 Gb/s)*
- 1 x socket Ultra M.2 (M2_3), supporta il modulo M.2 SATA3 6,0 Gb/s di tipo 2230/2242/2260/2280 ed il modulo M.2 PCI Express fino a Gen3 x4 (32 Gb/s)*
- * Supporto di SSD NVMe come disco d'avvio
- * Supporta kit ASRock U.2
- 1 x connettore U.2
- * Se è collegato il connettore U.2, M2_1 sarà disabilitato

Connettore

- 1 x connettore porta COM
- 1 x Connettore LED alimentazione e altoparlante
- 2 x collettore LED RGB
- * Ciascun connettore supporta strisce LED 36 W fino a 12 V/3 A
- 1 x connettore ventola CPU (4-pin)
- * Il connettore ventola CPU supporta ventole CPU con potenza massima di 1 A (12 W).
- 1 x connettore ventola CPU optional/ventola pompa dell'acqua (4 pin) (Smart Fan Speed Control)
- * La ventola CPU optional/ventola pompa dell'acqua supporta ventole di sistemi di raffreddamento ad acqua di potenza massima di 1,5A (18W).
- 2 x Connettori ventola telaio (4 pin) (Smart Fan Speed Control)
- 1 x connettore ventola telaio optional/ventola pompa dell'acqua (4 pin) (Smart Fan Speed Control)

* La ventola telaio/ventola pompa dell'acqua supporta ventole di sistemi di raffreddamento ad acqua di potenza massima di 1,5A (18W).

* CPU_FAN1, CHA_FAN1, CHA_FAN2, CPU_OPT/W_PUMP e CHA_FAN3/W_PUMP sono in grado di rilevare se è in uso una ventola a 3 pin o 4 a pin.

- 1 x connettore alimentazione ATX 24-pin (connettore alimentazione ad alta densità) (per scheda madre)
- 1 x connettore alimentazione 12V 8-pin (connettore alimentazione ad alta densità) (per scheda madre)
- 1 x connettore alimentazione 12V 4-pin (connettore alimentazione ad alta densità) (per scheda madre)
- 1 x connettore alimentazione 12V 6-pin (connettore alimentazione ad alta densità) (per schede grafiche PCIe)
- 1 x Connettore audio pannello frontale (15μ connettore audio d'oro)*
- 1 x Connettore audio pannello frontale angolo destro*

* Collegare il dispositivo audio ad uno dei connettori audio.

- 2 x connettori USB 2.0 (supporto di 4 porte USB 2.0) (supporta protezione da scariche elettrostatiche)
- 2 x connettori USB 3.0 (supporto di 4 porte USB 3.0) (supporta protezione da scariche elettrostatiche)
- 1 x interruttore per azzerare la CMOS
- 1 x Dr. Debug con LED
- 1 x interruttore d'alimentazione con LED
- 1 x interruttore di ripristino con LED
- 1 x Interruttore CPU Xtreme OC

Funzionalità BIOS

- AMI UEFI Legal BIOS con interfaccia di supporto
- Supporta "Plug and Play"
- Eventi di riattivazione conformi a ACPI 5.1
- Supporta jumperfree
- Supporto di SMBIOS 2.3
- Regolazione multipla tensione CPU, VCORE_NB, DRAM, VPPM, PCH 1,05V, +1,8V, VDDR, PROM 2,5V

Hardware Monitor

- Sensore di temperatura: ventole CPU, CPU optional/pompa dell'acqua, telaio, telaio optional/pompa dell'acqua

- Tachimetro ventola: ventole CPU, CPU optional/pompa dell'acqua, telaio, telaio optional/pompa dell'acqua
- Ventola silenziosa (regolazione automatica velocità in base alla temperatura della CPU): ventole CPU, CPU optional/pompa dell'acqua, telaio, telaio optional/pompa dell'acqua
- Controllo velocità ventola: ventole CPU, CPU optional/pompa dell'acqua, telaio, telaio optional/pompa dell'acqua
- Monitoraggio tensione: +12V, +5V, +3,3V, CPU Vcore, VCORE_NB, DRAM, PCH 1,05V, +1,8V, VDDP

SO

- Microsoft® Windows® 10 64 bit
- * Per il driver aggiornato di Windows® 10, visitare il sito ASRock all'indirizzo: <http://www.asrock.com>

Certificazioni

- FCC, CE
- ErP/EuP Ready (è necessaria alimentazione ErP/EuP ready)

* Per informazioni dettagliate sul prodotto, visitare il nostro sito Web: <http://www.asrock.com>



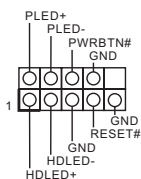
Prestare attenzione al potenziale rischio previsto nella pratica di overclocking, inclusa la regolazione delle impostazioni nel BIOS, l'applicazione di tecnologia di Untied Overclocking o l'utilizzo di strumenti di overclocking di terze parti. L'overclocking può influenzare la stabilità del sistema o perfino provocare danni ai componenti e ai dispositivi del sistema. Occorre eseguirlo a proprio rischio e spese. Non ci riterremo responsabili per possibili danni provocati da overclocking.

1.3 Header e connettori su scheda



Gli header e i connettori sulla scheda NON sono jumper. NON posizionare cappucci del jumper su questi header e connettori. Il posizionamento di cappucci del jumper su header e connettori provocherà danni permanenti alla scheda madre.

Header sul pannello del sistema
(PANEL1 a 9 pin)
(vedere pag. 1, n. 20)



Collegare l'interruttore dell'alimentazione, l'interruttore di reset e l'indicatore dello stato del sistema sullo chassis su questo header secondo la seguente assegnazione dei pin. Annotare i pin positivi e negativi prima di collegare i cavi.



PWRBTN (interruttore di alimentazione):

collegare all'interruttore dell'alimentazione sul pannello anteriore dello chassis. È possibile configurare il modo in cui spegnere il sistema utilizzando l'interruttore dell'alimentazione.

RESET (interruttore di reset):

collegare all'interruttore di reset sul pannello anteriore dello chassis. Premere l'interruttore di reset per riavviare il computer se il computer si blocca e non riesce ad eseguire un normale riavvio.

PLED (LED alimentazione del sistema):

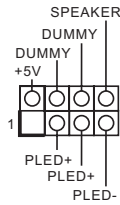
collegare all'indicatore di stato dell'alimentazione sul pannello anteriore dello chassis. Il LED è acceso quando il sistema è in funzione. Il LED continua a lampeggiare quando il sistema si trova nello stato di sospensione S1/S3. Il LED è spento quando il sistema si trova nello stato di sospensione S4 o quando è spento (S5).

HDLED (LED di attività disco rigido):

collegare al LED di attività disco rigido sul pannello anteriore dello chassis. Il LED è acceso quando il disco rigido sta leggendo o scrivendo dati.

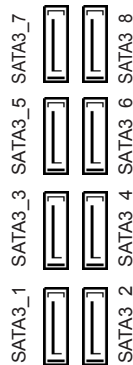
Il design del pannello anteriore può cambiare a seconda dello chassis. Un modulo di pannello anteriore è composto principalmente da interruttore di alimentazione, interruttore di reset, LED di alimentazione, LED di attività disco rigido, altoparlante, ecc. Quando si collega il modulo del pannello anteriore dello chassis a questo header, accertarsi che le assegnazioni del filo e le assegnazioni del pin corrispondano correttamente.

Connettore LED
alimentazione e
altoparlante
(SPK_PLED1 a 7 pin)
(vedere pag. 1, n. 26)



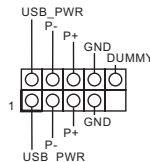
Collegare i LED alimen-
tazione e l'altoparlante a
questo connettore.

Connettori Serial ATA3
(SATA3_1_2:
vedere pag. 1, n. 17)
(SATA3_3_4:
vedere pag. 1, n. 16)
(SATA3_5_6:
vedere pag. 1, n. 15)
(SATA3_7_8:
vedere pag. 1, n. 14)



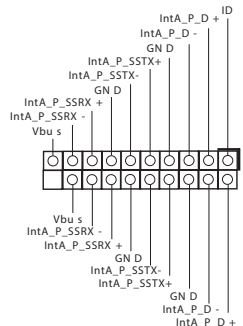
Questi otto connettori SATA3
supportano cavi di trasmissione
dati SATA per i dispositivi
d'archiviazione interni velocità di
trasferimento dati fino a 6,0 Gb/s.

Header USB 2.0
(USB_1_2 a 9 pin)
(vedere pag. 1, n. 24)
(USB_3_4 a 9 pin)
(vedere pag. 1, n. 25)



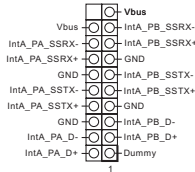
Ci sono due connettori
su questa scheda madre.
Ciascun header USB 2.0
può supportare due porte.

Header USB 3.0
(USB3_9_10 a 19 pin)
(vedere pag. 1, n. 21)

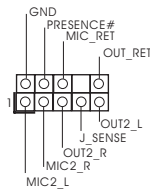


Ci sono due connettori
su questa scheda madre.
Ciascun header USB 3.0
può supportare due porte.

(USB3_11_12 a 19 pin)
(vedere pag. 1, n. 11)



Header audio pannello
anteriore
(AUDIO1_HD a 9 pin)
(vedere pag. 1, n. 31)
(HD_AUDIO_RA1
a 9 pin)
(vedere pag. 1, n. 30)



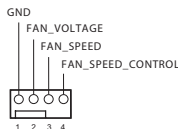
Questo header serve a
collegare i dispositivi
audio al pannello audio
anteriore.

* Collegare il dispositivo audio
ad uno dei connettori audio.



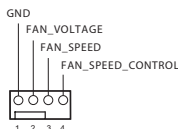
1. L'audio ad alta definizione supporta le funzioni Jack sensing, ma il filo del pannello sullo chassis deve supportare HDA per funzionare correttamente. Seguire le istruzioni presenti nel nostro manuale e nel manuale dello chassis per installare il sistema.
2. Se si utilizza un pannello audio AC'97, installarlo sull'header audio del pannello anteriore seguendo le fasi di seguito:
 - A. Collegare Mic_IN (MIC) a MIC2_L.
 - B. Collegare Audio_R (RIN) a OUT2_R e Audio_L (LIN) a OUT2_L.
 - C. Collegare Ground (GND) a Ground (GND).
 - D. MIC_RET e OUT_RET servono soltanto per il pannello audio HD. Non è necessario collegarli per il pannello audio AC'97.
 - E. Per attivare il microfono anteriore, andare alla scheda "FrontMic" nel pannello di controllo Realtek e regolare il "Volume di registrazione".

Connettori ventola telaio
(CHA_FAN1 a 4 pin)
(vedere pag. 1, n. 33)
(CHA_FAN2 a 4 pin)
(vedere pag. 1, n. 27)



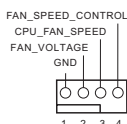
Collegare i cavi della
ventola ai connettori della
ventola e far corrispondere
il filo nero al pin di terra.

Connettore ventola telaio
optional / pompa dell'acqua
(CHA_FAN3/W_PUMP a 4
pin)
(vedere pag. 1, n. 1)



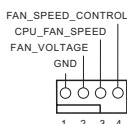
Questa scheda madre fornisce
uno connettori ventola telaio
con raffreddamento ad acqua a 4
pin. Se si decide di collegare una
ventola telaio con raffreddamen-
to ad acqua a 3 pin, collegarla al
pin 1-3.

Connettore ventola CPU
(CPU_FAN1 a 4 pin)
(vedere pag. 1, n. 8)



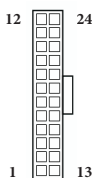
Questa scheda madre è dotata
di un connettore per la ventola
della CPU (Ventola silenziosa)
a 4 pin. Se si decide di collegare
una ventola della CPU a 3 pin,
collegarla al pin 1-3.

Connettore ventola CPU
optional / pompa dell'acqua
(CPU_OPT/W_PUMP a 4
pin)
(vedere pag. 1, n. 32)



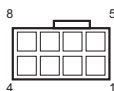
Questa scheda madre è dotata
di un connettore per la ventola
della CPU con raffreddamento
ad acqua a 4 pin. Se si decide di
collegare una ventola della CPU
con raffreddamento ad acqua a 3
pin, collegarla al pin 1-3.

Connettore di alimentazione
ATX
(ATXPWR1 a 24 pin)
(vedere pag. 1, n. 10)



Questa scheda madre è dotata
di un connettore di alimen-
tazione ATX a 24 pin. Per
utilizzare un'alimentazione
ATX a 20 pin, collegarla lungo
il pin 1 e il pin 13.

Connettore di alimentazione
ATX da 12 V
(ATX12V1 a 8 pin)
(vedere pag. 1, n. 9)



Questa scheda madre è dotata di
un connettore di alimentazione
ATX da 12 V a 8 pin. Collegare
il connettore ATX 12V a 8 pin
dalla sorgente di alimentazione.

Connettore di alimentazione
ATX da 12 V
(ATX12V2 a 4 pin)
(vedere pag. 1, n. 2)



Collegare un alimentatore ATX a 12 V a questo connettore.

* La spina di alimentazione può essere inserita in questo connettore con un solo orientamento.

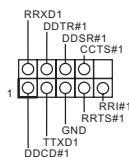
Connettore di alimentazione
Graphics da 12 V
(GFX_12V1 a 6 pin)
(vedere pag. 1, n. 18)



Questa scheda madre è dotata di un connettore di alimentazione Graphics da 12 V a 6 pin.

* Installare il cavo d'alimentazione della PSU a questo connettore quando sono installate 4 schede grafiche.

Header porta seriale
(COM1 a 9 pin)
(vedere pag. 1, n. 29)



Questo header COM1 supporta un modulo di porta seriale.

Collettore LED RGB
(RGB_LED1 a 4 pin)
(vedere pag. 1, n. 28)



Questi due collettori RGB vengono utilizzati per collegare la prolunga LED RGB, che consente agli utenti di scegliere tra vari effetti di illuminazione a LED.

Attenzione: Non installare il cavo LED RGB in senso errato; in caso contrario, il cavo potrebbe danneggiarsi.

*Fare riferimento a pagina 43 per ulteriori istruzioni su questi due connettori.

(RGB_LED2 a 4 pin)
(vedere pag. 1, n. 12)



Connettore U.2
(U2_1 a 36 pin)
(vedere pag. 1, n. 13)



Questo connettore supporta dispositivi d'archiviazione U.2 NVMe Express fino a Gen3 x4 (32 Gb/s).

* Se è collegato il connettore U.2, M2_1 sarà disabilitato.

1.4 Interruttori intuitivi

La scheda madre è dotata di cinque interruttori intuitivi: Interruttore d'alimentazione, Interruttore di ripristino, Interruttore Clear CMOS, Interruttore CPU Xtreme OC e Interruttore BIOS Flashback.

Interruttore d'alimentazione
(PWRBTN)
(vedere pag. 1, n. 19)



L'interruttore d'alimentazione consente di accendere/spengere rapidamente il sistema.

Interruttore di ripristino
(RSTBTN)
(vedere pag. 1, n. 22)



L'interruttore di ripristino consente di ripristinare rapidamente il sistema.

Interruttore Clear CMOS
(CLRCBTN)
(vedere pag. 1, n. 23)



L'interruttore Clear CMOS consente di cancellare rapidamente i valori CMOS.



Questa funzione è operativa solo quando si spegne il computer e si scollega l'alimentatore.

Interruttore CPU Xtreme OC
(MOS_PROCHOT1)
(vedere pag. 1, n. 5)



PROCHOT = ON (predefinito)
(disabilita la modalità CPU Extreme OC)

PROCHOT = OFF

(Abilita la modalità CPU Extreme OC)

Attenzione: L'overclocking può causare danni alla CPU e alla scheda madre. Occorre eseguirlo a proprio rischio e spese.

Interruttore BIOS Flashback
(BIOS_FB1)
(vedere pag. 3, n. 19)



L'interruttore BIOS Flashback consente agli utenti di aggiornare il BIOS.

1 Introducción

Gracias por comprar la placa base ASRock Fatal1ty X399 Professional Gaming Series, una placa base fiable fabricada según el rigurosísimo control de calidad de ASRock. Ofrece un rendimiento excelente con un diseño resistente de acuerdo con el compromiso de calidad y resistencia de ASRock.



Ya que las especificaciones de la placa base y el software del BIOS podrán ser actualizados, el contenido que aparece en esta documentación estará sujeto a modificaciones sin previo aviso. Si esta documentación sufre alguna modificación, la versión actualizada estará disponible en el sitio web de ASRock sin previo aviso. Si necesita asistencia técnica relacionada con esta placa base, visite nuestro sitio web para obtener información específica sobre el modelo que esté utilizando. Podrá encontrar las últimas tarjetas VGA, así como la lista de compatibilidad de la CPU, en el sitio web de ASRock. Sitio web de ASRock <http://www.asrock.com>.

1.1 Contenido del paquete

- Placa base ASRock Fatal1ty X399 Professional Gaming Series (Factor de forma ATX)
- Guía de instalación rápida de ASRock Fatal1ty X399 Professional Gaming Series
- CD de soporte de ASRock Fatal1ty X399 Professional Gaming Series
- 1 x escudo panel I/O
- 4 x cables de datos Serie ATA (SATA) (Opcional)
- 1 x tarjeta SLI Bridge de 3 vías (Opcional)
- 1 x tarjeta SLI-S111 Bridge de 4 vías (Opcional)
- 1 x tarjeta ASRock SLI_HB_Bridge_3S (Opcional)
- 2 x Antenas ASRock WiFi 2,4/5 GHz (Opcional)
- 3 x tornillos para sockets M.2 (Opcional)

1.2 Especificaciones

Plataforma

- Factor de forma ATX
- Circuito impreso (PCB) de 8 capas
- Circuito impreso (PCB) de 2 oz de cobre

CPU

- Admite CPU de la serie Ryzen Threadripper con zócalo AMD TR4
- PWM digital IR
- Diseño de 11 fases de alimentación
- Admite motor Hiper-BCLK de ASRock III

Conjunto de chips

- AMD X399

Memoria

- Tecnología de memoria DDR4 de cuatro canales
- 8 x ranuras DIMM DDR4
- Admite memoria sin búfer DDR4 3600+(OC)/3200(OC)/2933(OC)/2667/2400/2133 ECC & non-ECC*

* Para obtener más información, consulte la lista de memorias compatibles en el sitio web de ASRock. (<http://www.asrock.com/>)

- Capacidad máxima de memoria del sistema: 128GB
- Contacto 15µ Gold en ranuras DIMM

Ranura de expansión

- 4 ranuras PCI Express 3.0 x16 (PCIe1/PCIe2/PCIe4/PCIe5:simple a x16 (PCIe1); dual a x16 (PCIe1) / x16 (PCIe4); triple a x16 (PCIe1) / x8 (PCIe2) / x16 (PCIe4); cuádruple a x16 (PCIe1) / x8 (PCIe2) / x16 (PCIe4) / x8 (PCIe5))*

* Admite unidad de estado sólido de NVMe como disco de arranque

- 1 x ranura PCI Express 2.0 x1
- Compatible con AMD Quad CrossFireX™, 4-Way CrossFireX™, 3-Way CrossFireX™ y CrossFireX™
- Compatible con NVIDIA® Quad SLI™, 4-Way SLI™, 3-Way SLI™ y SLI™
- 1 x Zócalo M.2 vertical (clave E) con el módulo WiFi-802.11ac integrado (en la E/S trasera)
- Contacto 15µGold en ranura VGA PCIe (PCIe1 y PCIe4)

Audio

- 7.1 Audio CH HD con Protección de contenido (Realtek ALC1220 Audio Codec)
- Compatible con audio Blu-ray Premium
- Admite protección contra sobretensiones
- Tapas de audio Nichion de la serie Fine Gold
- DAC con SNR de 120 dB con amplificador diferencial
- Amplificador de auriculares de alta calidad TI® NE5532 para conector de audio en el panel frontal (admite auriculares de hasta 600 ohmios)
- Entrada de alimentación pura
- Tecnología de unidad directa
- Protección de aislamiento de PCB
- Detección de impedancia en el puerto salida de línea
- Capas PCB individuales para canal de audio D/I
- LED RGB
- Conectores de audio de oro
- Conector de audio dorado de 15µ
- Admite Creative SoundBlaster Cinema3

LAN

1 x 10 LAN Gigabit 100/1000/2500/5000/10000 Mb/s (AQUANTIA® AQC107):

- Admite la función Reactivación de LAN
- Admite protección contra rayos y descargas electrostáticas (ESD)
- Admite PXE

2 x LAN Intel Gigabit 10/100/1000 Mb/s (2 x Intel® I211AT):

- Admite la función Reactivación de LAN
- Admite protección contra rayos y descargas electrostáticas (ESD)
- Admite Ethernet 802.3az de eficiencia energética
- Admite PXE

LAN inalámbrica

- Módulo WiFi Intel® 802.11ac (incluido gratuitamente)
- Compatible con IEEE 802.11a/b/g/n/ac
- Compatible con Banda Dual (2,4/5 GHz)
- Compatible con conexión inalámbrica de alta velocidad hasta 433 Mbps
- Compatible con Bluetooth 4.2 / 3.0 + Alta velocidad clase II

E/S en panel posterior

- 2 x Puertos de antena
- 1 x puerto de ratón/teclado PS/2
- 1 x puerto de salida SPDIF óptica
- 1 x Puerto USB 3.1 Tipo A Port (10 Gb/s) (admite protección ESD)
- 1 x Puerto USB 3.1 Tipo C Port (10 Gb/s) (admite protección ESD)

- 8 x Puertos USB 3.0 (admite protección contra descargas electrostáticas)
- * La alimentación USB ultra se admite en los puertos USB3_6.
- * La función de reactivación ACPI no se admite en puertos USB3_6.
- * 1 x Puerto para ratón Fatal1ty (USB 3.0) incluido
- 3 x puerto LAN RJ-45 con LED (ACT/LINK LED y SPEED LED)
- 1 x Interruptor de actualización de la BIOS
- Conector de audio HD: Altavoz trasero / Central / Graves / Entrada de línea / Altavoz frontal / Micrófono (conectores de audio de oro)

Almacenamiento

- 8 x conectores SATA3 de 6,0 Gb/s, compatible con RAID (RAID 0, RAID 1 y RAID 10), NCQ, AHCI y conexión en caliente
- 2 x Zócalos Ultra M.2 (M2_1 y M2_2) que admite el módulo SATA3 6,0 Gb/s M.2 de tipo 2242/2260/2280 con clave M y el módulo PCI Express M.2 hasta Gen3 x4 (32 Gb/s)*
- 1 x Zócalo Ultra M.2 (M2_3) que admite el módulo SATA3 6,0 Gb/s M.2 de tipo 2230/2242/2260/2280 con clave M y el módulo PCI Express M.2 hasta Gen3 x4 (32 Gb/s)*
- * Admite unidad de estado sólido de NVMe como disco de arranque
- * Admite el Kit U.2 de ASRock
- 1 x conector U.2
- * Si el conector U.2 está desenchufado, M2_1 se deshabilitará

Conector

- 1 x Base de conexiones de puerto COM
- 1 x LED de alimentación y base de conexiones para el altavoz
- 2 x Cabezales de indicador LED RGB
- * Cada cabezal admite banda de LED de hasta 12 V/3 A (36 W)
- 1 x Conector para ventilador de la CPU (4 pines)
- * El conector para ventilador de la CPU admite ventilador de la CPU con una potencia de ventilador de 1 A (12 W) máxima.
- 1 x Conector (4 pines) para el ventilador de la bomba de agua/ opcional de la CPU (control de velocidad de ventilador inteligente)
- * El ventilador de la bomba de agua/ opcional de la CPU admite ventilador del disipador por agua con una potencia de ventilador máxima de 1,5 A (18 W).
- 2 x Conectores (4 pines) para el ventilador del chasis (control de velocidad de ventilador inteligente)
- 1 x Conector (4 pines) para el ventilador de la bomba de agua/ opcional del chasis (control de velocidad de ventilador inteligente)

* El ventilador de la bomba de agua/opcional del chasis admite ventilador del disipador por agua con una potencia de ventilador máxima de 1,5 A (18 W).

* CPU_FAN1, CHA_FAN1, CHA_FAN2, CPU_OPT/W_PUMP y CHA_FAN3/W_PUMP se pueden detectar automáticamente si se usa el ventilador de 3 o 4 pines.

- 1 x Conector de alimentación de 24 pines y ATX (conector de alimentación de alta densidad) (para placa base)
- 1 x Conector de alimentación de 8 pines y 12V (conector de alimentación de alta densidad) (para placa base)
- 1 x Conector de alimentación de 4 pines y 12V (conector de alimentación de alta densidad) (para placa base)
- 1 x Conector de alimentación de 6 pines y 12V (conector de alimentación de alta densidad) (para tarjeta gráfica PCIe)
- 1 x Conector de audio en el panel frontal (15µ Conector de audio de oro)*
- 1 x Conector de audio en el panel frontal en ángulo recto*

* Conector de dispositivo de audio con uno de los conectores de audio.

- 2 x Bases de conexiones USB 2.0 (admite 4 puertos USB 2.0). (Admite protección contra descargas electrostáticas).
- 2 x Bases de conexiones USB 3.0 (admite 4 puertos USB 3.0). (Admite protección contra descargas electrostáticas).
- 1 x interruptor de borrado CMOS
- 1 x Dr. Debug con indicador LED
- 1 x interruptor de alimentación con indicador LED
- 1 x interruptor de reseteo con indicador LED
- 1 x Interruptor CPU Xtreme OC

Función del BIOS

- BIOS legal UEFI AMI compatible con interfaz gráfica de usuario
- Compatible con "Plug and Play"
- Eventos de reactivación conformes con ACPI 5,1
- Compatible con Jumper FREE
- Admite SMBIOS 2.3
- Varios ajustes de voltaje de CPU, VCORE_NB, DRAM, VPPM, PCH 1,05V, +1,8V, VDDP y PROM 2,5V

Monitor de hardware

- Detección de temperatura: CPU, bomba de agua/opcional de la CPU, chasis, ventiladores de la bomba de agua/opcionales del chasis

- Tacómetro del ventilador: CPU, bomba de agua/opcional de la CPU, chasis, ventiladores de la bomba de agua/opcionales del chasis
- Ventilador silencioso (ajuste automático de la velocidad del ventilador del chasis por temperatura de la CPU): CPU, bomba de agua/opcional de la CPU, chasis, ventiladores de la bomba de agua/opcionales del chasis
- Control de varias velocidades del ventilador: CPU, bomba de agua/opcional de la CPU, chasis, ventiladores de la bomba de agua/opcionales del chasis
- Supervisión del voltaje: +12V, +5V, +3,3V, CPU Vcore, VCORE_NB, DRAM, PCH 1,05V, +1,8V, VDDP

SO

- Microsoft® Windows® 10 64 bits
- * Para obtener el controlador actualizado para Windows® 10, visite el sitio Web desde ASRock para obtener detalles:
<http://www.asrock.com>

Certificaciones

- FCC y CE
- Preparado para ErP/EuP (se necesita una fuente de alimentación preparada para ErP/EuP)

* Para obtener información detallada del producto, visite nuestro sitio Web: <http://www.asrock.com>



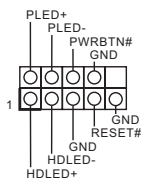
Tenga en cuenta que hay un cierto riesgo implícito en las operaciones de aumento de la velocidad del reloj, incluido el ajuste del BIOS, aplicando la tecnología de aumento de velocidad liberada o utilizando las herramientas de aumento de velocidad de otros fabricantes. El aumento de la velocidad puede afectar a la estabilidad del sistema e, incluso, dañar los componentes y dispositivos del sistema. Esta operación se debe realizar bajo su propia responsabilidad y usted debe asumir los costos. No asumimos ninguna responsabilidad por los posibles daños causados por el aumento de la velocidad del reloj.

1.3 Conectores y cabezales incorporados



Los cabezales y conectores incorporados NO son puentes. NO coloque tapas de puente sobre estos cabezales y conectores. Si coloca tapas de puente sobre los cabezales y conectores dañará de forma permanente la placa base.

Cabezal del panel del sistema
(PANEL1 de 9 pines)
(consulte la pág.1, N.º 20)



Conecte el interruptor de alimentación, restablezca el interruptor y el indicador del estado del sistema del chasis a los valores de este cabezal, según los valores asignados a los pines como se indica a continuación. Cerciérese de cuáles son los pines positivos y los negativos antes de conectar los cables.



PWRBTN (Interruptor de alimentación):

Conéctelo al interruptor de alimentación del panel frontal del chasis. Deberá configurar la forma en la que su sistema se apagará mediante el interruptor de alimentación.

RESET (Interruptor de reseteo):

Conéctelo al interruptor de reseteo del panel frontal del chasis. Pulse el interruptor de reseteo para resetear el ordenador si éste está bloqueado y no se puede reiniciar de forma normal.

PLED (Indicador LED de la alimentación del sistema):

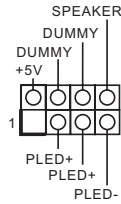
Conéctelo al indicador de estado de la alimentación del panel frontal del chasis. El indicador LED permanece encendido cuando el sistema está funcionando. El indicador LED parpadea cuando el sistema se encuentra en estado de suspensión S1/S3. El indicador LED se apaga cuando el sistema se encuentra en estado de suspensión S4 o está apagado (S5).

HDLED (Indicador LED de actividad en el disco duro):

Conéctelo al indicador LED de actividad en el disco duro del panel frontal del chasis. El indicador LED permanece encendido cuando el disco duro está leyendo o escribiendo datos.

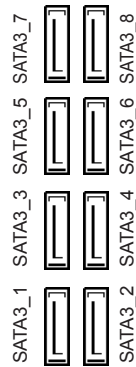
El diseño del panel frontal puede ser diferente dependiendo del chasis. Un módulo de panel frontal consta principalmente de: interruptor de alimentación, interruptor de reseteo, indicador LED de alimentación, indicador LED de actividad en el disco duro, altavoz, etc. Cuando conecte su módulo del panel frontal del chasis a este cabezal, asegúrese de que las asignaciones de los cables y los pines coinciden correctamente.

LED de alimentación y
base de conexiones para la
altavoz
(SPK_PLED1 de 7 pines)
(consulte la pág.1, N° 26)



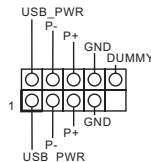
Conecte el LED de
alimentación del chasis y
el altavoz del chasis a esta
base de conexiones.

Conectores Serie ATA3
(SATA3_1_2:
consulte la pág.1, N° 17)
(SATA3_3_4:
consulte la pág. 1, N° 16)
(SATA3_5_6:
consulte la pág.1, N° 15)
(SATA3_7_8:
consulte la pág.1, N° 14)



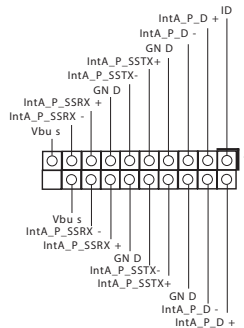
Estos ocho conectores
SATA3 son compatibles
con cables de datos SATA
para dispositivos de
almacenamiento interno
con una velocidad de
transferencia de datos de
hasta 6,0 Gb/s.

Cabezales USB 2.0
(USB1_2 de 9 pines)
(consulte la pág.1, N° 24)
(USB_3_4 de 9 pines)
(consulte la pág.1, N° 25)



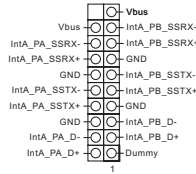
Hay dos bases de
conexiones en esta placa
base. Cada cabezal USB
2.0 admite dos puertos.

Cabezales USB 3.0
(USB3_9_10 de 19 pines)
(consulte la pág.1, N° 21)

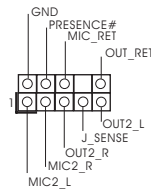


Hay dos bases de
conexiones en esta placa
base. Cada cabezal USB
3.0 admite dos puertos.

(USB3_11_12 de 19 pines)
(consulte la pág.1, N° 11)



Cabezal de audio del panel frontal
(HD_AUDIO1 de 9 pines)
(consulte la pág.1, N° 31)
(HD_AUDIO_RA1 de 9 pines)
(consulte la página 1, n° 30)



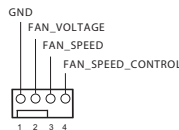
Este cabezal se utiliza para conectar dispositivos de audio al panel de audio frontal.

* Conector de dispositivo de audio con uno de los conectores de audio.



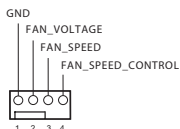
1. El Audio de Alta Definición (HDA, en inglés) es compatible con el método de sensor de conectores, sin embargo, el cable del panel del chasis deberá ser compatible con HDA para que pueda funcionar correctamente. Siga las instrucciones que se indican en nuestro manual y en el manual del chasis para instalar su sistema.
2. Si utiliza un panel de audio AC'97, colóquelo en el cabezal de audio del panel frontal siguiendo los pasos que se describen a continuación:
 - A. Conecte Mic_IN (MIC) a MIC2_L.
 - B. Conecte Audio_R (RIN) a OUT2_R y Audio_L (LIN) a OUT2_L.
 - C. Conecte Ground (Conexión a tierra) (GND) a Ground (GND).
 - D. MIC_RET y OUT_RET se utilizan únicamente con el panel de audio HD. No es necesario que los conecte en el panel de audio AC'97.
 - E. Para activar el micrófono frontal, vaya a la ficha "micrófono frontal" (Front Mic) en el panel de control de Realtek y ajuste el "Volumen de grabación" (Recording Volume).

Conectores para el ventilador del chasis
(CHA_FAN1 de 4 pines)
(consulte la pág.1, N.º 33)
(CHA_FAN2 de 4 pines)
(consulte la pág.1, N.º 27)



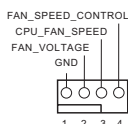
Conecte los cables del ventilador a los conectores del ventilador y haga coincidir el cable negro con el pin de conexión a tierra.

Conector del ventilador de la bomba de agua/opcional del chasis
(CHA_FAN3/W_PUMP de 4 pines)
(consulte la pág.1, N.º 1)



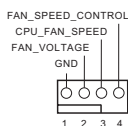
Esta placa base proporciona uno conectores de ventilador del chasis de refrigeración por agua de 4 pines. Si tiene pensando conectar un ventilador de refrigeración por agua del chasis de 3 pines, conéctelo al pin 1-3.

Conector del ventilador de la CPU
(CPU_FAN1 de 4 pines)
(consulte la pág.1, N.º 3)



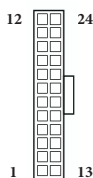
Esta placa base contiene un conector de ventilador (ventilador silencioso) de CPU de 4 pines. Si tiene pensando conectar un ventilador de CPU de 3 pines, conéctelo al Pin 1-3.

Conector del ventilador de la bomba de agua/opcional de la CPU
(CPU_OPT/W_PUMP de 4 pines)
(consulte la pág.1, N.º 32)



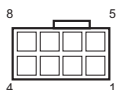
Esta placa base proporciona un conector de ventilador de CPU de refrigeración por agua de 4 pines. Si tiene pensando conectar un ventilador de disipador por agua de CPU de 3 pines, conéctelo al pin 1-3.

Conector de alimentación ATX
(ATXPWR1 de 24 pines)
(consulte la pág.1, N.º 10)



Esta placa base contiene un conector de alimentación ATX de 24 pines. Para utilizar una toma de alimentación ATX de 20 pines, conéctela en los Pines del 1 al 13.

Conector de alimentación ATX de 12V
(ATX12V1 de 8 pines)
(consulte la pág.1, N.º 9)



Esta placa base contiene un conector de alimentación ATX de 12V y 8 pines. Collegare il connettore ATX 12V a 8 pin dalla sorgente di alimentazione.

Conector de alimentación
ATX de 12V
(ATX12V2 de 4 pines)
(consulte la pág.1, N° 2)



Conecte una fuente de
alimentación ATX 12V en
este conector.

* La spina di alimentazione può
essere inserita in questo connet-
tore con un solo orientamento.

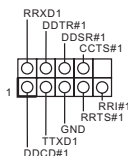
Conector de alimentación
de 12 V de gráficos
(GFX_12V1 de 6 pines)
(consulte la pág.1, N° 18)



Esta placa base proporciona un
conector de alimentación de 12 V
para gráficos de 6 pines.

* Instale el cable de alimentación
de la unidad de alimentación en
este conector cuando estén insta-
ladas 4 tarjetas gráficas.

Cabezal de puerto serie
(COM1 de 9 pines)
(consulte la pág.1, N° 29)



Este cabezal COM1 admite
un módulo de puerto serie.

Cabezales de LED RGB
(RGB_LED1 de 4 pines)
(consulte la pág.1, N° 28)



Estas dos bases de conexiones
RGB se utilizan para conectar
el alargador de LED RGB que
permite a los usuarios elegir entre
varios efectos de iluminación de
LED.

**Precaución: Nunca instale
el cable de LED RGB con la
orientación incorrecta ya que,
de lo contrario, el cable puede
dañarse.**

*Consulte la página 43 para obten-
er más instrucciones sobre estas
dos bases de conexiones.

(RGB_LED2 de 4 pines)
(consulte la pág.1, N° 12)



Conector U.2
(U2_1 de 36 pines)
(consulte la pág.1, N° 13)



Este conector admite
dispositivos de almacenamiento
U.2 NVMe Express de hasta
Gen3 x4 (32 Gb/s).

* Si el conector U.2 está desenchufado, M2_1 se deshabilitará.

1.4 Interruptores inteligentes

La placa base contiene cinco interruptores inteligentes: Interruptor de alimentación, Interruptor de restablecimiento, Interruptor de borrado de CMOS, Interruptor CPU Xtreme OC e Interruptor de selección de BIOS.

Interruptor de alimentación
(PWRBTN)
(consulte la pág.1, N° 19)



El interruptor de alimentación permite a los usuarios encender y apagar rápidamente el sistema.

Interruptor de reseteo
(RSTBTN)
(consulte la pág.1, N° 22)



El interruptor de reseteo permite a los usuarios resetear rápidamente el sistema.

Interruptor de borrado de CMOS
(CLRCBTN)
(consulte la pág.1, N° 23)



El interruptor de borrado de CMOS permite a los usuarios borrar rápidamente los valores de CMOS.



Esta función podrá utilizarla únicamente cuando apague su ordenador y desconecte la corriente.

Interruptor CPU Xtreme OC
(MOS_PROCHOT1)
(consulte la pág.1, N° 5)



PROCHOT = ACTIVADO (por derecho)(deshabilitar el modo CPU Extreme OC)

PROCHOT = DESACTIVADO

(Habilitar el modo CPU Extreme OC)
Advertencia: Aumentar la velocidad puede causar daños a su CPU y a la placa base. Esta operación se debe realizar bajo su propia responsabilidad y usted debe asumir los costos.

Interruptor de actualización de la BIOS (BIOS_FB1)
(consulte la pág. 3, No. 19)



El interruptor de actualización de la BIOS permite a los usuarios actualizar la BIOS.

1 Введение

Благодарим вас за приобретение надежной материнской платы ASRock Fatal1ty X399 Professional Gaming Series, выпускаемой под постоянным строгим контролем компании ASRock. Эта материнская плата обеспечивает великолепную производительность и отличается надежной конструкцией в соответствии с требованиями компании ASRock в отношении качества и долговечности.



По причине обновления спецификации на материнскую платформу и программного обеспечения BIOS содержимое настоящей документации может быть изменено без предварительного уведомления. При изменении содержимого настоящего документа его обновленная версия будет доступна на веб-сайте ASRock без предварительного уведомления. При необходимости технической поддержки, связанной с материнской платой, посетите веб-сайт и найдите на нем информацию о модели используемой вами материнской платы. На веб-сайте ASRock также можно найти самый последний перечень поддерживаемых VGA-карт и ЦП. Веб-сайт ASRock <http://www.asrock.com>.

1.1 Комплект поставки

- Материнская плата ASRock Fatal1ty X399 Professional Gaming Series (форм-фактор ATX)
- Краткое руководство по установке ASRock Fatal1ty X399 Professional Gaming Series
- Диск с ПО для ASRock Fatal1ty X399 Professional Gaming Series
- 1 x экран панели с портами ввода-вывода
- 4 x кабеля передачи данных Serial ATA (SATA) (приобретаются отдельно)
- 1 x карта ASRock 3-Way SLI Bridge (приобретаются отдельно)
- 1 x карта ASRock 4-Way SLI-S111 Bridge (приобретаются отдельно)
- 1 x карта ASRock SLI_HB_Bridge_3S (приобретаются отдельно)
- 2 x ASRock WiFi-антенны 2,4/5 ГГц (приобретаются отдельно)
- 3 x Винт для гнезда M.2 (приобретаются отдельно)

1.2. Технические характеристики

Платформа	• Форм-фактор ATX • 8-слойная печатная схема • Медная печатная плата 2 унции
ЦП	• Поддерживаются процессоры AMD серии Ryzen Threadripper под сокет TR4 • Цифровой ШИМ-контроллер IR • Система питания 11 • Поддержка системы ASRock Hyper BCLK Engine III
Чипсет	• AMD X399
Память	• Четырехканальная память DDR4 • 8 x гнезда DDR4 DIMM • Поддерживаются модули небуферизованной памяти DDR4 3600+ (разгон)/3200 (разгон)/2933 (разгон)/2667/2400/2133 без с ECC и без ECC* * Дополнительная информация представлена в Списке совместимой памяти (Memory Support List) на веб-сайте AS-Rock. (http://www.asrock.com/) • Максимальный объем ОЗУ: 128 ГБ • Гнезда DIMM с золочеными контактами 15мк
Слот расширения	• 4 x слота PCI Express 3.0 x16 (PCIЕ1/PCIЕ2/PCIЕ4/PCIЕ5:одинарный при x16 (PCIЕ1); двойной при x16 (PCIЕ1) / x16 (PCIЕ4); тройной при x16 (PCIЕ1) / x8 (PCIЕ2) / x16 (PCIЕ4); четверной при x16 (PCIЕ1) / x8 (PCIЕ2) / x16 (PCIЕ4) / x8 (PCIЕ5))* * Поддерживаются в качестве загрузочных SSD-диски типа NVMe. • 1 x слот PCI Express 2.0 x1 • Поддержка AMD Quad CrossFireX™, 4-Way CrossFireX™, 3-Way CrossFireX™ и CrossFireX™ • Поддержка NVIDIA® Quad SLI™, 4-Way SLI™, 3-Way SLI™ и SLI™ • 1 x вертикальный слот M.2 (ключ E) с входящим в комплект поставки модулем WiFi-802.11ac (на задней панели ввода-вывода) • Позолоченные контакты разъема VGA PCIe (PCIЕ1 и PCIЕ4) 15μ

Звук

- 7.1-канальный звук высокой четкости HD Audio с защитой данных (аудиокодек Realtek ALC1220)
- Поддержка Premium Blu-ray Audio
- Защита от перепадов напряжения в электрической сети
- Конденсаторы для аудиосистем серии Nichicon Fine Gold
- ЦАП с отношением сигнал/шум 120 дБ с дифференциальным усилителем
- Первоклассный усилитель TI® NE5532 для гарнитуры у аудиоразъема на передней панели (поддерживаются гарнитуры с сопротивлением до 600 Ом)
- Стабилизированный вход питания
- Технология Direct Drive
- Изолирующее экранирование печатной платы
- Определение сопротивления нагрузки, подключенной к линейному выходу.
- Отдельные слои печатной платы для левого и правого аудиоканалов
- Светодиодная RGB-подсветка
- Позолоченные контакты аудиоразъемов
- Позолоченный аудиоразъем (15 мкм)
- Поддержка Creative SoundBlaster Cinema3

LAN

- 1 x порт 10 Gigabit Ethernet 100/1000/2500/5000/10000 Мбит/с (AQUANTIA® AQC107):
- Поддерживается пробуждение по LBC
 - Молниезащита и защита от электростатических разрядов
 - Поддерживается PXE
- 2 x порта Gigabit Ethernet 10/100/1000 Мбит/с (2 x Intel® I211AT):
- Поддерживается пробуждение по LBC
 - Молниезащита и защита от электростатических разрядов
 - Поддерживается Energy Efficient Ethernet 802.3az
 - Поддерживается PXE

Беспроводная ЛВС

- Модуль WiFi Intel® 802.11ac (бесплатно в комплекте)
- Поддержка IEEE 802.11a/b/g/n/ac
- Поддержка двух диапазонов (2,4/5 ГГц)
- Поддержка высокоскоростного беспроводного подключения до 433 Мбит/с
- Поддержка Bluetooth 4.2 / 3.0 + High speed class II

Порты ввода-вывода на задней панели

- 2 x антенных порта
- 1 x порт PS/2 для мыши/клавиатуры
- 1 x оптический выход SPDIF
- 1 x порт USB 3.1 Type-A (10 Гбит/с) (с защитой от электростатических разрядов)
- 1 x порт USB 3.1 Type-C (10 Гбит/с) (с защитой от электростатических разрядов)

- 8 х портов USB 3.0 (с защитой от электростатических разрядов)
- * Функция питания через USB (Ultra USB Power) поддерживается на порту USB3_6.
- * Функция пробуждения ACPI не поддерживается на порту USB3_6.
- * 1 х порт для мыши Fatal1ty (USB 3.0) входит в комплект
- 3 х порта RJ-45 для ЛВС с индикатором (ACT/LINK и SPEED)
- 1 х переключатель BIOS Flashback.
- Разъемы HD Audio: тыловые AC / центральная AC / сабвуфер / линейный вход / фронтальные AC / микрофон (позолоченные контакты)

Запоминающие устройства

- 8 х порта SATA3 со скоростью передачи данных 6,0 Гб/с, поддержка RAID (RAID 0, RAID 1 и RAID 10), NCQ, AHCI и «горячего подключения».
- 2 х слота Ultra M.2 (M2_1 и M2_2), поддерживаются модули M.2 SATA3 типа 2242/2260/2280 с пропускной способностью 6,0 Гбит/с и модули M.2 PCI Express до версии Gen3 x4 (32 Гбит/с) с ключом M*
- 1 х слот Ultra M.2 (M2_3), поддерживается модуль M.2 SATA3 типа 2230/2242/2260/2280 с пропускной способностью 6,0 Гб/с и модуль M.2 PCI Express до версии Gen3 x4 (32 Гб/с) с ключом M.*
- * Поддерживаются в качестве загрузочных SSD-диски типа NVMe.
- * Поддерживается комплект ASRock U.2
- 1 х разъем U.2
- * Если подключен разъем U.2, слот M2_1 отключается.

Разъемы

- 1 х колодка COM-порта
- 1 х колодка TPM
- 1 х колодка светодиодного индикатора питания и динамика корпуса
- 2 х колодки для подключения светодиодной RGB-подсветки.
- * Каждая колодка поддерживает светодиодную ленту мощностью до 36 Вт (12 В, 3 А).
- 1 х разъем для вентилятора охлаждения ЦП, 4-контактный
- * Разъем процессорного вентилятора поддерживает вентилятор с потребляемым током не более 1 А (12 Вт).
- 1 х разъем для дополнительного вентилятора или водяной помпы водяного охлаждения ЦП (4-контактный) (смарт-регулятор скорости вентилятора)
- * Разъем для процессорного корпусного вентилятора или водяной помпы поддерживает вентилятор с потребляемым током не более 1,5 А (18 Вт).

- 2 x разъема для корпусных вентиляторов (4-контактные) (смарт-регулятор скорости вентилятора)
- 1 x разъем для дополнительного корпусного вентилятора или водяной помпы (4-контактный) (смарт-регулятор скорости вентилятора)

* Разъем для дополнительного корпусного вентилятора или водяной помпы поддерживает вентилятор с потребляемым током не более 1,5 A (18 Вт).

* Для разъемов CPU_FAN1, CHA_FAN1, CHA_FAN2, CPU_OPT/W_PUMP и CHA_FAN3/W_PUMP автоматически определяется тип подключенного вентилятора: 3- или 4-контактный.

- 1 x разъем питания ATX (24-контактный разъем питания высокой плотности, для материнской платы)
- 1 x разъем питания 12 В (8-контактный разъем питания высокой плотности, для материнской платы)
- 1 x разъем питания 12 В (4-контактный разъем питания высокой плотности, для материнской платы)
- 1 x разъем питания 12 В (6-контактный разъем питания высокой плотности, для видеокарты на PCIe)
- 1 x аудиоразъем для передней панели (15μ Позолоченные аудиоразъемов)*

- 1 x аудиоразъем на передней панели под прямым углом*

* Аудиоустройства подключаются к одному из аудиоразъемов.

- 2 x колодки USB 2.0 (4 порта USB 2.0 с защитой от электростатических разрядов)
- 2 x колодки USB 3.0 (4 порта USB 3.0 с защитой от электростатических разрядов)
- 1 x кнопка сброса настроек CMOS
- 1 x Dr. Debug с индикатором
- 1 x кнопка питания с индикатором
- 1 x кнопка перезагрузки с индикатором
- 1 x кнопка экстремального разгона ЦП

Параметры BIOS

- AMI UEFI Legal BIOS с поддержкой графического интерфейса
- Поддержка технологии «Plug and Play»
- Совместимость с управлением энергопотреблением по ACPI 5.1
- Поддержка функции JumperFree
- Поддерживается SMBIOS 2.3.
- Регулировка напряжений ЦП, VCORE_NB, DRAM, VPPM, PCH 1,05V,+1,8V, VDDP, PROM 2,5V

Контроль оборудования

- Контроль температуры: вентилятор ЦП; дополнительный вентилятор или помпа водяного охлаждения ЦП; корпусной вентилятор; дополнительный вентилятор или помпа водяного охлаждения корпуса

- Тахометр: вентилятор ЦП; дополнительный вентилятор или помпа водяного охлаждения ЦП; корпусной вентилятор; дополнительный вентилятор или помпа водяного охлаждения корпуса
- Бесшумная работа (с автоматической регулировкой скорости вращения в зависимости от температуры ЦП): вентилятор ЦП; дополнительный вентилятор или помпа водяного охлаждения ЦП; корпусной вентилятор; дополнительный вентилятор или помпа водяного охлаждения корпуса
- Регулировка скорости вращения: вентилятор ЦП; дополнительный вентилятор или помпа водяного охлаждения ЦП; корпусной вентилятор; дополнительный вентилятор или помпа водяного охлаждения корпуса
- Контроль напряжений: +12 В, +5 В, +3,3 В, напряжение ядра ЦП, VCORE_NB, DRAM, PCH 1,05В, +1,8В, VDDP

Операционные системы

- Microsoft® Windows® 10 (64-разрядная)
- * Подробные сведения об обновлении драйвера для Windows® 10 представлены на веб-сайте ASRock: <http://www.asrock.com>

Сертификация

- FCC, CE
- Совместимость с ErP/EuP (необходим блок питания, соответствующий стандарту ErP/EuP)

* С дополнительной информацией об изделии можно ознакомиться на веб-сайте: <http://www.asrock.com>



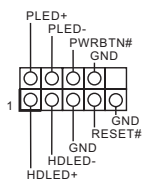
Следует учитывать, что разгон процессора, включая изменение настроек BIOS, применение технологии Untied Overclocking и использование инструментов разгона независимых производителей, сопряжен с определенным риском. Разгон процессора может снизить стабильность системы или даже привести к повреждению ее компонентов и устройств. Разгон процессора осуществляется пользователем на свой собственный риск и за свой собственный счет. Мы не несем ответственность за возможный ущерб, вызванный разгоном процессора.

1.3 Колодки и разъемы, расположенные на материнской плате



Расположенные на материнской плате колодки и разъемы перемычками НЕ являются. НЕ устанавливайте на эти колодки и разъемы колпачковые перемычки. Установка колпачковых перемычек на эти колодки и разъемы может вызвать неустранимое повреждение материнской платы.

Колодка системной
панели
(9-контактная, PANEL1)
(см. стр. 1, № 20)



Подключите расположенные на корпусе выключатель питания, кнопку перезагрузки и индикатор состояния системы к этой колодке в соответствии с распределением контактов, приведенным ниже. Перед подключением кабелей определите положительный и отрицательный контакты.



PWRBTN (кнопка питания):

Подключение кнопки питания, расположенной на передней панели корпуса. Можно настроить порядок выключения системы с использованием кнопки питания.

RESET (кнопка перезагрузки):

Подключение кнопки перезагрузки системы, расположенной на передней панели корпуса. Нажмите кнопку перезагрузки, чтобы перезапустить компьютер, если он завис и нормальный запуск невозможен.

PLED (светодиодный индикатор питания системы):

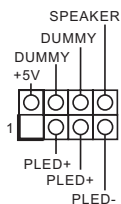
Подключение индикатора состояния, расположенного на передней панели корпуса. Светодиодный индикатор горит, когда система работает. Когда система находится в режиме ожидания S1/S3, светодиод мигает. Когда система находится в режиме ожидания S4 или выключена (S5), светодиод не горит.

HDLED (светодиодный индикатор работы жесткого диска):

Подключение светодиодного индикатора работы жесткого диска, расположенного на передней панели. Светодиодный индикатор горит, когда жесткий диск выполняет считывание или запись данных.

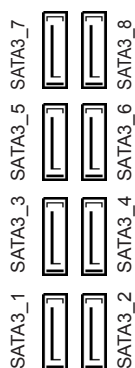
Передняя панель может быть разной на разных корпусах. В основном передняя панель включает в себя кнопку питания, кнопку перезагрузки, светодиодный индикатор питания, светодиодный индикатор работы жесткого диска, динамик и т. д. При подключении передней панели к этой колодке правильно подключайте провода к контактам.

Колодка светодиодного индикатора питания и динамика корпуса (7-контактная, SPK_PLED1) (см. стр. 1, № 26)



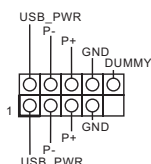
Предназначена для подключения светодиодного индикатора питания и динамика корпуса.

Разъемы Serial ATA3 (SATA3_1_2: см. стр. 1, № 17) (SATA3_3_4: см. стр. 1, № 16) (SATA3_5_6: см. стр.1,№ 15) (SATA3_7_8: см. стр.1,№ 14)



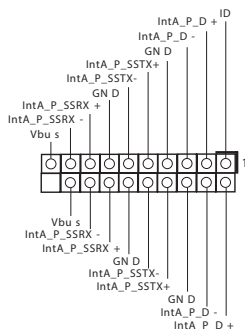
Эти шесть восемь SATA3 предназначены для подключения кабелей SATA внутренних запоминающих устройств для передачи данных со скоростью до 6,0 Гб/с.

Колодки USB 2.0 (9-контактная, USB_1_2) (см. стр. 1, № 24) (9-контактная, USB_3_4) (см. стр. 1, № 25)



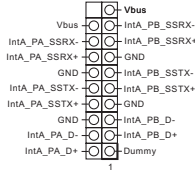
На системной плате размещены две колодки. Каждая колодка USB 2.0 может поддерживать два порта.

Колодки USB 3.0 (19-контактная, USB3_9_10) (см. стр. 1, № 21)

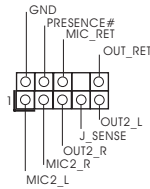


На системной плате размещены две колодки. Каждая колодка USB 3.0 может поддерживать два порта.

(19-контактная,
USB3_11_12)
(см. стр. 1, № 11)



Аудиоколодки для
передней панели
(9-контактная, HD_
AUDIO1)
(см. стр. 1, № 31)
(9-контактная, HD_
AUDIO_RA1)
(См. стр. 1, № 30)



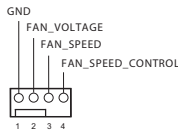
Эта колодка предназначена
для подключения
аудиоустройств к передней
аудиопанели.

* Аудиоустройства
подключаются к одному из
аудиоразъемов.



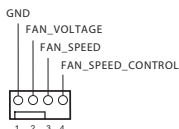
1. Аудиосистема высокого разрешения поддерживает функцию распознавания разъема, но для ее правильной работы необходимо, чтобы провод панели корпуса поддерживал передачу сигналов HDA. Инструкции по установке системы см. в этом руководстве и руководстве на корпус.
2. При использовании аудиопанели AC'97 подключите ее к аудиоколодке передней панели, как указано далее:
 - A. Подключите Mic_IN (MIC) к MIC2_L.
 - B. Подключите Audio_R (RIN) к OUT2_R, Audio_L (LIN) к OUT2_L.
 - C. Подключите провод заземления (GND) к контакту заземления (GND).
 - D. Контакты MIC_RET и OUT_RET используются только для аудиопанели высокого разрешения. При использовании аудиопанели AC'97 их подключать не нужно.
 - E. Чтобы активировать передний микрофон, перейдите на вкладку FrontMic панели управления Realtek и отрегулируйте параметр Recording Volume (Громкость записи).

Разъемы вентиляторов
корпуса
(4-контактный,
CHA_FAN1)
(см. стр. 1, № 33)
(4-контактный,
CHA_FAN2)
(см. стр. 1, № 27)



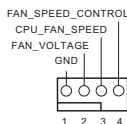
Предназначены
для подключения
кабелей разъемов
вентиляторов и
подключения черного
провода к заземлению.

Разъем для дополнительного вентилятора или помпы водяного охлаждения корпуса (4-контактный CHA_FAN3/W_PUMP) (см. стр. 1, № 1)



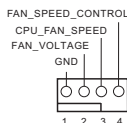
Данная материнская плата оснащена одна 4-контактными разъемами для системы водяного охлаждения корпуса. 3-контактную систему водяного охлаждения корпуса следует подключать к контактам 1–3.

Разъем вентилятора охлаждения процессора (4-контактный, CPU_FAN1) (см. стр. 1, № 8)



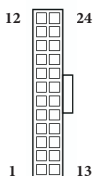
Эта материнская плата снабжена 4-контактным разъемом для малошумящего вентилятора ЦП. Если вы собираетесь подключить 3-контактный вентилятор охлаждения процессора, подключайте его к контактам 1-3.

Разъем для дополнительного вентилятора или помпы водяного охлаждения ЦП (4-контактный CPU_OPT/W_PUMP) (см. стр. 1, № 32)



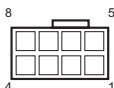
Данная материнская плата оснащена 4-контактным разъемом для системы водяного охлаждения ЦП. 3-контактную систему водяного охлаждения ЦП следует подключать к контактам 1–3.

Разъем питания ATX (24-контактный, ATXPWR1) (см. стр. 1, № 10)



Эта материнская плата снабжена 24-контактным разъемом питания ATX. Чтобы использовать 20-контактный разъем питания ATX, подключите его вдоль контакта 1 и контакта 13.

Разъем питания ATX 12 В (8-контактный, ATX12B1) (см. стр. 1, № 9)



Эта материнская плата снабжена 8-контактным разъемом питания ATX 12 В. Подключите 8-контактный разъем ATX 12 В от блока питания.

Разъем питания ATX 12 В
(4-контактный, ATX12V2)
(см. стр. 1, № 2)



К данному разъему подключается источник питания ATX 12 В.

* Разъем от блока питания подсоединяется к этому разъему только в одной ориентации.

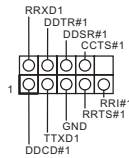
Разъем питания видеокарты 12 В
(6-контактный, GFX_12V1)
(см. стр. 1, № 18)



Эта материнская плата оснащена 6-контактным 12-В разъемом питания видеокарты.

* Когда установлены 4 видеокарты, подключите кабель от блока питания к этому разъему.

Колодка последовательного порта
(9-контактная, COM1)
(см. стр. 1, № 29)



Колодка COM1 поддерживает подключение модуля последовательного порта.

Колодки для подключения светодиодной RGB-подсветки.
(4 контакта, RGB_LED1)
(см. стр. 1, № 28)



Эти две колодки для RGB-подсветки служат для подключения удлинительного кабеля светодиодной RGB-подсветки, которая позволяет реализовать различные световые эффекты.

Внимание! Категорически запрещается подключать кабель светодиодной RGB-подсветки с нарушением полярности, так как это может привести к его повреждению.

* Дополнительные сведения об использовании этих двух колодок см. на стр. 43.

(4 контакта, RGB_LED2)
(см. стр. 1, № 12)



Разъем U.2
(36-контактный U2_1)
(см. стр. 1, № 13)



Этот разъем поддерживает
запоминающие устройства U.2
NVMe Express до Gen3 x4
(32 Гбит/с).

* Если подключен разъем U.2,
слот M2_1 отключается.

1.4 Электронные кнопки

Эта материнская плата оснащена пятью смарт-переключателями: питания, сброса, очистки CMOS-памяти, экстремального разгона ЦП и прошивки BIOS.

Кнопка питания
(PWRBTN)
(см. стр. 1, № 19)



Кнопка питания предназначена для быстрого включения/выключения системы.

Кнопка перезагрузки
(RSTBTN)
(см. стр. 1, № 22)



Кнопка перезагрузки предназначена для быстрой перезагрузки системы.

Кнопка сброса настроек CMOS
(CLRCBTN)
(см. стр. 1, № 23)



Кнопка сброса настроек CMOS предназначена для быстрого обнуления значений CMOS.



Эта функция работает, только если питание компьютера выключено и он отключен от источника питания.

Кнопка экстремального разгона ЦП
(MOS_PROCHOT1)
(см. стр. 1, № 5)



PROCHOT = ВКЛ. (по умолчанию) (режим экстремального разгона ЦП отключен)

PROCHOT = ОТКЛ.

(режим экстремального разгона ЦП включен)

Внимание! Разгон процессора может привести к повреждению процессора и системной платы. Разгон процессора осуществляется пользователем на собственный риск и за собственный счет.

Кнопка BIOS Flashback
(BIOS_FB1)
(См. стр. 3, № 19)



Кнопка BIOS Flashback позволяет прошивать BIOS.

1 Introdução

Obrigado por comprar a placa-mãe ASRock Fatal1ty X399 Professional Gaming Series da ASRock, uma placa-mãe confiável produzida sob o controle de qualidade altamente consistente da ASRock. Esta placa principal oferece um excelente desempenho com um design robusto em conformidade com o compromisso da ASRock em fabricar produtos de qualidade e resistentes.



Como as especificações da placa-mãe e do software do BIOS podem ser atualizadas, o conteúdo desta documentação estará sujeito a alterações sem aviso prévio. Caso ocorram modificações a esta documentação, a versão atualizada estará disponível no site da ASRock sem aviso prévio. Se precisar de assistência técnica relacionada a esta placa principal, visite o nosso site para obter informações específicas sobre o modelo que estiver utilizando. Você também poderá encontrar a lista de placas VGA e CPU mais recentes suportadas no site da ASRock. Site da ASRock <http://www.asrock.com>.

1.1 Conteúdo da embalagem

- Placa mãe Fatal1ty X399 Professional Gaming Series da ASRock(ATX Form Factor)
- Guia de Instalação Rápida da Placa-mãe Fatal1ty X399 Professional Gaming Series da ASRock
- CD de Suporte da Placa-mãe Fatal1ty X399 Professional Gaming Series da ASRock
- 1 x Painel de E/S
- 4 x Cabos de dados Serial ATA (SATA) (Opcional)
- 1 x Placa ASRock 3-Way SLI Bridge (Opcional)
- 1 x Placa ASRock 4-Way SLI-S111 Bridge (Opcional)
- 1 x Placa ASRock SLI_HB_Bridge_3S (Opcional)
- 2 x Antenas de 2,4/5 GHz da ASRock WiFi (Opcional)
- 3 x Parafusos para Soquetes M.2 (Opcional)

1.2 Especificações

Plataforma

- Formato ATX
- PCB 8 Camadas
- PCB 2oz de Cobre

CPU

- Suporta CPUs Série AMD TR4 Socket Ryzen Threadripper
- Energia Digital IR
- Design com 11 fases de alimentação
- Suporta Mecanismo ASRock Hyper BCLK III

Chipset

- AMD X399

Memória

- Memória DDR4 Quad Channel Tecnologia
- 8 x Slots DIMM DDR4
- Suporta memória DDR4 3600+(OC)/3200(OC)/2933(OC)/2667/2400/2133 ECC e não ECC, sem memória intermediária*
- * Por favor, consulte a Lista de Suporte de Memória no site da ASRock para obter mais informação. (<http://www.asrock.com/>)
- Capacidade máxima da memória do sistema: 128GB
- Contato em Ouro 15µ nos slots DIMM

Slot de expansão

- 4 x Slots PCI Express 3.0 x16 (PCIE1/PCIE2/PCIE4/PCIE5:único em x16 (PCIE1); duplo em x16 (PCIE1) / x16 (PCIE4); triplo em x16 (PCIE1) / x8 (PCIE2) / x16 (PCIE4); duplo em x16 (PCIE1) / x8 (PCIE2) / x16 (PCIE4) / x8 (PCIE5))*
- * Suporta NVMe SSD nos discos de inicialização
- 1 x slots PCI Express 2.0 x1
- Suporta AMD Quad CrossFireX™, 4-Way CrossFireX™, 3-Way CrossFireX™ e CrossFireX™
- Suporta NVIDIA® Quad SLI™, 4-Way SLI™, 3-Way SLI™ e SLI™
- 1 x Soquete M.2 Vertical (Tecla E) com módulo Wi-Fi-802.11ac incluído (na I/O traseira)
- Contato em Ouro 15µ no Slot PCIe VGA (PCIE1 e PCIE4)

Áudio

- Áudio HD de 7.1 canais com proteção de conteúdo (Codec de áudio Realtek ALC1220)
- Suporte áudio Blu-ray superior
- Suporta Proteção de Sobretenção
- Capacitor de Áudio Série Ouro Fino Nichicon
- 120dB SNR DAC com amplificador diferencial
- Fone de Ouvido TI® NE5532 Premium para - Conector de Áudio do Painel frontal (suporta fones de ouvido de até 600 Ohms)
- Ligação Pura
- Tecnologia de drive direto
- Blindagem de isolamento PCB
- Sensoriamento de Impedância na porta de Saída de Linha
- Camadas de PCB individuais por canal de áudio R/L
- RGB LED
- Fones de Áudio Gold
- Conector de Áudio de Outro 15μ
- Suporta Creative SoundBlaster Cinema3

LAN

1 x 10 Gigabit LAN 100/1000/2500/5000/10000 Mb/s (AQUANTIA® AQ107):

- Suporta Wake-On-LAN
- Oferece Suporte à Proteção de Relâmpago/ESD
- Suporta PXE

2 x Intel Gigabit LAN 10/100/1000 Mb/s (2 x Intel® I211AT):

- Suporta Wake-On-LAN
- Oferece Suporte à Proteção de Relâmpago/ESD
- Suporta Energy Efficient Ethernet 802.3az
- Suporta PXE

LAN sem fios

- Módulo Intel® 802.11ac WiFi (Pacote Gratuito)
- Suporta IEEE 802.11a/b/g/n/ac
- Suporta banda dupla (2,4/5 GHz)
- Suporta conexão sem fio de alta velocidade até 433Mbps
- Suporta Bluetooth 4.2 / 3.0 + Classe II de alta velocidade

E/S do painel posterior

- 2 x Portas de Antena
- 1 x Porta PS/2 para mouse/teclado
- 1 x Porta de saída SPDIF ótica
- 1 x Porta USB 3.1 Tipo A (10 Gb/s) (Suporta Proteção ESD)
- 1 x Porta USB 3.1 Tipo C (10 Gb/s) (Suporta Proteção ESD)

- 8 x Portas USB 3.0 (Suporta Proteção ESD)
- * Energia Ultra USB é suportada nas porta USB3_6.
- * Não há suporte para a função de despertar ACPI em porta USB3_6.
- * 1 x Porta de Mouse Fatal1ty (USB 3.0) é incluída
- 3 x Porta LAN RJ-45 com LED (LED ACT/LIGAÇÃO e LED DE VELOCIDADE)
- 1 x Chave BIOS Flashback
- Fichas de áudio HD: Alto-falante posterior / Central / Graves / Entrada de linha / Alto-falante frontal / Microfone(Entradas de Áudio Gold)

Armazenamento

- 8 x Conectores SATA3 6,0 Gb/s, suporta RAID (RAID 0, RAID 1, e RAID 10), NCQ, AHCI e Conexão a Quente
- 2 x Sockets Ultra m. 2 (M2_1 e M2_2) , suporta M chave digite 2242/2260/2280 módulo m. 2 SATA3 6.0 Gb/s e m. 2 PCI Express módulo até Gen3 x4 (32 Gb/s) *
- 1 x Soquete Ultra M.2 (M2_3), suporta Chave M tipo 2230/2242/2260/2280 módulo M.2 SATA3 6.0 Gb/s e módulo M.2 PCI Express até Gen3 x4 (32 Gb/s)*
- * Suporta NVMe SSD nos discos de inicialização
- * Suporta Kit U.2 ASRock
- 1 x Conector U.2
- * Se Conector U.2 está conectado, M2_1 será desativado

Conector

- 1 x Suporte porta COM
- 1 x LED de alimentação e Cabeçote de Autofalante
- 2 x Cabeçotes de LED RGB
- * Cada Cabeçote suporta Tira de LED até 12V/3A, 36W
- 1 x Conector da ventoinha da CPU (4 pinos)
- * O Conector do Ventilador de CPU suporta o ventilador de CPU de alimentação máxima 1A do ventilador (12W).
- 1 x Conector de Ventilador de CPU/Ventilador da Bomba de Água (4 pinos) (Controle de Velocidade de Ventoinha Inteligente)
- * O Ventilador de CPU Opcional/Ventilador da Bomba de Água suporta o ventilador de refrigerador a água de 1.5A máximo (18W) potência do ventilador.
- 2 x Conectores de Ventoinha de Chassi (4 pinos) (Controle de Velocidade de Ventoinha Inteligente)
- 1 x Conector de Ventilador de Chassi/Ventilador da Bomba de Água (4 pinos) (Controle de Velocidade de Ventoinha Inteligente)

* O Ventilador de Chassi Opcional/Ventilador da Bomba de Água suporta o ventilador de refrigerador a água de 1,5A máximo (18W) potência do ventilador.

* CPU_FAN1, CHA_FAN1, CHA_FAN2, CPU_OPT/W_PUMP e CHA_FAN3/W_PUMP podem detectar automaticamente se ventoinha de 3 pinos ou 4 pinos está em uso.

- 1 x Conector de energia 24-pinos ATX (Conector de energia de alta densidade) (para placa-mãe)
- 1 x Conector de energia 8-pinos 12V (Conector de energia de alta densidade) (para placa-mãe)
- 1 x Conector de energia 4-pinos 12V (Conector de energia de alta densidade) (para placa-mãe)
- 1 x Conector de energia 6-pinos 12V (Conector de energia de alta densidade) (para placa gráfica PCIe)
- 1 x Conector de áudio de painel frontal (Conector de Áudio de Outro 15μ)*
- 1 x Conector de áudio do painel frontal de ângulo direito*

*Conecte o dispositivo de áudio a qualquer um dos conectores de áudio.

- 2 x Plataformas USB 2.0 (Suporta 4 portas USB 2.0) (Suporta Proteção ESD)
- 2 x Plataformas USB 3.0 (Suporta 4 portas USB 3.0) (Suporta Proteção ESD)
- 1 x Interruptor para apagar o CMOS
- 1 x Dr. Debug com LED
- 1 x Interruptor de alimentação LED
- 1 x Interruptor de reinicialização LED
- 1 x Switch de CPU Xtreme OC

Funções da BIOS

- AMI UEFI Legal BIOS com suporte GUI
- Suporta “Plug and Play”
- ACPI 5.1 compatível com eventos de despertar
- Suporta jumperfree
- Suporte SMBIOS 2.3
- CPU, VCORE_NB, DRAM, VPPM, PCH 1,05V, +1,8V, VDDP, PROM 2,5V Multi ajuste de tensão

Monitor de hardware

- Sensor de Temperatura: CPU, CPU Opcional/Bomba de água, Chassis, Chassis Opcional/Ventoinhas da bomba de água

- Tacômetro da ventoinha: CPU, CPU Opcional/Bomba de água, Chassis, Chassis Opcional/Ventoinhas da bomba de água
- Ventoinha Silenciosa (Auto ajusta velocidade da ventoinha do chassi pela temperatura da CPU): CPU, CPU Opcional/Bomba de água, Chassis, Chassis Opcional/Ventoinhas da bomba de água
- Controle multi-velocidade da ventoinha: CPU, CPU Opcional/Bomba de água, Chassis, Chassis Opcional/Ventoinhas da bomba de água
- Monitoramento da tensão: +12V, +5V, +3,3V, CPU Vcore, VCORE_NB, DRAM, PCH 1,05V, +1,8V, VDDP

SO

- Microsoft® Windows® 10 64-bit
- * Para o driver atualizado do Windows® 10, por favor, visite o website da ASRock para mais detalhes: <http://www.asrock.com>

Certificações

- FCC, CE
- Preparada para ErP/EuP (é necessária uma fonte de alimentação preparada para ErP/EuP)

* Para obter informações detalhadas sobre o produto, por favor, visite o nosso site: <http://www.asrock.com>



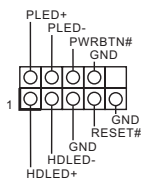
Por favor, observe que existe um certo risco envolvendo overclocking, incluindo o ajuste das definições na BIOS, a aplicação de tecnologia Untied Overclocking ou a utilização de ferramentas de overclocking de terceiros. O overclocking poderá afetar a estabilidade do sistema ou mesmo causar danos nos componentes e dispositivos do seu sistema. Ele deve ser realizado por sua conta e risco. Não nos responsabilizamos por possíveis danos causados pelo overclocking.

1.3 Suportes e conectores onboard



Os conectores e suportes onboard NÃO são jumpers. NÃO coloque tampas de jumpers sobre estes terminais e conectores. Colocar tampas de jumpers sobre os terminais e conectores irá causar danos permanentes à placa-mãe.

Suporte do painel de sistema
(PAINEL1 de 9 pinos)
(ver p.1, N.º 20)



Ligue o botão de alimentação, o botão de reinicialização e o indicador do estado do sistema no chassi deste suporte, de acordo com a descrição abaixo. Observe os pinos positivos e negativos antes de conectar os cabos.



PWRBTN (Botão de alimentação):

Conecte o botão de alimentação no painel frontal do chassi. Você pode configurar a forma para desligar o seu sistema através do botão de alimentação.

RESET (Botão de reinicialização):

Conecte o botão de reinicialização no painel frontal do chassi. Pressione o botão de reinicialização para reiniciar o computador, se ele congela e falha ao realizar um reinício normal.

PLED (LED de alimentação do sistema):

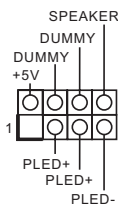
Conecte o indicador do estado da alimentação no painel frontal do chassi. O LED ficará aceso quando o sistema estiver em funcionamento. O LED ficará piscando quando o sistema estiver nos estados de suspensão S1/S3. O LED ficará desligado quando o sistema estiver no estado de suspensão S4 ou desligado (S5).

HDLED (LED de atividade do disco rígido):

Conecte o LED de atividade do disco rígido no painel frontal do chassi. O LED ficará aceso quando o disco rígido estiver lendo ou registrando dados.

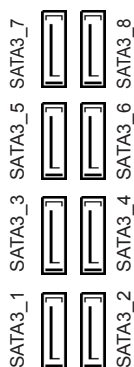
O design do painel frontal poderá variar dependendo do chassi. Um módulo de painel frontal consiste principalmente em um botão de alimentação, um botão de reinicialização, um LED de alimentação, um LED de atividade do disco rígido, um alto-falante, etc. Ao conectar seu módulo de painel frontal do chassi a este conector, certifique-se de que os fios e os pinos correspondem de forma correta.

LED de alimentação e Cabeçote de Autofalante
(SPK_PLED1 de 7 pinos)
(ver p.1, N.º 26)



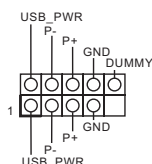
Conecte o LED de alimentação do chassi e o autofalante do chassi a este cabeçote.

Conectores série ATA3
(SATA3_1_2:
ver p.1, N.º 17)
(SATA3_3_4:
ver pág.1 No. 16)
(SATA3_5_6:
ver p.1, N.º 15)
(SATA3_7_8:
ver p.1, N.º 14)



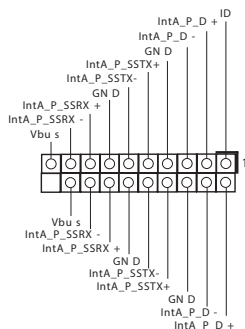
Estes oito conectores SATA3 suportam cabos de dados SATA para dispositivos de armazenamento interno com uma taxa de transferência de dados de até 6,0 Gb/s.

Suportes USB 2.0
(USB1_2 de 9 pinos)
(ver p.1, N.º 24)
(USB_3_4 de 9 pinos)
(ver p.1, N.º 25)



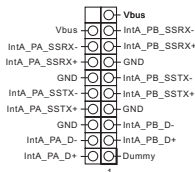
Há dois cabeçotes nesta placa-mãe. Cada suporte USB 2.0 pode suportar duas portas.

Suportes USB 3.0
(USB9_10 de 19 pinos)
(ver p.1, N.º 21)

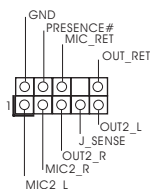


Há dois cabeçotes nesta placa-mãe. Cada suporte USB 3.0 pode suportar duas portas.

(USB3_11_12 de 19 pinos)
(ver p.1, N.º 11)



Suporte de áudio do painel
frontal
(HD_AUDIO1 de 9 pinos)
(ver p.1, N.º 31)
(HD_AUDIO_RA1 de 9 pinos)
(ver p.1, N.º 30)



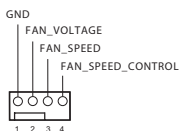
Este suporte destina-se à
conexão dos dispositivos
de áudio no painel de áudio
frontal.

*Conecte o dispositivo de
áudio a qualquer um dos
conectores de áudio.



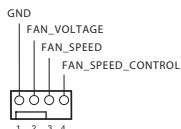
1. O Áudio de alta definição suporta Sensor de Adaptador, mas o fio do painel no chassi deverá suportar HDA para funcionar corretamente. Por favor, siga as instruções no nosso manual e no manual do chassi para instalar o seu sistema.
2. Se utilizar um painel de áudio AC'97, instale-o no terminal de áudio do painel frontal de acordo com os passos abaixo:
 - A. Ligue Mic_IN (MIC) a MIC2_L.
 - B. Conecte o Audio_R (RIN) a OUT2_R e Audio_L (LIN) a OUT2_L.
 - C. Conecte a ligação Terra (GND) à Terra (GND).
 - D. MIC_RET e OUT_RET destinam-se apenas ao painel de áudio HD. Você não precisa ligá-los ao painel de áudio AC'97.
 - E. Para ativar o microfone frontal, vá à guia "Microfone Frontal" no painel de controle Realtek e ajuste o "Volume de gravação".

Conectores da Ventoinha
do Chassi
(CHA_FAN1 de 4 pinos)
(ver p.1, N.º 33)
(CHA_FAN2 de 4 pinos)
(ver p.1, N.º 27)



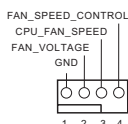
Por favor, conecte os
cabos do ventilador
aos conectores
do ventilador e
corresponda o fio preto
no pino terra.

Chassis Opcional /
Conector da ventoinha de
bomba de água
(CHA_FAN3/W_PUMP
de 4 pinos)
(ver p.1, N.º 1)



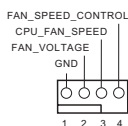
Esta placa mãe fornece conector de ventilador do chassis de refrigeração a água de 4 pinos. Se você pretende conectar um ventilador de refrigeração a água de chassis de 3 pinos, por favor, conecte-o ao Pino 1-3.

Conector da Ventoinha da
CPU
(CPU_FAN1 de 4 pinos)
(ver p.1, N.º 8)



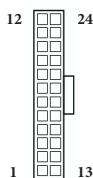
Esta placa mãe inclui um conector de ventilador da CPU (Ventilador silencioso) de 4 pinos. Se você pretende conectar um ventilador da CPU de 3 pinos, por favor, conecte-o ao Pino 1-3.

Conector da ventoinha
de bomba de água/CPU
opcional
(CPU_OPT/W_PUMP de
4 pinos)
(ver p.1, N.º 32)



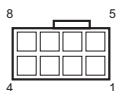
Esta placa mãe inclui um conector de ventilador da CPU de refrigeração a água de 4 pinos. Se você pretende conectar um ventilador de refrigeração a água da CPU de 3 pinos, por favor, conecte-o ao Pino 1-3.

Conector de alimentação
ATX
(ATXPWR1 de 24 pinos)
(ver p.1, N.º 10)



Esta placa-mãe inclui um conector de alimentação ATX de 24 pinos. Para utilizar uma fonte de alimentação ATX de 20 pinos, introduza-a no Pino 1 e Pino 13.

Conector de alimentação
de 12V ATX
(ATX12V1 de 8 pinos)
(ver p.1, N.º 9)



Esta placa-mãe inclui um conector de alimentação de 12V ATX de 8 pinos. Conecte o conector ATX 12V de 8 pinos de sua fonte de alimentação.

Conector de alimentação
de 12V ATX
(ATX12V2 de 4 pinos)
(ver p.1, N.º 2)



Por favor, ligue este conector a uma alimentação de força ATX 12V.

*O plugue de sua fonte de alimentação se encaixa neste conector apenas em uma orientação.

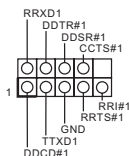
Conector de alimentação
de 12V gráfico
(GFX_12V1 de 6 pinos)
(ver p.1, N.º 18)



Esta placa-mãe inclui um conector de alimentação de 12V gráfico de 6 pinos.

*Instale o cabo de alimentação da PSU a este conector quando 4 placas gráficas forem instaladas.

Suporte da porta serial
(COM1 de 9 pinos)
(ver p.1, N.º 29)



Este suporte COM1 recebe um módulo da porta serial.

Cabeçotes de LED RGB
(RGB_LED1 de 4 pinos)
(ver p.1, N.º 28)



Estes dois cabeçotes RGB são usados para conectar o cabo de extensão de LED RGB que permite aos usuários escolher entre vários efeitos de iluminação LED.

Atenção: Nunca instale o cabo RGB LED na orientação errada; caso contrário, o cabo pode ser danificado.

*Consulte a página 43 para mais instruções sobre estes dois cabeçotes.

(RGB_LED2 de 4 pinos)
(ver p.1, N.º 12)



Conector U.2
(U2_1 de 36 pinos)
(ver p.1, N.º 13)



Esse conector suporta dispositivos
de armazenamento U.2 NVMe
Express até Gen3 x4 (32 Gb/s).

* Se Conector U.2 está conectado,
M2_1 será desativado.

1.4 Interruptores inteligentes

A placa-mãe tem finco chaves inteligentes: Chave de energia, Chave Reset, Chave Limpar CMOS, Chave CPU Xtreme OCe Chave BIOS Flashback.

Interruptor de alimentação
(PWRBTN)
(ver p.1, N.º 19)



O interruptor de alimentação permite aos usuários ligar/desligar o sistema rapidamente.

Interruptor de reinicialização
(RSTBTN)
(ver p.1, N.º 22)



O interruptor de reinicialização permite aos usuários reinicializar o sistema rapidamente.

Interruptor para apagar o CMOS
(CLRBTN)
(ver p.1, N.º 23)



O interruptor para apagar o CMOS permite aos usuários apagar os valores CMOS rapidamente.



Esta função pode ser utilizada apenas quando o computador e a fonte de alimentação estiverem desligados.

Switch de CPU Xtreme OC
(MOS_PROCHOT1)
(ver p.1, N.º 5)



PROCHOT = Ligado (padrão)
(Desativar modo CPU Extreme OC)

PROCHOT = Desligado

(Ativar modo CPU Extreme OC)

Aviso: Overclock pode danificar sua CPU e placa mãe. Ele deve ser realizado por sua conta e risco.

Chave BIOS Flashback
(BIOS_FB1)
(ver p.3, N.º 19)



A Chave BIOS Flashback permite aos usuários limpar a BIOS.

1 Giriş

ASRock'ın zorlu kalite kontrol süreçlerinden geçerek üretilen güvenilir bir ana kart olan ASRock Fatal1ty X399 Professional Gaming Series ana kartını satın aldığınız için teşekkür ederiz. Sağlam tasarımı ile ASRock'ın kalite ve dayanıklılık taahhüdüne uygun şekilde mükemmel performans sağlar.



Ana kart özellikleri ve BIOS yazılımı güncellenebileceğinden, bu dokümantasyonun içeriği herhangi bir bildirimde bulunulmaksızın değiştirilebilir. Bu belgeler üzerinde herhangi bir değişiklik yapılması durumunda, güncellenmiş sürüm, herhangi bir bildirim yapılmaksızın ASRock'ın web sitesinde yer alacaktır. Bu ana kartla ilgili olarak teknik destek almak isterseniz, lütfen kullandığınız model hakkında özel bilgiler için web sitemizi ziyaret edin. En güncel VGA kartları ve işlemci destek listesini de ASRock'ın web sitesinde bulabilirsiniz. ASRock web sitesi <http://www.asrock.com>.

1.1 Ambalaj İçeriği

- ASRock Fatal1ty X399 Professional Gaming Series Ana Kartı (ATX Form Faktörü)
- ASRock Fatal1ty X399 Professional Gaming Series Hızlı Kurulum Kılavuzu
- ASRock Fatal1ty X399 Professional Gaming Series Destek CD'si
- 1 tane G/Ç Paneli Kalkanı
- 4 tane Seri ATA (SATA) Veri Kablosu (İsteğe Bağlı)
- 1 tane ASRock 3-Way SLI Bridge Kartı (İsteğe Bağlı)
- 1 tane ASRock 4-Way SLI-S111 Bridge Kartı (İsteğe Bağlı)
- 1 tane ASRock SLI_HB_Bridge_3S Kartı (İsteğe Bağlı)
- 2 tane ASRock WiFi 2,4/5 GHz Anteni (İsteğe Bağlı)
- 3 tane M.2 Yuvaları için vida (İsteğe Bağlı)

1.2 Özellikler

Platform

- ATX Form Faktörü
- 8 Katman PCB
- 2 ons Bakır PCB

İşlemci

- AMD TR4 Socket Ryzen Threadripper Serisi işlemcileri destekler
- Kızılötesi Dijital PWM
- 11 Güç Safhası tasarımı
- ASRock Hyper BCLK Motorunu destekler III

Yonga kümesi

- AMD X399

Bellek

- Dört Kanallı DDR4 Bellek Teknolojisi
- 8 tane DDR4 DIMM Yuvası
- DDR4 3600+(OC)/3200(OC)/2933(OC)/ 2667/2400/2133 ECC ve ECC olmayan, arabelleksiz bellek destekler*
- * Ayrıntılı bilgi için ASRock'ın web sitesindeki Bellek Desteği Listesine bakın. (<http://www.asrock.com/>)
- En fazla sistem belleği kapasitesi: 128 GB
- DIMM Yuvalarında 15 µ Altın Temas

Genişletme Yuvası

- 4 tane PCI Express 3.0 x16 Yuva (PCIE1/PCIE2/PCIE4/PCIE5:x16'da (PCIE1) tek; x16'da (PCIE1) / x16'da (PCIE4) çift; x16'de (PCIE1) / x8'de (PCIE2) / x16'da (PCIE4) üçlü; x16'de (PCIE1) / x8'de (PCIE2) / x16'de (PCIE4) / x8'de (PCIE5)) dörtlü*
- * Önyükleme diskleri olarak NVMe SSD destekler
- 1 tane PCI Express 2.0 x1 yuva
- AMD Quad CrossFireX™, 4-Way CrossFireX™, 3-Way CrossFireX™ ve CrossFireX™ destekler
- NVIDIA® Quad SLI™, 4-Way SLI™, 3-Way SLI™ ve SLI™ destekler
- 1 tane Dikey M.2 Yuva (Tuş E), birlikte gelen WiFi-802.11ac modüllü (arka G/Ç kısmında)
- VGA PCIe Yuvasında (PCIE1 ve PCIE4) 15µ Altın Temas

Ses

- İçerik Koruma özelliğine sahip 7.1 kanal HD Ses (Realtek ALC1220 Ses Kodlayıcı-Kod Çözücü)
- Üstün Blu-ray Ses desteği
- Aşırı Gerilim Korumasını destekler
- Nichicon Fine Gold Serisi Ses Kapakları
- Fark Yükselteçli 120 dB SNR DAC
- TI* NE5532 Ön Panel Ses Bağlayıcısı için Premium Kulaklık Amplifikatörü (600 Ohm'a kadar kulaklıkları destekler)
- Saf Güç Girişi
- Direct Drive Teknolojisi
- PCB Yalıtım Koruması
- Hat Çıkış bağlantı noktasında Empedans Algılama
- Sağ/Sol Ses Kanalı için Bağımsız PCB Katmanları
- RGB LED
- Altın Ses Girişleri
- 15 µ Altın Ses Bağlayıcı
- Creative SoundBlaster Cinema3'ü destekler

LAN

1 tane 10 Gigabit LAN 100/1000/2500/5000/10000 Mb/sn.

(AQUANTIA® AQ107):

- Yerel Ağ Üzerinden Açmayı destekler
- Yıldırım/ESD Korumasını destekler
- PXE özelliğini destekler

2 tane Intel Gigabit LAN 10/100/1000 Mb/sn. (2 tane Intel®

I211AT):

- Yerel Ağ Üzerinden Açmayı destekler
- Yıldırım/ESD Korumasını destekler
- Enerji Verimliliğine Sahip Ethernet 802.3az işlevini destekler
- PXE özelliğini destekler

Kablosuz LAN

- Intel® 802.11ac WiFi Modülü (Ücretsiz Paket)
- IEEE 802.11a/b/g/n/ac işlevini destekler
- Çift Bant özelliğini destekler (2,4/5 GHz)
- 433 Mbps değerine kadar yüksek hızlı kablosuz bağlantıları destekler
- Bluetooth 4.2 / 3.0 + II. sınıf yüksek hızı destekler

Arka Panel**G/Ç**

- 2 tane Anten Bağlantı Noktası
- 1 tane PS/2 Fare/Klavye Bağlantı Noktası
- 1 tane Optik SPDIF Çıkışı Bağlantı Noktası
- 1 tane USB 3.1 Tip A Bağlantı Noktası (10 Gb/sn.) (ESD Koruması Destekler)
- 1 tane USB 3.1 Tip C Bağlantı Noktası (10 Gb/sn.) (ESD Koruması Destekler)

- 8 tane USB 3.0 Bağlantı Noktası (ESD Korumasını destekler)
- * Üstün USB Gücü USB3_6 bağlantı noktasında desteklenir.
- * ACPI uyandırma işlevi USB3_6 bağlantı noktasında desteklenmemektedir.
- * 1 tane Fatal1ty Fare Bağlantı Noktası (USB 3.0) dâhildir
- LED'e sahip 3 tane RJ-45 LAN Bağlantı Noktası (ACT/LINK LED ve SPEED LED)
- 1 tane BIOS Flashback Anahtarı
- HD Ses Girişleri/Çıkışları: Arka Hoparlör / Merkezi / Bas / Hat Girişi / Ön Hoparlör / Mikrofon (Altın Ses Girişleri)

Depolama

- 8 tane SATA3 6.0 Gb/sn. Bağlayıcı, RAID (RAID 0, RAID 1, ve RAID 10), NCQ, AHCI ve Tak Çıkar desteği
- 2 tane Ultra M.2 Yuvası (M2_1 ve M2_2), M Anahtar tipi 2242/2260/2280 M.2 SATA3 6,0 Gb/sn. modülünü ve Gen3 x4 (32 Gb/sn.) değerine kadar M.2 PCI Express modülünü destekler*
- 1 tane Ultra M.2 Yuvası (M2_3), M Key 2230/2242/2260/2280 tip M.2 SATA3 6.0 Gb/sn. modülünü ve Gen3 x4 (32 Gb/sn.) değerine kadar M.2 PCI Express modülünü destekler*
- * Önyüklem diskleri olarak NVMe SSD destekler
- * ASRock U.2 Takımını destekler
- 1 tane U.2 Bağlayıcı
- * U.2 Bağlayıcı takılırsa M2_1 devre dışı bırakılacaktır.

Bağlayıcı

- 1 tane COM Bağlantı Noktası Bağlantısı
- 1 tane Güç LED'i ve Hoparlör Bağlantısı
- 2 tane RGB LED Bağlantısı
- * Her bir bağlantı 12 V/3 A, 36 W LED Dizisine kadar destekler
- 1 tane İşlemci Fanı Bağlayıcı (4 pimli)
- * İşlemci Fanı Bağlayıcı, en fazla 1 A (12 W) fan gücünde işlemci fanı destekler.
- 1 tane İşlemci İsteğe Bağlı/Su Pompalı Fan Bağlayıcı (4 pimli) (Akıllı Fan Hızı Kontrolü)
- * İşlemci İsteğe Bağlı/Su Pompalı Fan, en fazla 1,5 A (18 W) fan gücünde su soğutmalı fan destekler.
- 2 tane Kasa Fanı Bağlayıcısı (4 pimli) (Akıllı Fan Hızı Kontrolü)
- 1 tane Kasa İsteğe Bağlı/Su Pompalı Fan Bağlayıcı (4 pimli) (Akıllı Fan Hızı Kontrolü)

- * Kasa İsteğe Bağlı/Su Pompalı Fan, en fazla 1,5 A (18 W) fan gücünde su soğutmalı fan destekler.
- * CPU_FAN1, CHA_FAN1, CHA_FAN2, CPU_OPT/W_PUMP ve CHA_FAN3/W_PUMP, 3 pimli fanın mı yoksa 4 pimli fanın mı kullanımında olduğunu otomatik olarak algılayabilir.
- 1 tane 24 pim ATX Güç Bağlayıcı (Yüksek Yoğunluklu Güç Bağlayıcı) (Ana kart için)
- 1 tane 8 pim 12 V Güç Bağlayıcı (Yüksek Yoğunluklu Güç Bağlayıcı) (Ana kart için)
- 1 tane 4 pim 12 V Güç Bağlayıcı (Yüksek Yoğunluklu Güç Bağlayıcı) (Ana kart için)
- 1 tane 6 pim 12 V Güç Bağlayıcı (Yüksek Yoğunluklu Güç Bağlayıcı) (PCIe grafik kartı için)
- 1 tane Ön Panel Ses Bağlayıcısı (15 µ Altın Ses Bağlayıcısı)*
- 1 tane Dik Açılı Ön Panel Ses Bağlayıcısı*
- * Ses aygıtını ses bağlayıcılardan herhangi birine bağlayın.
- 2 tane USB 2.0 Bağlantısı (4 USB 2.0 bağlantı noktasını destekler) (ESD Korumasını destekler)
- 2 tane USB 3.0 Bağlantısı (4 USB 3.0 bağlantı noktasını destekler) (ESD Korumasını destekler)
- 1 tane CMOS Temizleme Anahtarı
- 1 tane LED'li Dr. Debug
- 1 tane LED'li Güç Anahtarı
- 1 tane LED'li Sıfırlama Anahtarı
- 1 tane İşlemci Xtreme OC Anahtarı

BIOS Özelliği

- Grafik kullanıcı arayüzü desteğiyle AMI UEFI Legal BIOS
- "Tak ve Çalıştır" özelliğini destekler
- ACPI 5.1 uyumluluğu uyandırma olayları
- Bağlantı teli olmadan çalıştırma özelliğini destekler
- SMBIOS 2.3 desteği
- CPU, VCORE_NB, DRAM, VPPM, PCH 1,05V, +1,8V, VDDP, PROM 2,5V, Çoklu Gerilim Ayarı

Donanım Monitörü

- Sıcaklık Algılama: İşlemci, İşlemci İsteğe Bağlı/Su Pompalı, Kasa, Kasa İsteğe Bağlı/Su Pompalı Fanlar

- Fan Devirölçer: İşlemci, İşlemci İsteğe Bağlı/Su Pompalı, Kasa, Kasa İsteğe Bağlı/Su Pompalı Fanlar
- Sessiz Fan (İşlemci sıcaklığıyla otomatik ayarlanan kasa fanı hızı): İşlemci, İşlemci İsteğe Bağlı/Su Pompalı, Kasa, Kasa İsteğe Bağlı/Su Pompalı Fanlar
- Fan Çoklu Hız Kontrolü: İşlemci, İşlemci İsteğe Bağlı/Su Pompalı, Kasa, Kasa İsteğe Bağlı/Su Pompalı Fanlar
- Gerilim izleme: +12V, +5V, +3,3V, İşlemci Vcore, VCORE_NB, DRAM, PCH 1,05V, +1,8V, VDDP

İşletim Sistemi

- Microsoft® Windows® 10 64 bit
- * Güncellenmiş Windows® 10 sürücüsü konusunda ayrıntılar için lütfen ASRock web sitesini ziyaret edin: <http://www.asrock.com>

Onaylar

- FCC, CE
- ErP/EuP için hazır (ErP/EuP için hazır güç beslemesi gereklidir)

* Detaylı ürün bilgisi için lütfen web sitemizi ziyaret edin: <http://www.asrock.com>



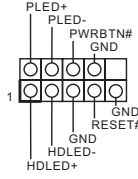
Lütfen, BIOS ayarlarını düzenleme, Bağımsız Hız Aşırtma Teknolojisinin uygulanması veya üçüncü taraf hız aşırtma araçlarının kullanılması da dâhil olmak üzere tüm hız aşırtma işlemlerinin belirli bir risk taşıdığını unutmayın. Hız aşırtma, sisteminizin dayanıklılığını etkileyebilir, hatta sisteminizde yer alan bileşenlere ve aygıtlara zarar verebilir. Bu, riski ve masrafları size ait olmak üzere gerçekleştirilmelidir. Hız aşırtmadan doğabilecek zararlar konusunda sorumlu olmayacağız.

1.3 Yerleşik Bağlantılar ve Bağlayıcılar



Yerleşik bağlantılar ve bağlayıcılar bağlantı teli değildir. Bağlantı teli kapaklarını bu bağlantı ve bağlayıcılar üzerine yerleştirmeyin. Bağlantı teli kapaklarının bağlantılar ve bağlayıcılar üzerine yerleştirilmesi ana karta kalıcı hasar verebilir.

Sistem Paneli Bağlantısı
(9 pimli PANEL1)
(bk. s.1, No. 20)



Güç anahtarını bağlayın, kasa üzerindeki anahtar ile sistem durumu belirtecini aşağıdaki pim düzenine göre sıfırlayın. Kabloları bağlarken pozitif ve negatif pimlere dikkat edin.



PWRBTN (Güç Anahtarı):

Güç anahtarını kasa ön paneline bağlayın. Güç anahtarını kullanarak sisteminizi kapatma şeklini yapılandırabilirsiniz.

RESET (Sıfırlama Anahtarı):

Sıfırlama anahtarını kasa ön paneline bağlayın. Bilgisayarın kilitlemesi ve normal şekilde yeniden başlatılamaması hâlinde reset (sıfırla) düğmesine basın.

PLED (Sistem Güç LED'i):

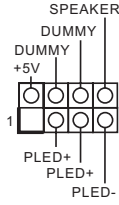
Güç durumu göstergesini kasa ön paneline bağlayın. Sistem çalışırken LED ışığı yanacaktır. Sistem S1/S3 uykusu durumdayken LED ışığı yanıp söner. Sistem S4 uykusu durumunda ya da kapalıyken (S5) LED ışık söner.

HDLED (Sabit Disk Etkinlik LED'i):

Sabit sürücü etkinlik LED'ini kasa ön paneline bağlayın. Sabit sürücü veri okur ya da yazarken LED ışığı yanar.

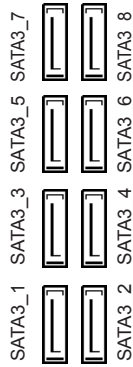
Ön panel tasarımı kasaya göre değişiklik gösterebilir. Bir ön panel modülü, temel olarak bir güç anahtarı, sıfırlama anahtarı, güç LED'i, sabit sürücü etkinliği LED'i, hoparlör gibi birimlerden oluşur. Kasanızın ön panel modülünü bu bağlantıya takmadan önce, kablo düzenlemeleri ve pim düzenlemelerinin düzgün şekilde yapıldığından emin olun.

Güç LED'i ve Hoparlör
Bağlantısı
(7 pimli SPK_PLED1)
(bk. s.1, No. 26)



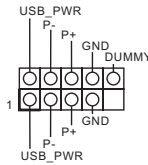
Lütfen kasa güç LED'ini
ve kasa hoparlörünü bu
bağlantıya takın.

Seri ATA3 Bağlayıcıları
(SATA3_1_2:
bk. s.1, No. 17)
(SATA3_3_4:
bk. s.1, No. 16)
(SATA3_5_6:
bk. s.1, No. 15)
(SATA3_7_8:
bk. s.1, No. 14)



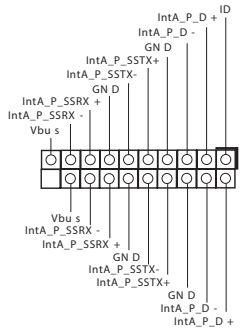
Bu sekiz SATA3 bağlayıcısı,
veri aktarım hızı 6,0
Gb/sn. değerine kadar
olan dâhili depolama
aygıtlarına yönelik SATA
veri kablolarını destekler.

USB 2.0 Bağlantıları
(9 pimli USB_1_2)
(bk. s.1, No. 24)
(9 pimli USB_3_4)
(bk. s.1, No. 25)



Bu ana kartta iki bağlantı
vardır. Her bir USB 2.0
bağlantısı, iki adet bağlantı
noktasını destekleyebilir.

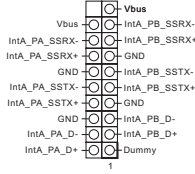
USB 3.0 Bağlantıları
(19 pimli USB3_9_10)
(bk. s.1, No. 21)



Bu ana kartta iki bağlantı
vardır. Her bir USB 3.0
bağlantısı, iki adet bağlantı
noktasını destekleyebilir.

(19 pimli USB3_11_12)

(bk. s.1, No. 11)



Ön Panel Ses Bağlantıları

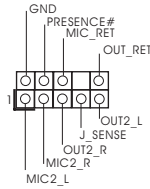
(9 pimli HD_AUDIO1)

(bk. s.1, No. 31)

(9 pimli

HD_AUDIO_RA1)

(bk. s. 1, No. 30)



Bu bağlantı, ses aygıtlarının ön ses paneline bağlanması içindir.

* Ses aygıtını ses bağlayıcılardan herhangi birine bağlayın.



- Yüksek Tanımlı Ses, Jak Algılama özelliğini destekler ancak bu işlevin düzgün çalışabilmesi için kasa üzerindeki panel kablosunun HDA işlevini desteklemesi gerekmektedir. Sisteminizi kurarken, lütfen kılavuzumuzdaki ve kasa kılavuzundaki talimatları izleyin.
- AC'97 ses paneli kullanıyorsanız, lütfen aşağıdaki adımları uygulayarak ön panel ses bağlantısına takın:
 - Mic_IN'i (MIC) MIC2_L'ye bağlayın.
 - Audio_R'yi (RIN) OUT2_R'ye ve Audio_L'yi (LIN) OUT2_L'ye bağlayın.
 - Toprağı (GND) Toprağa (GND) bağlayın.
 - MIC_RET ve OUT_RET yalnızca HD ses paneli içindir. AC'97 ses paneli için bunları bağlamamıza gerek yoktur.
 - Ön mikrofonu etkinleştirmek için, Realtek Kontrol panelinde "FrontMic" sekmesine gidin ve "Kayıt Ses Düzeyi" ayarını yapın.

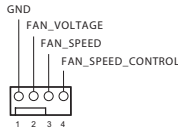
Kasa Fanı Bağlayıcıları

(4 pimli CHA_FAN1)

(bk. s.1, No. 33)

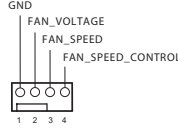
(4 pimli CHA_FAN2)

(bk. s.1, No. 27)



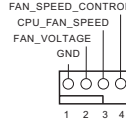
Lütfen fan kablolarını fan bağlayıcılarına takın ve siyah teli topraklama pimine bağlayın.

Kasa İsteğe Bağlı/Su
Pompası Fan Bağlayıcısı
(4 pimli
CHA_FAN3/W_PUMP)
(bk. s.1, No. 1)



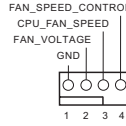
Bu ana kart, bir tane 4 pimli su soğutmalı kasa fan bağlayıcısına sahiptir. Bir 3 pimli kasa su soğutmalı fan bağlamayı planlıyorsanız, lütfen Pim 1-3'e bağlayın.

İşlemci Fanı Bağlayıcı
(4 pimli CPU_FAN1)
(bk. s.1, No. 8)



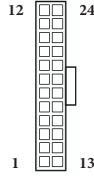
Bu ana kart, 4 pimli bir işlemci fanı (Sessiz Fan) bağlayıcı sağlar. 3 pimli bir işlemci fanı bağlamak isterseniz lütfen Pim 1-3'e bağlayın.

İşlemci İsteğe Bağlı/Su
Pompa Fanı Bağlayıcısı
(4 pimli
CPU_OPT/W_PUMP)
(bk. s.1, No. 32)



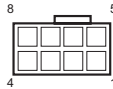
Bu ana kart, 4 pimli bir su soğutmalı işlemci fanı bağlayıcı sağlar. 3 pimli bir su soğutmalı işlemci fanı bağlamak isterseniz lütfen Pim 1-3'e bağlayın.

ATX Güç Bağlayıcısı
(24 pimli ATXPWR1)
(bk. s.1, No. 10)



Bu ana kart, 24 pimli ATX güç bağlayıcısı sağlar. 20 pimli ATX güç beslemesi kullanmak için lütfen Pim 1 ve Pim 13'e bağlayın.

ATX 12V Güç Bağlayıcısı
(8 pimli ATX12V1)
(bk. s.1, No. 9)



Bu ana kart, 8 pimli ATX 12V güç bağlayıcısı sağlar. Güç kaynağınızdan gelen 8 pimli ATX 12 V bağlayıcısını bağlayın.

ATX 12V Güç Bağlayıcısı
(4 pimli ATX12V2)
(bk. s.1, No. 2)



Lütfen bu bağlayıcı için
bir ATX 12V güç kaynağı
bağlayın.

* Güç kaynağı fişi bu bağlayıcıya
yalnızca bir yönde girer.

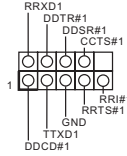
Grafik 12 V Güç
Bağlayıcısı
(6 pimli GFX_12V1)
(bk. s.1, No. 18)



Bu ana kart, 6 pimli Grafik
12 V güç bağlayıcısı
sağlamaktadır.

* 4 grafik kartı takıldığında
PSU'nun güç kablosunu bu
bağlayıcıya takın.

Seri Bağlantı Noktası
Bağlantısı
(9 pimli COM1)
(bk. s.1, No. 29)



Bu COM1 bağlantısı seri
bağlantı noktası modülünü
destekler.

RGB LED Bağlantısı
(4 pimli RGB_LED1)
(bk. s.1, No. 28)



Bu iki RGB bağlantısı, kul-
lanıcıların çeşitli LED aydın-
latma efektleri arasında seçim
yapmasına izin veren RGB LED
uzatma kablosunu bağlamak için
kullanılır.

**Dikkat: RGB LED kablosunu
kesinlikle yanlış yönde tak-
mayın. Aksi takdirde kablo hasar
görebilir.**

*Bu iki bağlantı konusunda daha
fazla yönerge için lütfen 43. say-
faya başvurun.

(4 pimli RGB_LED2)
(bk. s.1, No. 12)



U.2 Bağlayıcı
(36 pimli U2_1)
(bk. s.1, No. 13)



Bu bağlayıcı, Gen3 x4 (32 Gb/sn.)
değerine kadar U.2 NVMe Express
depolama aygıtlarını destekler.

* U.2 Bağlayıcı takılırsa M2_1
devre dışı bırakılacaktır.

1.4 Akıllı Anahtarlar

Ana kartta beş tane akıllı anahtar bulunur: Güç Anahtarı, Sıfırlama Anahtarı, CMOS Temizleme Anahtarı, İşlemci Xtreme OC Anahtarı ve BIOS Flashback Anahtarı.

Güç Anahtarı
(PWRBTN)
(bk. s.1, No. 19)



Güç Anahtarı kullanıcıların sistemi hızla açmalarını/kapatmalarını sağlar.

Sıfırlama Anahtarı
(RSTBTN)
(bk. s.1, No. 22)



Sıfırlama Anahtarı kullanıcıların sistemi hızla sıfırlamalarını sağlar.

CMOS Temizleme
Anahtarı
(CLRBTN)
(bk. s.1, No. 23)



CMOS Temizleme Anahtarı kullanıcıların CMOS değerlerini hızla temizlemelerini sağlar.



Bu işlev yalnızca bilgisayarınızı kapattığınızda ve fişini prizden çektiğinizde çalışır.

İşlemci Xtreme OC An-
ahtarı
(MOS_PROCHOT1)
(bk. s.1, No. 5)



PROCHOT = ON (varsayılan)
(İşlemci Xtreme OC modunu devre dışı bırak)

PROCHOT = OFF

(İşlemci Xtreme OC modunu etkinleştirir)

Uyarı: Hız aşırıtma, işlemcinizde ve ana kartınızda hasara neden olabilir. Bu, riski ve masrafları size ait olmak üzere gerçekleştirilmelidir.

BIOS Flashback Anahtarı
(BIOS_FB1)
(bkz. sf. 3, No. 19)



BIOS Flashback Anahtarı kullanıcıların BIOS'u yükseltmelerini sağlar.

1 개요

ASRock Fatal1ty X399 Professional Gaming Series 마더보드를 구입해 주셔서 감사합니다. 이 마더보드는 ASRock의 일관되고 엄격한 품질관리 하에 생산되어 신뢰성이 우수합니다. 품질과 내구성에 대한 ASRock의 기준에 부합하는 우수한 성능과 견고한 설계를 제공합니다.



마더보드 규격과 BIOS 소프트웨어를 업데이트할 수도 있기 때문에, 이 문서의 내용은 예고 없이 변경될 수 있습니다. 이 설명서가 변경될 경우, 업데이트된 버전은 ASRock의 웹사이트에서 추가 통지 없이 제공됩니다. 이 마더보드와 관련하여 기술적 지원이 필요한 경우, 당사의 웹사이트를 방문하여 사용 중인 모델에 대한 구체적 정보를 구하십시오. ASRock의 웹사이트에서는 최신 VGA 카드와 CPU 지원 목록도 찾을 수 있습니다. ASRock 웹사이트 <http://www.asrock.com>.

1.1 포장 내용물

- ASRock Fatal1ty X399 Professional Gaming Series 마더보드 (ATX 폼 팩터)
- ASRock Fatal1ty X399 Professional Gaming Series 간편 설치 안내서
- ASRock Fatal1ty X399 Professional Gaming Series 지원 CD
- I/O 패널 실드 1 개
- 시리얼 ATA (SATA) 데이터 케이블 4 개 (선택 품목)
- ASRock 3-Way SLI Bridge 카드 1 개 (선택 품목)
- ASRock 4-Way SLI-S111 Bridge 카드 1 개 (선택 품목)
- ASRock SLI_HB_Bridge_3S 카드 1 개 (선택 품목)
- ASRock WiFi 2.4/5 GHz 안테나 2 개 (선택 품목)
- M.2 소켓용 나사 3 개 (선택 품목)

1.2 규격

플랫폼

- ATX 폼 팩터
- 8 레이어 PCB
- 2 온스 구리 PCB

CPU

- AMD TR4 소켓 Ryzen Threadripper 시리즈 CPU 지원
- IR 디지털 PWM
- 11 개 전원 위상 구조
- ASRock Hyper BCLK Engine III 지원

칩세트

- AMD X399

메모리

- 쿼드 채널 DDR4 메모리 기술
- DDR4 DIMM 슬롯 8 개
- DDR4 3600+(OC)/3200(OC)/2933(OC)/ 2667/2400/2133 ECC 및 비-ECC, 비버퍼링 메모리 지원 *
- * 추가 정보를 원하시면 ASRock 웹사이트에 있는 메모리 지원 목록을 참조하십시오. (<http://www.asrock.com/>)
- 시스템 메모리 최대 용량: 128GB
- DIMM 슬롯에 15 μ Gold Contact 장착

확장 슬롯

- PCI Express 3.0 x16 슬롯 4 개 (PCIE1/PCIE2/PCIE4/PCIE5: 단일 @ x16 (PCIE1), 이중 @ x16 (PCIE1) / x16 (PCIE4), 삼중 @ x16 (PCIE1) / x8 (PCIE2) / x16 (PCIE4), 사중 @ x16 (PCIE1) / x8 (PCIE2) / x16 (PCIE4) / x8 (PCIE5))*
- * NVMe SSD 를 부팅 디스크로 사용 가능하도록 지원
- PCI Express 2.0 x1 슬롯 1 개
- AMD Quad CrossFireX™, 4-Way CrossFireX™, 3-Way CrossFireX™ 및 CrossFireX™ 지원
- NVIDIA® Quad SLI™, 4-Way SLI™, 3-Way SLI™ 및 SLI™ 지원
- 수직 M.2 소켓 (키 E) 1 개 (번들로 제공되는 후면 I/O 의 WiFi-802.11ac 모듈 포함)
- VGA PCIe 슬롯에 15 μ Gold Contact 장착 (PCIE1 및 PCIE4)

오디오

- 콘텐츠 보호를 이용한 7.1 CH HD 오디오 지원 (Realtek ALC1220 오디오 코덱)
- 프리미엄 Blu-ray 오디오 지원
- 서비 보호 지원
- Nichicon Fine Gold 시리즈 오디오 캡
- 디퍼렌셜 증폭기 포함 120dB SNR DAC
- 전면 패널 오디오 커넥터용 TI* NE5532 프리미엄 헤드셋 증폭기 (최대 600 옴 헤드셋 지원)
- 순수 전원 입력
- 다이렉트 드라이브 기술
- PCB 절연 차폐
- 라인 출력 포트의 임피던스 감지
- R/L 오디오 채널용 개별 PCB 레이어
- RGB LED
- 골드 오디오 잭
- 15 μ 골드 오디오 커넥터
- Creative SoundBlaster Cinema3 지원

LAN

10 Gigabit LAN 100/1000/2500/5000/10000 Mb/s 1 개 (AQUANTIA* AQC107):

- Wake-On-LAN 지원
- 번개 /ESD 보호 지원
- PXE 지원

Intel Gigabit LAN 10/100/1000 Mb/s 2 개 (Intel* I211AT 2 개):

- Wake-On-LAN 지원
- 번개 /ESD 보호 지원
- 절건형 이더넷 802.3az 지원
- PXE 지원

무선 LAN

- Intel* 802.11ac WiFi 모듈 (무료 번들)
- IEEE 802.11a/b/g/n/ac 지원
- 듀얼 밴드 (2.4/5 GHz) 지원
- 최대 433Mbps 의 고속 무선 연결 지원
- Bluetooth 4.2 / 3.0 + 고속 클래스 II 지원

후면 패널 I/O

- 안테나 포트 2 개
- PS/2 마우스 / 키보드 포트 1 개
- 광학 SPDIF 출력 포트 1 개
- USB 3.1 타입 A 포트 1 개 (10 Gb/s) (ESD 보호 지원)
- USB 3.1 타입 C 포트 1 개 (10 Gb/s) (ESD 보호 지원)

- USB 3.0 포트 8 개 (ESD 보호 지원)
- * 울트라 USB 전원은 USB3_6 포트에서 지원됩니다.
- * ACPI 절전 해제 기능은 USB3_6 포트에서 지원되지 않습니다.
- * Fatal1ty 마우스 포트 (USB 3.0) 1 개가 포함됨
- LED 장착 RJ-45 LAN 포트 3 개 (ACT/LINK LED 및 SPEED LED)
- BIOS 플래시백 스위치 1 개
- HD 오디오 잭 : 후면 스피커 / 중앙 / 베이스 / 라인 입력 / 전면 스피커 / 마이크 (골드 오디오 잭)

저장 장치

- SATA3 6.0 Gb/s 커넥터 8 개가 RAID(RAID 0, RAID 1 및 RAID 10), NCQ, AHCI 및 핫 플러그를 지원합니다.
- Ultra M.2 소켓 (M2_1 및 M2_2) 2 개, M 키 타입 2242/2260/2280 M.2 SATA3 6.0 Gb/s 모듈 지원 및 Gen3 까지의 M.2 PCI Express 모듈 4 개 지원 (32 Gb/s)*
- 울트라 M.2 소켓 (M2_3) 1 개, M 키 타입 2230/2242/2260/2280 M.2 SATA3 6.0 Gb/s 모듈 및 Gen3 M.2 PCI Express 모듈 4 개 (32 Gb/s) 지원 *
- * NVMe SSD 를 부팅 디스크로 사용 가능하도록 지원
- * ASRock U.2 키트 지원
 - U.2 커넥터 1 개
- * U.2 커넥터가 연결된 경우, M2_1 이 비활성화됩니다.

커넥터

- COM 포트 헤더 1 개
- 전원 LED 및 스피커 헤더 1 개
- RGB LED 헤더 2 개
- * 각 헤더가 최대 12V/3A, 36W LED 스트립을 지원합니다.
- CPU 팬 커넥터 (4 핀) 1 개
- * CPU 팬 커넥터는 팬 전력이 최대 1A(12W) 인 CPU 팬을 지원합니다.
- CPU 옵션 / 워터 펌프 팬 커넥터 (4 핀) 1 개 (스마트 팬 속도 제어)
- * CPU 옵션 / 워터 펌프 팬은 팬 전력이 최대 1.5A(18W) 인 수냉식 쿨러 팬을 지원합니다.
- 새시 팬 커넥터 (4 핀) 2 개 (스마트 팬 속도 제어)
- 새시 옵션 / 워터 펌프 팬 커넥터 (4 핀) 1 개 (스마트 팬 속도 제어)

- * 새시 옵션 / 워터 펌프 팬은 팬 전력이 최대 1.5A(18W) 인 수냉식 쿨러 팬을 지원합니다.
- * 3 핀 또는 4 핀 팬이 사용 중인 경우, CPU_FAN1, CHA_FAN1, CHA_FAN2, CPU_OPT/W_PUMP 과 CHA_FAN3/W_PUMP 이 자동으로 감지할 수 있습니다.
- 24 핀 ATX 전원 커넥터 1 개 (고밀도 전원 커넥터) (마더보드 경우)
- 8 핀 12V 전원 커넥터 1 개 (고밀도 전원 커넥터) (마더보드 경우)
- 4 핀 12V 전원 커넥터 1 개 (고밀도 전원 커넥터) (마더보드 경우)
- 6 핀 12V 전원 커넥터 1 개 (고밀도 전원 커넥터) (PCIe 그래픽 카드 경우)
- 전면 패널 오디오 커넥터 1 개 (15 μ 골드 오디오 커넥터)*
- 직각 전면 패널 오디오 커넥터 * 1 개
- * 오디오 장치를 오디오 커넥터 중 하나에 연결하십시오.
- USB 2.0 헤더 2 개 (USB 2.0 포트 4 개 지원) (ESD 보호 지원)
- USB 3.0 헤더 2 개 (USB 3.0 포트 4 개 지원) (ESD 보호 지원)
- Clear CMOS 스위치 1 개
- LED 탑재 Dr. Debug 1 개
- LED 탑재 전원 스위치 1 개
- LED 탑재 리셋 스위치 1 개
- CPU Xtreme OC 스위치 1 개

BIOS 기능

- GUI 지원을 제공하는 AMI UEFI 적합형 BIOS
- “플러그 앤드 플레이 ” 지원
- ACPI 5.1 준수 웨이크 업 이벤트
- 점퍼 프리 지원
- SMBIOS 2.3 지원
- CPU, VCORE_NB, DRAM, VPPM, PCH 1.05V, +1.8V, VDDP, PROM 2.5V 전압 다중 조정

하드웨어 모니터

- 온도 감지 : CPU, CPU 옵션 / 워터 펌프, 새시, 새시 옵션 / 워터 펌프 팬

- 팬 타코미터 : CPU, CPU 옵션 / 워터 펌프, 새시, 새시 옵션 / 워터 펌프 팬
- 저소음 팬 (CPU 온도에 의한 새시 팬 속도 자동 조절): CPU, CPU 옵션 / 워터 펌프, 새시, 새시 옵션 / 워터 펌프 팬
- 팬 다중 속도 제어 : CPU, CPU 옵션 / 워터 펌프, 새시, 새시 옵션 / 워터 펌프 팬
- 전압 모니터링 : +12V, +5V, +3.3V, CPU Vcore, VCORE_NB, DRAM, PCH 1.05V, +1.8V, VDDP

OS

- Microsoft® Windows® 10 64- 비트
- * 업데이트된 Windows® 10 드라이브의 자세한 내용은 다음의 ASRock 웹사이트를 참조하십시오 . <http://www.asrock.com>

인증

- FCC, CE
- ErP/EuP 사용 가능 (ErP/EuP 사용 가능 전원공급장치 필요)

* 자세한 제품 정보에 대해서는 당사 웹사이트를 참조하십시오 : <http://www.asrock.com>



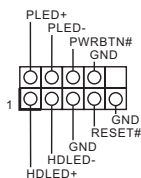
BIOS 설정을 조정하거나 Untied Overclocking Technology 를 적용하거나 타업체의 오버클로킹 도구를 사용하는 것을 포함하는 오버클로킹에는 어느 정도의 위험이 따른다는 것을 유념하십시오. 오버클로킹은 시스템 안정성에 영향을 주거나 심지어 시스템의 구성 요소와 장치에 손상을 입힐 수도 있습니다. 오버클로킹은 사용자 스스로 위험과 비용을 감수하고 해야 합니다. 당사는 오버클로킹에 의해 발생할 수 있는 손상에 대해서 책임이 없습니다.

1.3 온보드 헤더 및 커넥터



온보드 헤더와 커넥터는 점퍼가 아닙니다. 점퍼 캡을 온보드 헤더와 커넥터에 씌우지 마십시오. 점퍼 캡을 온보드 헤더와 커넥터에 씌우면 마더보드가 영구적으로 손상됩니다.

시스템 패널 헤더
(9 핀 PANEL1)
(1 페이지, 20 번 항목
참조)



새시의 전원 스위치, 리셋 스위치, 시스템 상태 표시등을 아래의 핀 할당에 따라 이 헤더에 연결합니다. 케이블을 연결하기 전에 양극 핀과 음극 핀을 기록합니다.



PWRBTN(전원 스위치):

새시 전면 패널의 전원 스위치에 연결합니다. 전원 스위치를 이용해 시스템을 끄는 방법을 구성할 수 있습니다.

RESET(리셋 스위치):

새시 전면 패널의 리셋 스위치에 연결합니다. 컴퓨터가 정지하고 정상적 재시작을 수행하지 못할 경우 리셋 스위치를 눌러 컴퓨터를 재시작합니다.

PLED(시스템 전원 LED):

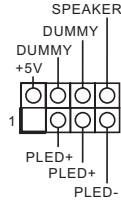
새시 전면 패널의 전원 상태 표시등에 연결합니다. 시스템이 작동하고 있을 때는 LED가 켜져 있습니다. 시스템이 S1/S3 대기 상태에 있을 때는 LED가 계속 깜박입니다. 시스템이 S4 대기 상태 또는 전원 꺼짐(S5) 상태에 있을 때는 LED가 꺼져 있습니다.

HDLED(하드 드라이브 동작 LED):

새시 전면 패널의 하드 드라이브 동작 LED에 연결합니다. 하드 드라이브가 데이터를 읽거나 쓰고 있을 때 LED가 켜져 있습니다.

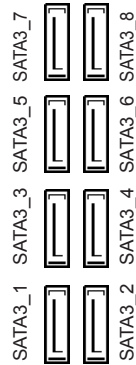
전면 패널 디자인은 새시별로 다를 수 있습니다. 전면 패널 모듈은 주로 전원 스위치, 리셋 스위치, 전원 LED, 하드 드라이브 동작 LED, 스피커 등으로 구성되어 있습니다. 새시 전면 패널 모듈을 이 헤더에 연결할 때 와이어 할당과 핀 할당이 정확히 일치하는지 확인합니다.

전원 LED 및 스피커 헤더
(7 핀 SPK_PLED1)
(1 페이지, 26 번 항목 참조)



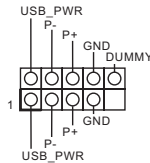
새시 전원 LED 와 새시
스피커를 이 헤더에 연결
하십시오 .

시리얼 ATA3 커넥터
(SATA3_1_2:
1 페이지, 17 번 항목 참조)
(SATA3_3_4:
1 페이지, 16 번 항목 참조)
(SATA3_5_6:
1 페이지, 15 번 항목 참조)
(SATA3_7_8:
1 페이지, 14 번 항목 참조)



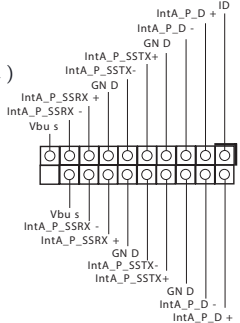
이들 8 개의 SATA3 커넥터
는 최대 6.0 Gb/s 데이터 전
송 속도를 제공하는 내부
저장 장치용 SATA 데이터
케이블을 지원합니다 .

USB 2.0 헤더
(9 핀 USB_2)
(1 페이지, 24 번 항목 참조)
(9 핀 USB_3_4)
(1 페이지, 25 번 항목 참조)



이 마더보드에는 헤더 두
개가 있습니다 . 각 USB
2.0 헤더는 포트 두 개를
지원할 수 있습니다 .

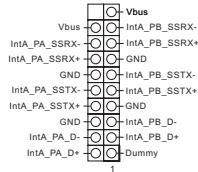
USB 3.0 헤더
(19 핀 USB3_9_10)
(1 페이지, 21 번 항목 참조)



이 마더보드에는 헤더 두
개가 있습니다 . 각 USB
3.0 헤더는 포트 두 개를
지원할 수 있습니다 .

(19 핀 USB3_11_12)

(1 페이지, 11 번 항목 참조)



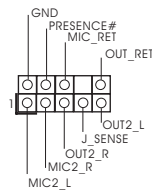
전면 패널 오디오 헤더

(9 핀 HD_AUDIO1)

(1 페이지, 31 번 항목 참조)

(9 핀 HD_AUDIO_RA1)

(1 페이지, 30 번 항목 참조)



이 헤더는 오디오 장치를 전면 오디오 패널에 연결하는 데 사용됩니다.

* 오디오 장치를 오디오 커넥터 중 하나에 연결하십시오.



- 고음질 오디오는 잭 감지를 지원하지만 올바르게 작동하려면 새시의 패널 와이어가 HDA를 지원해야 합니다. 설명서 및 새시 설명서에 나와 있는 지침을 따라 시스템을 설치하십시오.
- AC '97 오디오 패널을 사용할 경우 아래와 같은 절차를 따라 전면 패널 오디오 헤더에 설치하십시오:
 - Mic_IN (MIC)를 MIC2_L에 연결합니다.
 - Audio_R (RIN)을 OUT2_R에 연결하고 Audio_L (LIN)을 OUT2_L에 연결합니다.
 - 접지 (GND)를 접지 (GND)에 연결합니다.
 - MIC_RET 및 OUT_RET는 HD 오디오 패널에만 사용됩니다. AC '97 오디오 패널용으로 연결할 필요가 없습니다.
 - 전면 마이크를 활성화하려면 Realtek 제어판에서 "FrontMic" 탭으로 가서 "Recording Volume(녹음 볼륨)"을 조정합니다.

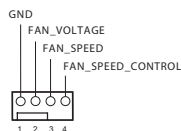
새시 팬 커넥터

(4 핀 CHA_FAN1)

(1 페이지, 33 번 항목 참조)

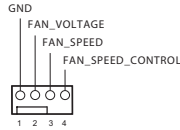
(4 핀 CHA_FAN2)

(1 페이지, 27 번 항목 참조)



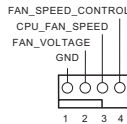
팬 케이블을 팬 커넥터에 연결하고 검은색 와이어를 접지핀에 연결하십시오.

CPU/ 새시 옵션 / 워터
펌프 팬 커넥터
(4 핀 CHA_FAN3/W_
PUMP)
(1 페이지 , 1 번 항목
참조)



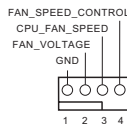
이 마더보드에는 4 핀 수
냉식 새시 팬 커넥터 1 개
가 탑재되어 있습니다 . 3
핀 CPU 새시 수냉식 쿨러
팬을 연결하려는 경우 핀
1-3 에 연결하십시오 .

CPU 팬 커넥터
(4 핀 CPU_FAN1)
(1 페이지 , 8 번 항목
참조)



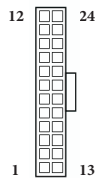
이 마더보드에는 4 핀
CPU 팬 (저소음 팬) 커
넥터가 탑재되어 있습니
다 . 3 핀 CPU 팬을 연결
하려는 경우 핀 1-3 에 연
결하십시오 .

CPU 옵션 / 워터 펌프 팬
커넥터
(4 핀 CPU_OPT/W_
PUMP)
(1 페이지 , 32 번 항목
참조)



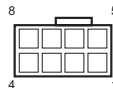
이 마더보드에는 4 핀 수
냉식 CPU 팬 커넥터가 탑
재되어 있습니다 . 3 핀
CPU 수냉식 쿨러 팬을 연
결하려는 경우 핀 1-3 에
연결하십시오 .

ATX 전원 커넥터
(24 핀 ATXPWR1)
(1 페이지 , 10 번 항목
참조)



이 마더보드에는 24 핀
ATX 전원 커넥터가 탑
재되어 있습니다 . 20 핀
ATX 전원공급장치를 사
용하려면 핀 1 과 핀 13 을
따라 연결하십시오 .

ATX 12V 전원 커넥터
(8 핀 ATX12V1)
(1 페이지 , 9 번 항목
참조)



이 마더보드에는 8 핀
ATX 12V 전원 커넥터
가 탑재되어 있습니다 .
전원 공급장치에서 8 핀
ATX 12V 커넥터를 연결
하십시오 .

ATX 12V 전원 커넥터
(4 핀 ATX12V2)
(1 페이지, 2 번 항목
참조)



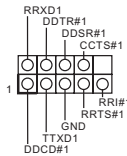
ATX 12V 전원공급장치를
이 커넥터에 연결하십시오.
* 전원 공급장치 플러그는 한 방
향으로만 이 커넥터에 끼울 수
있습니다.

그래픽 12V 전원 커넥터
(6 핀 GFX_12V1)
(1 페이지, 18 번 항목
참조)



이 마더보드에는 6 핀 그
래픽 12V 전원 커넥터가
탑재되어 있습니다.
* 4 개의 그래픽 카드가 설치되
어 있을 때 PSU 의 전원 케이블
을 이 커넥터에 연결하십시오.

시리얼 포트 헤더
(9 핀 COM1)
(1 페이지, 29 번 항목
참조)



이 COM1 헤더는 시리얼
포트 모듈을 지원합니다.

RGB LED 헤더
(4 핀 RGB_LED1)
(1 페이지, 28 번 항목
참조)



이 2 개의 RGB 헤더는 다양한
LED 조명 효과를 선택할 수 있
는 RGB LED 연장 케이블을 연
결하는 데 사용됩니다.

(4 핀 RGB_LED2)
(1 페이지, 12 번 항목
참조)



**주의 : RGB LED 케이블을 잘못
된 방향으로 설치하지 마십시
오. 그럴 경우 케이블이 손
상될 수 있습니다.**

* 이 두 가지 헤더에 대한 추가
지침은 43 페이지를
참조하십시오.

U.2 커넥터
(36 핀 U2_1)
(1 페이지, 13 번 항목
참조)



이 커넥터는 최대 Gen3 x4(32
Gb/s) 까지 U.2 NVMe Express 저
장 장치를 지원합니다.
* U.2 커넥터가 연결된 경우,
M2_1 이 비활성화됩니다.

1.4 스마트 스위치

마더보드에는 스마트 스위치 5 개가 탑재되어 있습니다 : 전원 스위치 , 초기화 스위치 , CMOS 지우기 스위치 , CPU Xtreme OC 스위치 및 BIOS 플래시백 스위치 .

전원 스위치

(PWRBTN)

(1 페이지 , 19 번 항목 참조)



전원 스위치로 시스템을 빨리 켜거나 끌 수 있습니다 .

리셋 스위치

(RSTBTN)

(1 페이지 , 22 번 항목 참조)



리셋 스위치로 시스템을 빨리 리셋할 수 있습니다 .

CMOS 지우기 스위치

(CLRBTN)

(1 페이지 , 23 번 항목 참조)



CMOS 지우기 스위치로 CMOS 값을 빨리 지울 수 있습니다 .



이 기능은 컴퓨터를 끄고 전원 플러그를 빼는 경우에만 작동합니다 .

CPU Xtreme OC 스위치

(MOS_PROCHOT1)

(1 페이지 , 5 번 항목 참조)



PROCHOT = 켜짐 (기본값) (CPU Extreme OC 모드 사용 안 함)

PROCHOT = 꺼짐

(CPU Extreme OC 모드 사용)

경고 : 오버클럭킹은 CPU 와 메인 보드를 손상시킬 수 있습니다 . 오버클럭킹은 사용자 스스로 위험과 비용을 감수하고 해야 합니다 .

BIOS 플래시백 스위치

(BIOS_FB1)

(3 페이지 , 19 번 항목 참조)



BIOS 플래시백 스위치는 BIOS 를 플래시할 수 있습니다 .

1 はじめに

ASRock Fatal1ty X399 Professional Gaming Series マザーボードをお買い上げ頂きありがとうございます。ASRock の製品は一貫した厳格な品質管理の下で製造されており、優れた品質と耐久性を兼ね備えつつ、優れたパフォーマンスを提供致します。



マザーボードの仕様と BIOS ソフトウェアは更新されることがあるため、このマニュアルの内容は予告なしに変更することがあります。このマニュアルの内容に変更があった場合には、更新されたバージョンは、予告なく ASRock のウェブサイトから入手できるようになります。このマザーボードに関する技術的なサポートが必要な場合には、ご使用のモデルについての詳細情報を、当社のウェブサイトで参照ください。ASRock のウェブサイトでは、最新の VGA カードおよび CPU サポート一覧もご覧になれます。ASRock ウェブサイト <http://www.asrock.com>

1.1 パッケージの内容

- ASRock Fatal1ty X399 Professional Gaming Series マザーボード(ATX フォームファクタ)
- ASRock Fatal1ty X399 Professional Gaming Series クイックインストールガイド
- ASRock Fatal1ty X399 Professional Gaming Series サポート CD
- 1 x I/O パネルシールド
- 4 x シリアル ATA (SATA) データケーブル(オプション)
- 1 x ASRock 4 ウェイ SLI-S111 ブリッジカード (オプション)
- 1 x ASRock SLI_HB_Bridge_3S カード (オプション)
- 2 x ASRock Wi-Fi 2.4/5 GHz アンテナ(オプション)
- 3 x M.2 ソケット用ねじ (オプション)



ユーザーマニュアル

1.2 仕様

プラットフォーム

- ATX フォームファクター
- 8 レイヤー PCB
- 2 オンスのコパー製 PCB

CPU

- AMD TR4 ソケット Ryzen Threadripper シリーズ CPU に対応
- IR デジタル PWM
- 11 電源フェーズ設計
- ASRock ハイパー BCLK エンジン III に対応

チップセット

- AMD X399

メモリ

- クアットチャンネル DDR4 メモリテクノロジー
- 8 x DDR4 DIMM スロット
- DDR4 3600+(OC)/3200(OC)/2933(OC)/ 2667/2400/2133 ECC および non-ECC、アンバッファードメモリに対応 *
- * 詳細については、ASRock ウェブサイトのメモリーサポート一覧を参照してください。(http://www.asrock.com/)
- システムメモリの最大容量: 128GB
- DIMM スロットに 15 μ ゴールドコンタクトを採用

拡張スロット

- 4 x PCI Express 3.0 x16 スロット (PCIe1/PCIe2/PCIe4/ PCIe5:x16 (PCIe1) でシングル、x16 (PCIe1) / x16 (PCIe4) でデュアル、x16 (PCIe1) / x8 (PCIe2) / x16 (PCIe4) でトリプル、x16 (PCIe1) / x8 (PCIe2) / x16 (PCIe4) / x8 (PCIe5) でクアッド)*

* 起動ディスクとして NVMe SSD に対応

- 1 x PCI Express 2.0 x1 スロット
- AMD Quad CrossFireX™、4 ウェイ CrossFireX™、3 ウェイ CrossFireX™、および、CrossFireX™ に対応
- NVIDIA® Quad SLI™、4 ウェイ SLI™、3 ウェイ SLI™、および、SLI™ に対応
- 1 x 垂直 M.2 ソケット (Key E)、WiFi-802.11ac モジュールがバンドルされています (リア I/O)
- VGA PCIe スロットに 15 μ ゴールドコンタクトを採用 (PCIe1 と PCIe4)

オーディオ

- 7.1 CH HD オーディオ、コンテンツプロテクション付き(Realtek ALC1220 オーディオコーデック)
- プレミアム・ブルーレイ・オーディオ・サポート
- サージ保護に対応
- ニチコン製ファインゴールドシリーズオーディオコンデンサ
- SNR 比 120dB の DAC(差動アンプ搭載)
- フロントパネルオーディオコネクタ用 TI® NE5532 プレミアムヘッドセットアンプ(最大 600 Ohms までのヘッドセットに対応)
- Pure Power-In (ピュアパワーイン)
- ダイレクトドライブテクノロジー
- PCB 絶縁シールド
- ライン出力ポートにインピーダンスセンシング装備
- R/L オーディオチャンネル用個別 PCB レイヤ
- RGB LED
- ゴールドオーディオジャック
- 15μ ゴールドオーディオコネクタ
- Creative SoundBlaster Cinema3 に対応

LAN

1 x 10 ギガビット LAN 100/1000/2500/5000/10000 Mb/s

(AQUANTIA® AQC107):

- Wake-On-LAN(ウェイク オン ラン)に対応
- 雷 / 静電気放電(ESD)保護に対応
- PXE をサポート

2 x Intel ギガビット LAN 10/100/1000 Mb/s (2 x Intel® I211AT):

- Wake-On-LAN(ウェイク オン ラン)に対応
- 雷 / 静電気放電(ESD)保護に対応
- エネルギー効率のよいイーサネット 802.3az をサポート
- PXE をサポート

ワイヤレス

LAN

- Intel® 802.11ac WiFi モジュール(無料バンドル)
- IEEE 802.11a/b/g/n/ac をサポート
- デュアルバンド(2.4/5 GHz)をサポート
- 最高 433 Mbps の高速ワイヤレス接続をサポート
- ブルートゥース 4.2/3.0 + ハイスピードクラス II をサポート

リアパネル I/O

- 2 x アンテナポート
- 1 x PS/2 マウス / キーボードポート
- 1 x 光 SPDIF 出力ポート
- 1 x USB 3.1 Type-A ポート(10 Gb/s)(静電気放電(ESD)保護に対応)
- 1 x USB 3.1 Type-C ポート(10 Gb/s)(静電気放電(ESD)保護に対応)

- 8 x USB 3.0 ポート(静電気放電(ESD)保護に対応)
- * Ultra USB Power(ウルトラ USB パワー)には USB3_6 ポート上で対応します。
- * ACPI ウェークアップ機能は USB3_6 ポートには対応していません。
- * 1 x Fatal1ty マウスポート(USB 3.0)が含まれています
- LED 付き 3 x RJ-45 LAN ポート(ACT/LINK LED と SPEED LED)
- 1 x BIOS フラッシュバックスイッチ
- HD オーディオジャック : リアスピーカー / センター / バス / ラインイン / フロントスピーカー / マイク(ゴールドオーディオジャック)

ストレージ

- 8 x SATA3 6.0 Gb/s コネクタ、RAID(RAID 0、RAID 1、RAID 10)、NCQ、AHCI およびホットプラグ機能に対応
- 2 x Ultra M.2 ソケット(M2_1 および M2_2)、M Key タイプ 2242/2260/2280 M.2 SATA3 6.0 Gb/s モジュール、および、最大 Gen3 x4 (32 Gb/s) までの M.2 PCI Express モジュールに対応 *
- 1 x ウルトラ M.2 ソケット(M2_3)、M Key タイプ 2230/2242/2260/2280 M.2 SATA3 6.0 Gb/s モジュールと最大 Gen3 x4 (32 Gb/s) までの M.2 PCI Express モジュールに対応 *
- * 起動ディスクとして NVMe SSD に対応
- * ASRock U.2 キットに対応
- 1 x U.2 コネクタ
- * U.2 コネクタが接続されている場合は M2_1 は無効になります

コネクタ

- 1 x COM ポートヘッダー
- 1 x 電源 LED とスピーカーヘッダー
- 2 x RGB LED ヘッダー
- * それぞれのヘッダーは最大 12V/3A、36W までの LED ストリップに対応します
- 1 x CPU ファンコネクタ(4 ピン)
- * CPU ファンコネクタは最大 1A (12W) の電力の CPU ファンに対応します。
- 1 x CPU (オプション)/ ウォーターポンプファンコネクタ(4 ピン) (スマートファン速度制御)
- * CPU(オプション)/ ウォーターポンプファンは最大 1.5A (18W) の出力のウォータークーラーに対応します。
- 2 x シャーシファンコネクタ(4 ピン)(スマートファン速度制御)
- 1 x シャーシ(オプション)/ ウォーターポンプファンコネクタ(4 ピン)(スマートファン速度制御)

* シャーシ(オプション) / ウォーターポンプファンは最大 1.5A (18W) の出力のウォータークーラーに対応します。

* CPU_FAN1, CHA_FAN1, CHA_FAN2, CPU_OPT/W_PUMP および CHA_FAN3/W_PUMP は 3 ピンまたは 4 ピンファンが使用されているかどうかを自動検出できます。

- 1 x 24 ピン ATX 電源コネクタコネクタ(高密度電源コネクタ)(マザーボード向け)
- 1 x 8 ピン 12V 電源コネクタコネクタ(高密度電源コネクタ)(マザーボード向け)
- 1 x 4 ピン 12V 電源コネクタコネクタ(高密度電源コネクタ)(マザーボード向け)
- 1 x 6 ピン 12V 電源コネクタ(高密度電源コネクタ)(PCIe グラフィックスカード向け)
- 1 x フロントパネルオーディオコネクタ (15 μ ゴールドオーディオジャック)*
- 1 x 直角前面パネルオーディオコネクタ*

* オーディオデバイスをいずれかのオーディオコネクタに接続します。

- 2 x USB 2.0 ヘッダー(4 つの USB 2.0 ポートに対応)(静電気放電(ESD)保護に対応)
- 2 x USB 3.0 ヘッダー(4 つの USB 3.0 ポートに対応)(静電気放電(ESD)保護に対応)
- 1 x CMOS クリアスイッチ
- 1 x Dr. Debug, LED 付き
- 1 x 電源スイッチ, LED 付き
- 1 x リセットスイッチ, LED 付き
- 1 x CPU Xtreme OC スイッチ

BIOS 機能

- AMI UEFI Legal BIOS、GUI サポート付き
- 「プラグアンドプレイ」をサポート
- ACPI 5.1 準拠のウェイクアップイベント
- ジャンパーフリーをサポート
- SMBIOS 2.3 サポート
- CPU、VCORE_NB、DRAM、VPPM、PCH 1.05V、+1.8V、VDDP、PROM 2.5V 電圧マルチ調整

ハードウェア アモニター

- 温度センシング: CPU、CPU オプション / ウォーターポンプ、シャーシ、シャーシオプション / ウォーターポンプファン

- ・ ファンタコメータ : CPU、CPU オプション / ウォーターポンプ、シャーシ、シャーシオプション / ウォーターポンプファン
- ・ 静音ファン (CPU 温度に従ってシャーシファン速度を自動調整) : CPU、CPU オプション / ウォーターポンプ、シャーシ、シャーシオプション / ウォーターポンプファン
- ・ ファンマルチ速度制御 : CPU、CPU オプション / ウォーターポンプ、シャーシ、シャーシオプション / ウォーターポンプファン
- ・ 電圧監視 : +12V、+5V、+3.3V、CPU Vcore、VCORE_NB、DRAM、PCH 1.05V、+1.8V、VDDP

OS

- ・ Microsoft® Windows® 10 64-bit
- * 更新された Windows® 10 ドライバについては、ASRock のウェブサイトの詳細をご確認ください : <http://www.asrock.com>

認証

- ・ FCC、CE
- ・ ErP/EuP Ready (ErP/EuP 対応電源供給装置が必要です)

* 商品詳細については、当社ウェブサイトをご覧ください。 <http://www.asrock.com>



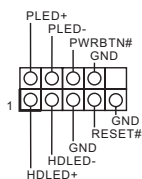
BIOS 設定の調整、アンタイドオーバークロックテクノロジーの適用、サードパーティのオーバークロックツールの使用などを含む、オーバークロックには、一定のリスクを伴いますのでご注意ください。オーバークロックするとシステムが不安定になったり、システムのコンポーネントやデバイスが破損することがあります。ご自分の責任で行ってください。弊社では、オーバークロックによる破損の責任は負いかねますのでご了承ください。

1.3 オンボードのヘッダーとコネクター



オンボードヘッダーとコネクターはジャンパーではありません。これらヘッダーとコネクターにはジャンパーキャップを被せないでください。ヘッダーおよびコネクターにジャンパーキャップを被せると、マザーボードに物理損傷が起こることがあります。

システムパネルヘッダー
(9 ピン PANEL1)
(p.1, No. 20 参照)



電源スイッチを接続し、スイッチをリセットし、下記のピン割り当てに従って、シャーシのシステムステータス表示ランプをこのヘッダーにセットします。ケーブルを接続するときには、ピンの+と-に気をつけてください。



PWRBTN(電源スイッチ):

シャーシ前面パネルの電源スイッチに接続してください。電源スイッチを使用して、システムをオフにする方法を設定できます。

RESET(リセットスイッチ):

シャーシ前面パネルのリセットスイッチに接続してください。コンピューターがフリーズしたり、通常の再起動を実行できない場合には、リセットスイッチを押して、コンピューターを再起動します。

PLED(システム電源 LED):

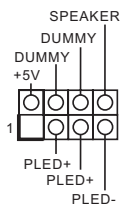
シャーシ前面パネルの電源ステータスインジケータに接続してください。システム稼働中は、LED が点灯します。システムが S1/S3 スリープ状態の場合には、LED は点滅を続けます。システムが S4 スリープ状態または電源オフ(S5)のときには、LED はオフです。

HDLED(ハードドライブアクティビティ LED):

シャーシ前面パネルのハードドライブアクティビティ LED に接続してください。ハードドライブのデータを読み取りまたは書き込み中に、LED はオンになります。

前面パネルデザインは、シャーシによって異なることがあります。前面パネルモジュールは、主に電源スイッチ、リセットスイッチ、電源 LED、ハードドライブアクティビティ LED、スピーカーなどから構成されます。シャーシの前面パネルモジュールとこのヘッダーを接続する場合には、配線の割り当てと、ピンの割り当てが正しく合致していることを確かめてください。

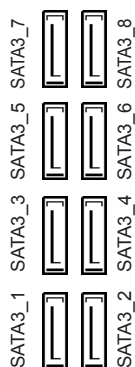
電源 LED とスピーカーヘッダー
 ッダー
 (7 ピン SPK_PLED1)
 (p.1, No. 26 参照)



シャーシ電源 LED と
 シャーシスピーカーをこ
 のヘッダーに接続してく
 ださい。

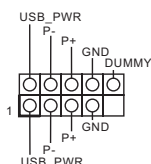
シリアル ATA3 コネクタ
 ー

(SATA3_1_2:
 p.1, No. 17 参照)
 (SATA3_3_4:
 p.1, No. 16 を参照してく
 ださい) (SATA3_5_6:
 p.1, No. 15 参照)
 (SATA3_7_8:
 p.1, No. 14 参照)



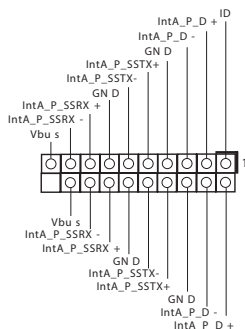
これら 8 つの SATA3 コ
 ネクタは最高 6.0Gb/s の
 データー転送速度をサ
 ポートし、内部ストレージ
 デバイス用の SATA デー
 ターケーブルに対応致し
 ます。

USB 2.0 ヘッダー
 (9 ピン USB_1_2)
 (p.1, No. 24 参照)
 (9 ピン USB_3_4)
 (p.1, No. 25 参照)



このマザーボードには 2
 つのヘッダーが装備され
 ています。各 USB 2.0 ヘッ
 ダーは、2 つのポートをサ
 ポートできます。

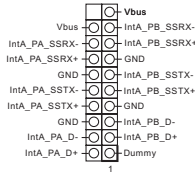
USB 3.0 ヘッダー
 (19 ピン USB9_10)
 (p.1, No. 21 参照)



このマザーボードには 2
 つのヘッダーが装備され
 ています。各 USB 3.0 ヘッ
 ダーは、2 つのポートをサ
 ポートできます。

(19 ピン USB3_11_12)

(p.1、No. 11 参照)



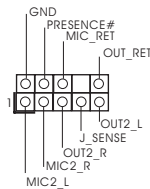
フロントパネルオーディオヘッダー

(9 ピン HD_AUDIO1)

(p.1、No. 31 参照)

(9 ピン HD_AUDIO_RA1)

(p.1、No. 30 参照)



このヘッダーは、フロントオーディオパネルにオーディオデバイスを接続するためのものです。

* オーディオデバイスをいずれかのオーディオコネクタに接続します。



1. ハイディフィニションオーディオはジャックセンシングをサポートしていますが、正しく機能するためには、シャーシのパネルワイヤーが HDA をサポートしている必要があります。お使いのシステムを取り付けるには、当社のマニュアルおよびシャーシのマニュアルの指示に従ってください。
2. AC'97 オーディオパネルを使用する場合には、次のステップで、前面パネルオーディオヘッダーに取り付けてください。
 - A. Mic_IN (MIC) を MIC2_L に接続します。
 - B. Audio_R (RIN) を OUT2_R に、Audio_L (LIN) を OUT2_L に接続します。
 - C. アース (GND) をアース (GND) に接続します。
 - D. MIC_RET と OUT_RET は、HD オーディオパネル専用です。AC'97 オーディオパネルではこれらを接続する必要はありません。
 - E. フロントマイクを有効にするには、Realtek コントロールパネルの「FrontMic」タブで、「録音音量」を調整してください。

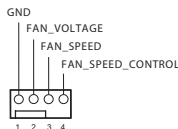
シャーシファンコネクタ

(4 ピン CHA_FAN1)

(p.1、No. 33 参照)

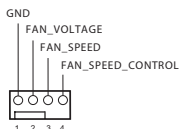
(4 ピン CHA_FAN2)

(p.1、No. 27 参照)



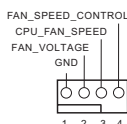
ファンケーブルはファンコネクタに接続し、黒線とアースピンを合わせてください。

シャーシ(オプション)/ ウ
ォーターポンプファンコ
ネクタ
(4 ピン CHA_FAN3/W_
PUMP)
(p.1、No. 1 参照)



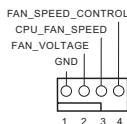
このマザーボードには 4 ピン
水冷却 シャーシがコネクタ用
に装備されています。3 ピンの
シャーシウォータークーラー
ファンを接続する場合には、ピ
ン 1-3 に接続してください。

CPU ファンコネクタ
(4 ピン CPU_FAN1)
(p.1、No. 8 参照)



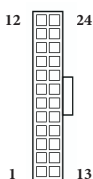
このマザーボードは 4 ピン
CPU ファン(静音ファン)コネク
ターが装備されています。3 ピ
ンの CPU ファンを接続する場
合には、ピン 1-3 に接続してく
ださい。

CPU(オプション)/ ウォー
ターポンプファンコネク
ター
(4 ピン CPU_OPT/W_
PUMP)
(p.1、No. 32 参照)



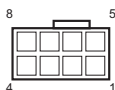
このマザーボードは 4 ピン水
冷却 CPU ファンコネクター
が装備されています。3 ピン
の CPU 水冷却ファンを接続
する場合には、ピン 1-3 に接
続してください。

ATX 電源コネクタ
(24 ピン ATXPWR1)
(p.1、No. 10 参照)



このマザーボードは 24 ピ
ン ATX 電源コネクターが装
備されています。20 ピンの
ATX 電源を使用するには、ピ
ン 1 と 13 番に合わせて接続
してください。

ATX 12V 電源コネクタ
(8 ピン ATX12V1)
(p.1、No. 9 参照)



このマザーボードは 8 ピン
ATX12V 電源コネクターが
装備されています。電源供給
装置の 8 ピン ATX 12V コネ
クタを接続します。

ATX 12V 電源コネクタ
(4 ピン ATX12V2)
(p.1、No. 2 参照)



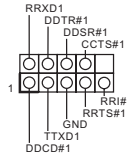
ATX 12V 電源をこのコネクタに接続してください。
* 電源供給プラグはこのコネクタに 1 方向にしか差し込むことができません。

グラフィックス 12V 電源コネクタ
(6 ピン GFX_12V1)
(p.1、No. 18 参照)



このマザーボードは 6 ピングラフィックス 12V 電源コネクタが装備されています。
* 4 枚のグラフィックスカードを取り付ける場合は、PSU の電源ケーブルをこのコネクタに接続します。

シリアルポートヘッダー
(9 ピン COM1)
(p.1、No. 29 参照)



この COM1 ヘッダーはシリアルポートモジュールをサポートします。

RGB LED ヘッダー
(4 ピン RGB_LED1)
(p.1、No. 28 参照)



これら 2 つの RGB ヘッダーを使用して RGB LED 延長ケーブルを接続すれば、ユーザーはさまざまな LED ライティング効果を選択できます。

(4 ピン RGB_LED2)
(p.1、No. 12 参照)



注意 : RGB LED ケーブルは間違った方向に取り付けしないでください。間違った方向に取り付けるとケーブルが破損することがあります。

* これら 2 つのヘッダーの詳細説明については 43 ページを参照してください。

U.2 コネクタ
(36 ピン U2_1)
(p.1、No. 13 参照)



このコネクタは 最大 Gen3 x4
(32 Gb/s) までの U.2 NVMe
Express ストレージデバイスに
対応します。

* U.2 コネクタが接続されている
場合は M2_1 は無効になります。

1.4 スマートスイッチ

このマザーボードには 5つのスマートスイッチが装備されています: 電源スイッチ、リセットスイッチ、CMOS クリアスイッチ、CPU Xtreme OC スイッチ、および、BIOS Flashback スイッチ。

電源スイッチ
(PWRBTN)
(p.1、No. 19 参照)



電源スイッチで、システムを素早くオン / オフにできます。

リセットスイッチ
(RSTBTN)
(p.1、No. 22 参照)



リセットスイッチで、システムを素早くリセットできます。

クリア CMOS スイッチ
(CLRCBTN)
(p.1、No. 23 参照)



クリア CMOS スイッチで、CMOS 値を素早くクリアできます。



この機能が動作するのは、コンピュータの電源をオフにして、電源供給を切断した場合だけです。

CPU Xtreme OC スイッチ
(MOS_PROCHOT1)
(p.1、No. 5 参照)



PROCHOT = オン (デフォルト)
(CPU Xtreme OC モード無効)

PROCHOT = オフ

(CPU Xtreme OC モード有効)
警告: オーバークロックングにより、CPU とマザーボードが損傷する原因となることがあります。ご自分の責任で行ってください。

BIOS フラッシュバック
スイッチ (BIOS_FB1)
(p.3、No. 19 参照)



BIOS フラッシュバックスイッチにより、BIOS をフラッシュすることができます。

1 简介

感谢您购买华擎 Fatal1ty X399 Professional Gaming Series 主板，这是按照华擎一贯严格质量控制标准生产的性能可靠的主板。它提供符合华擎质量和耐久性承诺的精良设计和卓越性能。



由于主板规格和 BIOS 软件可能已更新，因此，本文档的内容可能会随时更改，恕不另行通知。如果本文档有任何修改，则更新的版本将发布在华擎网站上，我们不会另外进行通知。如果您需要与此主板相关的技术支持，请访问我们的网站以具体了解所用型号的信息。您也可以在华擎网站上找到最新 VGA 卡和 CPU 支持列表。华擎网站 <http://www.asrock.com>。

1.1 包装清单

- 华擎 Fatal1ty X399 Professional Gaming Series 主板（ATX 规格尺寸）
- 华擎 Fatal1ty X399 Professional Gaming Series 主板快速安装指南
- 华擎 Fatal1ty X399 Professional Gaming Series 主板支持光盘
- 1 x I/O 面板
- 4 x 串行 ATA (SATA) 数据线（选购）
- 1 x 华擎 3-Way SLI Bridge 卡（选购）
- 1 x 华擎 4-Way SLI-S111 Bridge 卡（选购）
- 1 x 华擎 SLI_HB_Bridge_3S 卡（选购）
- 2 x 华擎 WiFi 2.4/5 GHz 天线（选购）
- 3 x 螺丝（供 M.2 插座使用）（选购）

1.2 规格

平台

- ATX 规格尺寸
- 8 层 PCB
- 2 盎司纯铜电路板

CPU

- 支持 AMD TR4 Socket 锐龙 AMD Ryzen 处理器 Threadripper 系列 CPU
- 红外线数字 PWM
- 11 电源相设计
- 支持华擎超级 BCLK 引擎 III

芯片集

- AMD X399

内存

- 四通道 DDR4 内存技术
- 8 x DDR4 DIMM 槽
- 支持 DDR4 3600+(OC)/3200(OC)/2933(OC)/ 2667/2400/2133 ECC 及非 ECC，非缓冲内存 *
- * 请参阅华擎网站上的 Memory Support List（内存支持列表）了解详情。（<http://www.asrock.com/>）
- 支持系统内存最大容量：128GB
- DIMM 插槽中 15 μ 金触点

扩充槽

- 4 x PCI Express 3.0 x16 插槽 (PCIE1/PCIE2/PCIE4/PCIE5: 单 - x16 (PCIE1)；双 - x16 (PCIE1) / x16 (PCIE4)；三 - x16 (PCIE1) / x8 (PCIE2) / x16 (PCIE4)；四 - x16 (PCIE1) / x8 (PCIE2) / x16 (PCIE4) / x8 (PCIE5))*
- * 支持 NVMe SSD 用作启动盘
- 1 x PCI Express 2.0 x1 槽
- 支持 AMD Quad CrossFireX™、4 向 CrossFireX™、3 向 CrossFireX™ 和 CrossFireX™
- 支持 NVIDIA® Quad SLI™、4 向 SLI™、3 向 SLI™ 和 SLI™
- 1 x 垂直 M.2 Socket (Key E)，捆绑有 WiFi-802.11ac 模块（在后 I/O 上）
- VGA PCIe 插槽 (PCIE1 和 PCIE4) 中 15 μ 金触点

音频

- 具有内容保护功能的 7.1 CH 高清音频 (Realtek ALC1220 音频编解码器)
- 优质 Blu-ray 音频支持
- 支持电涌保护
- Nichicon Fine Gold 系列音频电容
- 120dB SNR DAC, 带微分放大器
- 用于前面板音频接口的 TI® NE5532 高品质耳机放大器 (支持最高 600 Ohm 耳机)
- 纯电源输入
- Direct Drive (直接驱动) 技术
- PCB 隔离罩
- 线路输出端口的阻抗感测
- 用于左 / 右音频通道的个别 PCB 层
- RGB LED
- 金色音频插孔
- 15 μ 金色音频接口
- 支持 Creative SoundBlaster Cinema3

LAN

1 x 10 Gigabit LAN 100/1000/2500/5000/10000 Mb/s (AQUAN-TIA® AQC107):

- 支持 Wake-On-LAN (网上唤醒)
- 支持雷电 /ESD 保护
- 支持 PXE

2 x Intel Gigabit LAN 10/100/1000 Mb/s (2 x Intel® I211AT):

- 支持 Wake-On-LAN (网上唤醒)
- 支持雷电 /ESD 保护
- 支持高效以太网 802.3az
- 支持 PXE

无线 LAN

- Intel® 802.11ac WiFi 模块 (免费捆绑)
- 支持 IEEE 802.11a/b/g/n/ac
- 支持双频段 (2.4/5 GHz)
- 支持最高 433Mbps 的高速无线连接
- 支持 Bluetooth 4.2 / 3.0 + 高速 Class II

后面板 I/O

- 2 x 天线端口
- 1 x PS/2 鼠标 / 键盘端口
- 1 x 光学 SPDIF 输出端口
- 1 x USB 3.1 A 类型端口 (10 Gb/s) (支持 ESD 保护)
- 1 x USB 3.1 C 类型端口 (10 Gb/s) (支持 ESD 保护)

- 8 x USB 3.0 端口 (支持 ESD 保护)
- * USB3_6 支持超级 USB 电源。
- * 在 USB3_6 端口上不支持 ACPI 唤醒功能。
- * 1 x Fatal1ty 鼠标端口 (USB 3.0) 已包括
- 3 x RJ-45 LAN 端口, 带 LED (ACT/LINK LED 和 SPEED LED)
- 1 x BIOS 回闪开关
- 高清音频插孔: 后扬声器 / 中央 / 低音 / 线路输入 / 前扬声器 / 麦克风 (金色音频插孔)

存储

- 8 x SATA3 6.0 Gb/s 接口, 支持 RAID (RAID 0、RAID 1 和 RAID 10)、NCQ、AHCI 和热插拔
- 2 x 超级 M.2 接口 (M2_1 和 M2_2), 支持 M Key 类型 2242/2260/2280 M.2 SATA3 6.0 Gb/s 模块和 M.2 PCI Express 模块 (最高 Gen3 x4 (32 Gb/s)) *
- 1 x 超级 M.2 接口 (M2_3), 支持 M Key 类型 2230/2242/2260/2280 M.2 SATA3 6.0 Gb/s 模块和 M.2 PCI Express 模块 (最高 Gen3 x4 (32 Gb/s)) *
- * 支持 NVMe SSD 用作启动盘
- * 支持华擎 U.2 套件
- 1 x U.2 接口
- * 如果已插入 U.2 接口, M2_1 将被禁用

接口

- 1 x COM 端口接头
- 1 x 电源 LED 和扬声器接脚
- 2 x RGB LED 接头
- * 每个接脚支持最高 12V/3A, 36W LED 灯条
- 1 x CPU 风扇接口 (4 针)
- * CPU 风扇接口支持最高 1A (12W) 功率的 CPU 风扇。
- 1 x CPU 可选 / 水泵风扇接口 (4 针) (智能风扇速度控制)
- * CPU 可选 / 水泵风扇支持最高 1.5A (18W) 功率的水冷风扇。
- 2 x 机箱风扇接口 (4 针) (智能风扇速度控制)
- 1 x 机箱可选 / 水泵风扇接口 (4 针) (智能风扇速度控制)

* 机箱可选 / 水泵风扇支持最高 1.5A (18W) 功率的水冷风扇。

* CPU_FAN1、CHA_FAN1、CHA_FAN2、CPU_OPT/W_PUMP 和 CHA_FAN3/W_PUMP 可以自动检测 3 针脚或 4 针脚风扇是否在使用。

- 1 x 24 针 ATX 电源接口（高密度电源接口）（用于主板）
- 1 x 8 针 12V 电源接口（高密度电源接口）（用于主板）
- 1 x 4 针 12V 电源接口（高密度电源接口）（用于主板）
- 1 x 6 针 12V 电源接口（高密度电源接口）（用于 PCIe 图形卡）
- 1 x 前面板音频接口 (15 μ 金色音频接口)*
- 1 x 直角前面板音频接口*

* 将音频设备连接到其中一个音频接口。

- 2 x USB 2.0 接脚（支持 4 个 USB 2.0 端口，支持 ESD 保护）
- 2 x USB 3.0 接脚（支持 4 个 USB 3.0 端口，支持 ESD 保护）
- 1 x 清除 CMOS 开关
- 1 x Dr. Debug（调试工具），带 LED
- 1 x 电源开关，带 LED
- 1 x 重置开关，带 LED
- 1 x CPU Xtreme OC 开关

BIOS

功能特点

- AMI UEFI Legal BIOS，支持 GUI
- 支持“即插即用”
- ACPI 5.1 兼容唤醒事件
- 支持免跳线（jumperfree）
- SMBIOS 2.3 支持
- CPU、VCORE_NB、DRAM、VPPM、PCH 1.05V、+1.8V、VDDP、PROM 2.5V 电压多次调整

硬件监控

- 温度感测：CPU、CPU 可选 / 水泵、机箱、机箱可选 / 水泵风扇

- 风扇转速计：CPU、CPU 可选 / 水泵、机箱、机箱可选 / 水泵风扇
- 静音风扇（根据 CPU 温度自动调整机箱风扇速度）：
CPU、CPU 可选 / 水泵、机箱、机箱可选 / 水泵风扇
- 风扇多种速度控制：CPU、CPU 可选 / 水泵、机箱、机箱可选 / 水泵风扇
- 电压监控：+12V、+5V、+3.3V、CPU Vcore、VCORE_
NB、DRAM、PCH 1.05V、+1.8V、VDDP

操作系统

- Microsoft® Windows® 10 64-bit
- * 有关已更新的 Windows® 10 驱动程序，请访问华擎网站了解详情：<http://www.asrock.com>

认证

- FCC、CE
- ErP/EuP 支持（需要支持 ErP/EuP 的电源）

* 有关详细产品信息，请访问我们的网站：<http://www.asrock.com>



须认识到超频会有一定风险，包括调整 BIOS 设置，应用“自由超频技术”，或使用第三方超频工具。超频可能会影响到系统的稳定性，甚至对系统的组件和设备造成损坏。执行这项工作您应自担风险和自己承担费用。我们对由于超频而造成的损坏概不负责。

1.3 板载接脚和接口

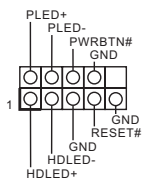


板载接脚和接口不是跳线。不要将跳线帽装到这些接脚和接口上。将跳线帽装到这些接脚和接口上将会对主板造成永久性损坏。

系统面板接脚

(9 针 PANEL1)

(见第 1 页，第 20 个)



按照下面的针脚分配，将机箱上的电源开关、重置开关和系统状态指示灯连接到此接脚。在连接线缆前请记下正负针脚。



PWRBTN(电源开关) :

连接到机箱前面板上的电源开关。您可以配置使用电源开关关闭系统的方式。

RESET(重置开关) :

连接到机箱前面板上的重置开关。如果计算机死机，无法执行正常重新启动，按重置开关重新启动计算机。

PLED(系统电源 LED) :

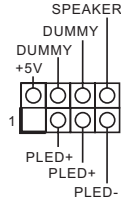
连接到机箱前面板上的电源状态指示灯。系统操作操作时，此 LED 亮起。系统处在 S1/S3 睡眠状态时，此 LED 闪烁。系统处在 S4 睡眠状态或关机 (S5) 时，此 LED 熄灭。

HDLED(硬盘活动 LED) :

连接到机箱前面板上的硬盘活动 LED 指示灯。硬盘正在读取或写入数据时，此 LED 亮起。

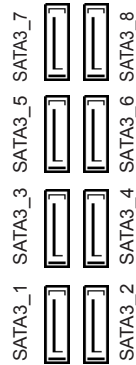
前面板设计根据机箱不同而有所差异。前面板模块主要包括电源开关、重置开关、电源 LED、硬盘活动 LED 指示灯、扬声器等。将机箱前面板模块连接到此接脚时，确保连线分配和针脚分配正确匹配。

电源 LED 和扬声器接脚
(7 针 SPK_PLED1)
(见第 1 页, 第 26 个)



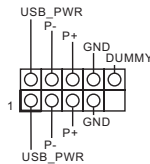
请将机箱电源 LED 和机箱扬声器连接到此接脚。

串行 ATA3 接口
(SATA3_1_2:
见第 1 页, 第 17 个)
(SATA3_3_4:
见第 1 页, 第 16 个)
(SATA3_5_6:
见第 1 页, 第 15 个)
(SATA3_7_8:
见第 1 页, 第 14 个)



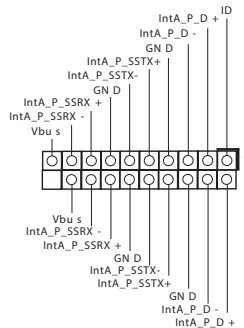
这八个 SATA3 接口支持最高 6.0 Gb/s 数据传输速率的内部存储设备的 SATA 数据线。

USB 2.0 接脚
(9 针 USB_1_2)
(见第 1 页, 第 24 个)
(9 针 USB_3_4)
(见第 1 页, 第 25 个)



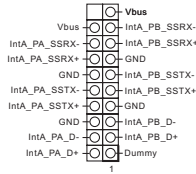
此主板上有 2 个接脚。
每个 USB 2.0 接脚可以支持两个端口。

USB 3.0 接脚
(19 针 USB3_9_10)
(见第 1 页, 第 21 个)

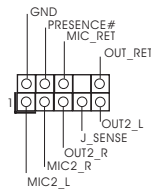


此主板上有 2 个接脚。
每个 USB 3.0 接脚可以支持两个端口。

(19 针 USB3_11_12)
(见第 1 页，第 11 个)



前面板音频接口
(9 针 HD_AUDIO1)
(见第 1 页，第 31 个)
(9 针 HD_AUDIO_RA1)
(第 1 页，第 30 个)

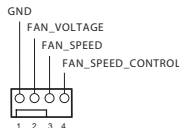


此接口用于将音频设备
连接到前音频面板。
* 将音频设备连接到其中
一个音频接口。



1. 高清音频支持插孔感测，但机箱上的面板连线必须支持 HDA 才能正常工作。请按照我们的手册和机箱手册的说明安装系统。
2. 如果您使用 AC' 97 音频面板，请按照以下步骤将它安装到前面板音频接口：
 - A. 将 Mic_IN (MIC) 连接到 MIC2_L。
 - B. 将 Audio_R (RIN) 连接到 OUT2_R，将 Audio_L (LIN) 连接到 OUT2_L。
 - C. 将接地端 (GND) 连接到接地端 (GND)。
 - D. MIC_RET 和 OUT_RET 只用于高清音频面板。您不需要针对 AC' 97 音频面板连接它们。
 - E. 要启用前麦克风，请转到 Realtek 控制面板上的“FrontMic”（前麦克风）选项卡，调整“Recording Volume”（录音音量）。

机箱风扇接口
(4 针 CHA_FAN1)
(见第 1 页，第 33 个)
(4 针 CHA_FAN2)
(见第 1 页，第 27 个)

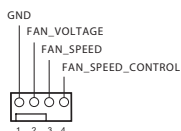


请将风扇线连接到风扇
接口并使黑线匹配接地
针脚。

机箱可选 / 水泵风扇接口

(4 针 CHA_FAN3/W_PUMP)

(见第 1 页, 第 1 个)

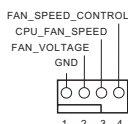


此主板提供一个 4 针水冷机箱风扇接口。如果您打算连接 3 针机箱水冷风扇, 请将它连接到针脚 1-3。

CPU 风扇接口

(4 针 CPU_FAN1)

(见第 1 页, 第 8 个)

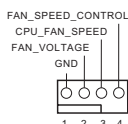


此主板提供 4 针 CPU 风扇 (静音风扇) 接口。如果您打算连接 3 针 CPU 风扇, 请将它连接到针脚 1-3。

CPU 可选 / 水泵风扇接口

(4 针 CPU_OPT/W_PUMP)

(见第 1 页, 第 32 个)

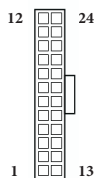


此主板提供 4 针水冷风扇接口。如果您打算连接 3 针 CPU 水冷风扇, 请将它连接到针脚 1-3。

ATX 电源接口

(24 针 ATXPWR1)

(见第 1 页, 第 10 个)

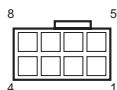


此主板提供 24 针 ATX 电源接口。要使用 20 针 ATX 电源, 请沿针脚 1 和针脚 13 插接它。

ATX 12V 电源接口

(8 针 ATX12V1)

(见第 1 页, 第 9 个)



此主板提供 8 针 ATX 12V 电源接口。连接电源上的 8 针 ATX 12V 接口。

ATX 12V 电源接口
(4 针 ATX12V2)
(见第 1 页，第 2 个)



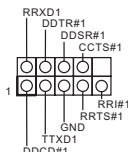
请将 ATX 12V 电源连接
到此接口。
* 电源插头只能从一个方向插入
此接口。

图形 12V 电源接口
(6 针 GFX_12V1)
(见第 1 页，第 18 个)



此主板提供 6 针图形 12V
电源接口。
* 安装有 4 个图形卡时将 PSU
的电源线连接到此接口

串行端口接脚
(9 针 COM1)
(见第 1 页，第 29 个)



此 COM1 接脚支持串行
端口模块。

RGB LED 接脚
(4 针 RGB_LED1)
(见第 1 页，第 28 个)



这两个 RGB 接脚用于连接 RGB
LED 延长线，可让用户选择不
同的 LED 灯光效果。

(4 针 RGB_LED2)
(见第 1 页，第 12 个)



注意： RGB LED 线安装方向切
勿错误，否则，线缆会损坏。
* 请参考第 43 页了解这两个接
脚的详情。

U.2 接口
(36 针 U2_1)
(见第 1 页，第 13 个)



此接口支持 U.2 NVMe Express
存储设备，最高为 Gen3 x4
(32 Gb/s)。

* 如果已插入 U.2 接口，M2_1
将被禁用。

1.4 智能开关

本主板配有五个智能开关：电源开关、重置开关、清除 CMOS 开关、CPU Xtreme OC 开关和 BIOS 回闪开关。

电源开关
(PWRBTN)
(见第 1 页，第 19 个)



电源开关允许用户快速打开 / 关闭系统。

重置开关
(RSTBTN)
(见第 1 页，第 22 个)



重置开关允许用户快速重置系统。

清除 CMOS 开关
(CLRCBTN)
(见第 1 页，第 23 个)



清除 CMOS 开关允许用户快速清除 CMOS 值。



只有在关闭计算机并拔下电源插头后，才能使用此功能。

CPU Xtreme OC 开关
(MOS_PROCHOT1)
(见第 1 页，第 5 个)



PROCHOT = ON (默认)
(禁用 CPU Xtreme OC 模式)

PROCHOT = OFF

(启用 CPU Xtreme OC 模式)

警告：超频可能会损坏 CPU 和主板。执行这项工作您应自担风险和自己承担费用。

BIOS 回闪开关
(BIOS_FB1)
(见第 3 页，第 19 个)



BIOS 回闪开关允许用户刷新 BIOS。

电子信息产品污染控制标示

依据中国发布的「电子信息产品污染控制管理办法」及 SJ/T 11364-2006「电子信息产品污染控制标示要求」，电子信息产品应进行标示，藉以向消费者揭露产品中含有的有毒有害物质或元素不致发生外泄或突变从而对环境造成污染或对人身、财产造成严重损害的期限。依上述规定，您可于本产品之印刷电路板上看见图一之标示。图一中之数字为产品之环保使用期限。由此可知此主板之环保使用期限为 10 年。



图一

有毒有害物质或元素的名称及含量说明

若您欲了解此产品的有毒有害物质或元素的名称及含量说明，请参照以下表格及说明。

部件名称	有害物质或元素					
	铅 (Pb)	镉 (Cd)	汞 (Hg)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
印刷电路板及电子组件	X	O	O	O	O	O
外部信号连接头及线材	X	O	O	O	O	O

O: 表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T 11363-2006 标准规定的限量要求以下。

X: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T 11363-2006 标准规定的限量要求，然该部件仍符合欧盟指令 2002/95/EC 的规范。

备注: 此产品所标示之环保使用年限，系指在一般正常使用状况下。

1 簡介

感謝您購買華擎 Fatal1ty X399 Professional Gaming Series 主機板，本主機板經華擎嚴格品質製作，是一套讓人信賴的可靠產品。本產品採耐用設計所展現的優異效能，完全符合華擎對品質及耐用度的承諾。



由於主機板規格及 BIOS 軟體可能會更新，所以本文件內容如有變更，恕不另行通知。如本文件有任何修改，可至華擎網站逕行取得更新版本，不另外通知。若您需要與本主機板相關的技術支援，請上我們的網站瞭解有關您使用機型的特定資訊。您也可以
在華擎網站找到最新的 VGA 卡及 CPU 支援清單。華擎網站 <http://www.asrock.com>。

1.1 包裝內容

- 華擎 Fatal1ty X399 Professional Gaming Series 主機板 (ATX 尺寸)
- 華擎 Fatal1ty X399 Professional Gaming Series 快速安裝指南
- 華擎 Fatal1ty X399 Professional Gaming Series 支援光碟
- 1 x I/O 面板外罩
- 4 x Serial ATA (SATA) 資料纜線 (選用)
- 1 x 華擎 3-Way SLI 橋接卡 (選用)
- 1 x 華擎 4-Way SLI-S111 橋接卡 (選用)
- 1 x 華擎 SLI_HB_Bridge_3S 卡 (選用)
- 2 x 華擎 WiFi 2.4/5 GHz 天線 (選用)
- 3 x 螺絲 (適用於 M.2 插座) (選用)

1.2 規格

平台

- ATX 尺寸
- 8 層板 PCB
- 2oz 銅製 PCB

CPU

- 支援 AMD TR4 Socket Ryzen Threadripper 系列 CPU
- IR Digital PWM
- 11 電源相位設計
- 支援華擎 Hyper BCLK 引擎 III

晶片組

- AMD X399

記憶體

- 四通道 DDR4 記憶體技術
- 8 x DDR4 DIMM 插槽
- 支援 DDR4 3600+(OC)/3200(OC)/2933(OC)/ 2667/2400/2133 ECC 及非 ECC、無緩衝記憶體 *
- * 如需更多資訊，請參閱華擎網站上的記憶體支援表。
(<http://www.asrock.com/>)
- 最大系統記憶體容量：128GB
- 15 μ 特厚鍍金插槽

擴充插槽

- 4 x PCI Express 3.0 x16 插槽 (PCIe1/PCIe2/PCIe4/PCIe5 : 單 x16 (PCIe1); 雙 x16 (PCIe1) / x16 (PCIe4); 三 x16 (PCIe1) / x8 (PCIe2) / x16 (PCIe4); 四 x16 (PCIe1) / x8 (PCIe2) / x16 (PCIe4) / x8 (PCIe5))*
- * 支援 NVMe SSD 作為開機磁碟
- 1 x PCI Express 2.0 x1 插槽
- 支援 AMD Quad CrossFireX™、4-Way CrossFireX™、3-Way CrossFireX™，與 CrossFireX™
- 支援 NVIDIA® Quad SLI™、4-Way SLI™、3-Way SLI™ 及 SLI™
- 1 x 垂直 M.2 插座 (Key E)，搭售 WiFi-802.11ac 模組 (在背後 I/O 上)
- VGA PCIe 插槽採用 15 μ 特厚鍍金插槽 (PCIe1 與 PCIe4)

音訊

- 7.1 CH HD 音訊含內容保護（Realtek ALC1220 音訊轉碼器）功能
- 高階藍光音訊支援
- 支援突波保護
- Nichicon Fine Gold 系列音響級電容
- 120dB SNR DAC 及差動放大器
- 適用前面板音訊接頭的 TI® NE5532 Premium Headset Amplifier（支援最高可達 600 Ohm 的耳機）
- 純電源輸入
- 直驅技術
- PCB 隔離遮蔽
- 線路輸出埠的阻抗感應
- 適用左／右音訊聲道的獨立 PCB 層
- RGB LED
- 金色音訊插孔
- 15 μ 特厚鍍金音訊接頭
- 支援 Creative SoundBlaster Cinema3

LAN

1 x 10 Gigabit LAN 100/1000/2500/5000/10000 Mb/s（AQUANTIA® AQC107）：

- 支援網路喚醒
- 支援雷擊／靜電保護
- 支援 PXE

2 x Intel Gigabit LAN 10/100/1000 Mb/s (2 x Intel® I211AT):

- 支援網路喚醒
- 支援雷擊／靜電保護
- 支援 Energy Efficient Ethernet 802.3az
- 支援 PXE

無線 LAN

- Intel® 802.11ac WiFi 模組（免費搭售）
- 支援 IEEE 802.11a/b/g/n/ac
- 支援雙頻 (2.4/5 GHz)
- 支援高達 433Mbps 的高速無線連線
- 支援 Bluetooth 4.2 / 3.0 + 高速級別 II

後面板 I/O

- 2 x 天線連接埠
- 1 x PS/2 滑鼠／鍵盤連接埠
- 1 x 光纖 SPDIF 輸出連接埠
- 1 x USB 3.1 A 類型連接埠 (10 Gb/s)（支援靜電保護）
- 1 x USB 3.1 C 類型連接埠 (10 Gb/s)（支援靜電保護）

- 8 x USB 3.0 連接埠（支援靜電保護）
- * USB3_6 連接埠支援 Ultra USB 電源。
- * USB3_6 連接埠不支援 ACPI 喚醒功能。
- * 1 x Fatal1ty 滑鼠連接埠 (USB 3.0) 已包含
- 3 x RJ-45 LAN 連接埠，含 LED（ACT/LINK LED 及 SPEED LED）
- 1 x BIOS Flashback 開關
- HD 音訊插孔：後置喇叭 / 中置 / 低音 / 線路輸入 / 前置喇叭 / 麥克風（金色音訊插孔）

儲存裝置

- 提供 8 x SATA3 6.0 Gb/s 接頭，支援 RAID（RAID 0、RAID 1、與 RAID 10）、NCQ、AHCI 及熱插拔
- 2 x Ultra M.2 插座（M2_1 和 M2_2），支援 M Key 型 2242/2260/2280 M.2 SATA3 6.0 Gb/s 模組與 M.2 PCI Express 模組（最高可達 Gen3 x4 (32 Gb/s)）類型 *
- 1 x Ultra M.2 插座 (M2_3)，支援 M Key 型 2230/2242/2260/2280 M.2 SATA3 6.0 Gb/s 模組與 M.2 PCI Express 模組（最高可達 Gen3 x4 (32 Gb/s)）類型 *
- * 支援 NVMe SSD 作為開機磁碟
- * 支持華擎 U.2 套件
 - 1 x U.2 接頭
- * 若插入 U.2 接頭，將會停用 M2_1

接頭

- 1 x COM 連接埠排針
- 1 x 電源 LED 及喇叭排針
- 2 x RGB LED 排針
- * 各排針最高支援 12V/3A，36W LED 條燈
- 1 x CPU 風扇接頭 (4-pin)
- * CPU 風扇接頭支援最高 1A (12W) 風扇功率的 CPU 風扇。
 - 1 x CPU 選購／水冷幫浦風扇接頭 (4-pin)（智慧型風扇速度控制）
- * CPU 選購／水冷幫浦風扇接頭支援最高 1.5A (18W) 風扇功率的水冷風扇。
 - 2 x 機殼風扇接頭 (4-pin)（智慧型風扇速度控制）
 - 1 x 機殼選購／水冷幫浦風扇接頭 (4-pin)（智慧型風扇速度控制）

* 機殼選購／水冷幫浦風扇接頭支援最高 1.5A (18W) 風扇功率的水冷風扇。

* 如果 3-pin 或 4-pin 風扇使用中，可自動偵測 CPU_FAN1、CHA_FAN1、CHA_FAN2、CPU_OPT/W_PUMP 和 CHA_FAN3/W_PUMP。

- 1 x 24 pin ATX 電源接頭（高密度電源接頭）（適用於主機板）
- 1 x 8 pin 12V 電源接頭（高密度電源接頭）（適用於主機板）
- 1 x 4 pin 12V 電源接頭（高密度電源接頭）（適用於主機板）
- 1 x 6 pin 12V 電源接頭（高密度電源接頭）（適用於 PCIe 顯示卡）
- 1 x 前面板音訊接頭 (15 μ 金色音訊接頭)*
- 1 x 直角前面板音訊接頭*

* 將音訊裝置連接至其中一個音訊接頭。

- 2 x USB 2.0 排針（支援 4 個 USB 2.0 連接埠）（支援靜電保護）
- 2 x USB 3.0 排針（支援 4 個 USB 3.0 連接埠）（支援靜電保護）
- 1 x 清除 CMOS 開關
- 1 x Dr. Debug，含 LED
- 1 x 電源開關，含 LED
- 1 x 重設開關，含 LED
- 1 x CPU Xtreme OC 開關

BIOS 功能

- AMI UEFI Legal BIOS 含 GUI 支援
- 支援「隨插即用」
- ACPI 5.1 符合喚醒自動開機
- 支援免跳線模式
- 支援 SMBIOS 2.3
- CPU、VCORE_NB、DRAM、VPPM、PCH 1.05V、+1.8V、VDDP、PROM 2.5V、電壓多重調整

硬體監視器

- 溫度感應：CPU、CPU 選購／水冷幫浦、機殼、機殼選購／水冷幫浦風扇

- 風扇轉速計：CPU、CPU 選購／水冷幫浦、機殼、機殼選購／水冷幫浦風扇
- 靜音風扇（依 CPU 溫度自動調整機殼風扇速度）：
CPU、CPU 選購／水冷幫浦、機殼、機殼選購／水冷幫浦風扇
- 風扇多重速度控制：CPU、CPU 選購／水冷幫浦、機殼、機殼選購／水冷幫浦風扇
- 電壓監控：+12V、+5V、+3.3V、CPU Vcore、VCORE_NB、DRAM、PCH 1.05V、+1.8V、VDDP

作業系統

- Microsoft® Windows® 10 64-bit
- * 關於最新 Windows® 10 驅動程式的詳細資訊，請瀏覽華擎網站：<http://www.asrock.com>

認證

- FCC、CE
- ErP/EuP ready（須具備 ErP/EuP ready 電源供應器）

* 如需產品詳細資訊，請上我們的網站：<http://www.asrock.com>



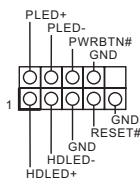
請務必理解，超頻可能產生某種程度的風險，其中包括調整 BIOS 中的設定、採用自由超頻技術或使用協力廠商的超頻工具。超頻可能會影響您系統的穩定性，或者甚至會對您系統的元件及裝置造成傷害。您應自行負擔超頻風險及成本。我們對於因超頻所造成的可能損害概不負責。

1.3 板載排針及接頭



板載排針及接頭都不是跳線。請勿將跳線帽套在這些排針及接頭上。將跳線帽套在排針及接頭上，將造成主機板永久性的受損。

系統面板排針
(9-pin PANEL1)
(請參閱第 1 頁，編號 20)



請依照以下的針腳排列將機殼上的電源開關、重設開關及系統狀態指示燈連接至此排針。在連接纜線之前請注意正負針腳。



PWRBTN (電源開關)：

連接至機殼前面板上的電源開關。您可設定使用電源開關關閉系統電源的方式。

RESET (重設開關)：

連接至機殼前面板上的重設開關。若電腦凍結且無法執行正常重新啟動，按下重設開關即可重新啟動電腦。

PLED (系統電源 LED)：

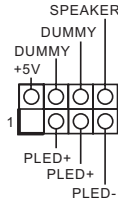
連接至機殼前面板上的電源狀態指示燈。系統正在運作時，此 LED 會亮起。系統進入 S1/S3 睡眠狀態時，LED 會持續閃爍。系統進入 S4 睡眠狀態或關機 (S5) 時，LED 會熄滅。

HDLED (硬碟活動 LED)：

連接至機殼前面板上的硬碟活動 LED。硬碟正在讀取或寫入資料時，LED 會亮起。

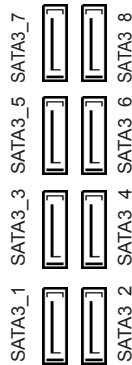
各機殼的前面板設計各有不同。前面板模組主要是由電源開關、重設開關、電源 LED、硬碟活動 LED、喇叭及其他裝置組成。將機殼前面板模組連接至此排針時，請確定佈線及針腳指派皆正確相符。

電源 LED 及喇叭排針
(7-pin SPK_PLED1)
(請參閱第 1 頁，編號 26)



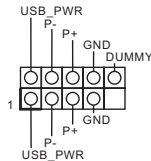
請將機殼電源 LED
及機殼喇叭連接至
此排針。

Serial ATA3 接頭
(SATA3_1_2:
請參閱第 1 頁，編號 17)
(SATA3_3_4:
請參閱第 1 頁，編號 16)
(SATA3_5_6:
請參閱第 1 頁，編號 15)
(SATA3_7_8:
請參閱第 1 頁，編號 14)



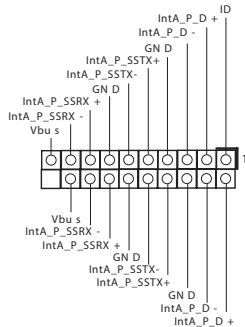
這八組 SATA3 接頭
皆支援內部儲存裝
置的 SATA 資料纜
線，最高可達 6.0
Gb/s 資料傳輸率。

USB 2.0 排針
(9-pin USB_1_2)
(請參閱第 1 頁，編號 24)
(9-pin USB_3_4)
(請參閱第 1 頁，編號 25)



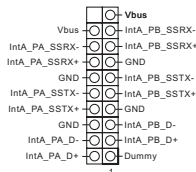
本主機板上含有兩
組排針。各 USB 2.0
排針皆可支援兩個
連接埠。

USB 3.0 排針
(19-pin USB3_9_10)
(請參閱第 1 頁，編號 21)

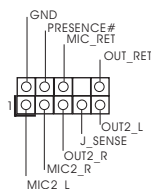


本主機板上含有兩
組排針。各 USB 3.0
排針皆可支援兩個
連接埠。

(19-pin USB3_11_12)
(請參閱第 1 頁，編號 11)



前面板音訊排針
(9-pin HD_AUDIO1)
(請參閱第 1 頁，編號 31)
(9-pin HD_AUDIO_RA1)
(請參閱第 1 頁，編號 30)



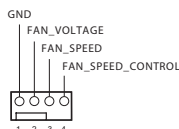
本排針適用於連接音訊裝置至前面板音訊。

* 將音訊裝置連接至其中一個音訊接頭。



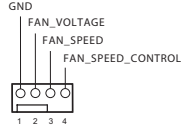
1. 高解析度音訊支援智慧型音效介面偵測 (Jack Sensing)，但機殼上的面板線必須支援 HDA 才能正確運作。請依本手冊及機殼手冊說明安裝系統。
2. 若您使用 AC' 97 音訊面板，請按照以下步驟安裝至前面板音訊排針：
 - A. 將 Mic_IN (MIC) 連接至 MIC2_L。
 - B. 將 Audio_R (RIN) 連接至 OUT2_R 且將 Audio_L (LIN) 連接至 OUT2_L。
 - C. 將接地 (GND) 連接至接地 (GND)。
 - D. MIC_RET 及 OUT_RET 僅供 HD 音訊面板使用。您不需要在 AC' 97 音訊面板上連接。
 - E. 若要啟動前側麥克風，請前往 Realtek 控制面板中的「FrontMic」標籤調整「錄音音量」。

機殼風扇接頭
(4-pin CHA_FAN1)
(請參閱第 1 頁，編號 33)
(4-pin CHA_FAN2)
(請參閱第 1 頁，編號 27)



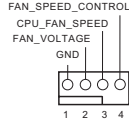
請將風扇纜線連接至風扇接頭，並比對黑線及接地針腳。

機殼選購／水冷幫浦風扇接頭
(4-pin CHA_FAN3/W_PUMP)
(請參閱第 1 頁，編號 1)



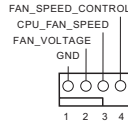
本主機板配備一個 4-Pin 水冷機殼風扇接頭。若您計畫連接 3-Pin 機殼水冷風扇，請接至 Pin 1-3。

CPU 風扇接頭
(4-pin CPU_FAN1)
(請參閱第 1 頁，編號 8)



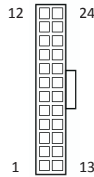
本主機板配備 4-Pin CPU 風扇 (靜音風扇) 接頭。若您計畫連接 3-Pin CPU 風扇，請接至 Pin 1-3。

CPU 選購／水冷幫浦風扇接頭
(4-pin CPU_OPT/W_PUMP)
(請參閱第 1 頁，編號 32)



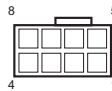
本主機板配備 4-Pin 水冷 CPU 風扇接頭。若您計畫連接 3-Pin CPU 水冷風扇，請接至 Pin 1-3。

ATX 電源接頭
(24-pin ATXPWR1)
(請參閱第 1 頁，編號 10)



本主機板配備一組 24-pin ATX 電源接頭。若要使用 20-pin ATX 電源供應器，請插入 Pin 1 及 Pin 13。

ATX 12V 電源接頭
(8-pin ATX12V1)
(請參閱第 1 頁，編號 9)



本主機板配備一組 8-pin ATX 12V 電源接頭。從電源供應器連接 8 針 ATX 12V 連接器。

ATX 12V 電源接頭
(4-pin ATX12V2)
(請參閱第 1 頁，編號 2)



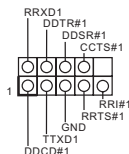
請將 ATX 12V 電源接至
此接頭。
* 電源插頭僅能以單一方
向插入此連接器。

顯示卡 12V 電源接頭
(6-pin GFX_12V1)
(請參閱第 1 頁，編號 18)



本主機板配備一組 6-pin
顯示卡 12V 電源接頭。
* 當安裝 4 張顯示卡時，請
將 PSU 的電源線連接至此
接頭。

序列連接埠排針
(9-pin COM1)
(請參閱第 1 頁，編號 29)



此 COM1 排針支援序列
連接埠模組。

RGB LED 排針
(4-pin RGB_LED1)
(請參閱第 1 頁，編號 28)



這兩個 RGB 排針用於連
接 RGB LED 延長線，可供
使用者選擇各種 LED 照
明效果。

(4-pin RGB_LED2)
(請參閱第 1 頁，編號 12)



警告：切勿以錯誤方向
安裝 RGB LED 纜線，否
則纜線可能損壞。
* 關於這兩種排針的詳
細說明，請參閱第 43
頁。

U.2 接頭
(36-pin U2_1)
(請參閱第 1 頁，編號 13)



此接頭支援 U.2 NVMe Express 儲存裝置（最高可達 Gen3 x4 (32 Gb/s)）。

* 若插入 U.2 接頭，將會停用 M2_1。

1.4 智慧型開關

主機板設有五個智慧型開關：電源開關、重設開關、清除 CMOS 開關、CPU Xtreme OC 開關及 BIOS Flashback 開關。

電源開關
(PWRBTN)

(請參閱第 1 頁，編號 19)



電源開關可讓使用者迅速開啟／關閉系統。

重設開關
(RSTBTN)

(請參閱第 1 頁，編號 22)



重設開關可讓使用者迅速重設系統。

清除 CMOS 開關
(CLRCBTN)

(請參閱第 1 頁，編號 23)



清除 CMOS 開關可讓使用者迅速清除 CMOS 值。



此功能唯有在將電腦關機，拔下電源供應器的插頭時才會作用。

CPU Xtreme OC 開關
(MOS_PROCHOT1)

(請參閱第 1 頁，編號 5)



PROCHOT = ON (預設) (停用 CPU Xtreme OC 模式)

PROCHOT = OFF

(啟用 CPU Xtreme OC 模式)

警告：超頻可能導致 CPU 與主機板損壞，您應自行負擔超頻風險及成本。

BIOS Flashback 開關 (BIOS_FB1)
(請參閱第 3 頁，編號 19)



BIOS Flashback 開關可讓使用者更新 BIOS。

1.2 Spesifikasi

Platform

- Bentuk dan Ukuran ATX
- PCB 8 Lapis
- PCB Tembaga 2oz

CPU

- Mendukung CPU Ryzen Threadripper Series dengan soket AMD TR4
- IR Digital PWM
- Desain 11 Fase Daya
- Mendukung Mesin ASRock Hyper BCLK III

Chipset

- AMD X399

Memori

- Teknologi Memori DDR4 Empat Kanal
- 8 x Slot DIMM DDR4
- Mendukung DDR4 3600+(OC)/3200(OC)/2933(OC)/2667/2400/2133 ECC & non-ECC, memori tanpa buffer*
- * Lihat Daftar Dukungan Memori pada situs web ASRock untuk informasi selengkapnya. (<http://www.asrock.com/>)
- Kapasitas maksimum memori sistem: 128GB
- 15µ Bidang Kontak berwarna Emas di Slot DIMM

Slot Ekspansi

- 4 x Slot PCI Express 3.0 x16 (PCIE1/PCIE2/PCIE4/PCIE5:satu pada x16 (PCIE1); dua pada x16 (PCIE1)/x16 (PCIE4); tiga pada x16 (PCIE1)/x8 (PCIE2)/x16 (PCIE4); empat pada x16 (PCIE1)/x8 (PCIE2)/x16 (PCIE4)/x8 (PCIE5))*
- * Mendukung SSD NVMe sebagai disk boot
- 1 x Slot PCI Express 2.0 x1
- Mendukung AMD Quad CrossFireX™, 4-Way CrossFireX™, 3-Way CrossFireX™, dan CrossFireX™
- Mendukung NVIDIA® Quad SLI™, 4-Way SLI™, 3-Way SLI™, dan SLI™
- 1 x Soket M.2 Vertikal (tombol E) dengan paket modul WiFi-802.11ac (di bagian belakang I/O)
- 15µ Bidang Kontak berwarna Emas di Slot VGA PCIe (PCIE1 dan PCIE4)

Audio

- Audio HD 7.1 CH dengan Perlindungan Konten (Realtek ALC1220 Audio Codec)
- Mendukung Audio Blu-ray Premium
- Mendukung Perlindungan dari Arus Pendek
- Nichicon Fine Gold Series Audio Caps
- 120dB SNR DAC dengan Amplifier Diferensial
- TI® NE5532 Premium Headset Amplifier untuk Konektor Audio Panel Depan (Mendukung headset hingga 600 Ohm)
- Daya Masuk Kuat
- Teknologi Direct Drive
- Pelindung Terisolasi PCB
- Deteksi Impedansi pada port Saluran Keluar
- Lapisan PCB Individual untuk Saluran Audio Ka/Ki
- LED RGB
- Soket Audio Emas
- Konektor Audio Emas 15µ
- Mendukung Cinema3 SoundBlaster Creative

LAN

1 x LAN 10 Gigabit 100/1000/2500/5000/10000 Mb/s (AQUANTIA® AQC107):

- Mendukung Wake-On-LAN
- Mendukung Perlindungan dari Petir/ESD
- Mendukung PXE

2 x LAN Intel Gigabit 10/100/1000 Mb/s (2 x Intel® I211AT):

- Mendukung Wake-On-LAN
- Mendukung Perlindungan dari Petir/ESD
- Mendukung Ethernet Hemat Energi 802.3az
- Mendukung PXE

**LAN
Nirkabel**

- Modul WiFi Intel® 802.11ac (Paket Gratis)
- Mendukung IEEE 802.11a/b/g/n/ac
- Mendukung Dual-Band (2,4/5 GHz)
- Mendukung Sambungan nirkabel berkecepatan tinggi hingga 433Mbps
- Mendukung Bluetooth 4.2 / 3.0 + Kecepatan tinggi kelas II

**I/O Panel
Belakang**

- 2 x Port Antena
- 1 x Port Mouse/Keyboard PS/2
- 1 x Port SPDIF Out Optik
- 1 x USB 3.1 Port Tipe A (10 Gb/s) (Mendukung Perlindungan ESD)
- 1 x USB 3.1 Port Tipe C (10 Gb/s) (Mendukung Perlindungan ESD)

- 8 x Port USB 3.0 (Mendukung Perlindungan dari ESD)
- * Daya USB Ultra didukung pada port USB3_6.
- * Fungsi pengaktifan ACPI tidak didukung pada port USB3_6.
- * 1 x Port Mouse Fatal1ty (USB 3.0) disertakan
- 3 x Port LAN RJ-45 dengan LED (ACT/LINK LED dan SPEED LED)
- 1 x Sakelar BIOS Flashback
- Soket Audio HD: Speaker Belakang / Tengah / Bass / Jalur masuk / Speaker Depan / Mikrofon (Jack Audio berwarna Emas)

Penyimpanan

- 8 x Konektor SATA3 6,0 Gb/s, mendukung RAID (RAID 0, RAID 1, dan RAID 10), NCQ, AHCI dan Hot Plug
- 2 x Soket Ultra M.2 (M2_1 dan M2_2), mendukung jenis modul 2242/2260/2280 M.2 SATA3 6,0 Gb/s dan modul M.2 PCI Express hingga Gen3 x4 (32 Gb/s)*
- 1 x Soket Ultra M.2 (M2_3), mendukung modul M Key tipe 2230/2242/2260/2280 M.2 SATA3 6,0 Gb/s dan modul M.2 PCI Express hingga Gen3 x4 (32 Gb/s)*
- * Mendukung SSD NVMe sebagai disk boot
- * Mendukung Kit U.2 ASRock
- 1 x Konektor U.2
- * Jika konektor U.2 terpasang, M2_1 akan menjadi nonaktif

Konektor

- 1 x Header Port COM
- 1 x Header LED Daya dan Speaker
- 2 x Header LED RGB
- * Setiap header mendukung LED Strip hingga 12V/3A, 36W
- 1 x Konektor Kipas CPU (4-pin)
- * Konektor Kipas CPU mendukung kipas CPU dengan daya kipas maksimum 1A (12W).
- 1 x Konektor Kipas CPU Opsional/Pompa Air (4-pin) (Kontrol Kecepatan Kipas Pintar)
- * CPU Opsional/Kipas Pompa Air mendukung kipas berpendingin air dengan daya kipas maksimum 1,5A (18W).
- 2 x Konektor Kipas Chassis (4-pin) (Kontrol Kecepatan Kipas Pintar)
- 1 x Konektor Sasis Opsional/Kipas Pompa Air (4-pin) (Kontrol Kecepatan Kipas Pintar)

- * Sasis Opsional/Kipas Pompa Air mendukung kipas berpendingin air dengan daya kipas maksimum 1,5A (18W).
- * CPU_FAN1, CHA_FAN1, CHA_FAN2, CPU_OPT/W_PUMP dan CHA_FAN3/W_PUMP dapat mendeteksi otomatis jika kipas 3-pin atau 4-pin sedang digunakan.
 - 1 x Konektor Daya ATX 24 pin (Konektor Daya dengan Kerapatan Tinggi) (untuk Motherboard)
 - 1 x Konektor Daya 12V 8 pin (Konektor Daya dengan Kerapatan Tinggi) (untuk Motherboard)
 - 1 x Konektor Daya 12V 4 pin (Konektor Daya dengan Kerapatan Tinggi) (untuk Motherboard)
 - 1 x Konektor Daya 12V 6 pin (Konektor Daya dengan Kerapatan Tinggi) (untuk kartu grafis PCIe)
 - 1 x Konektor Audio Panel Depan (15µ Konektor Audio Emas)*
 - 1 x Konektor Audio Panel Depan Sudut Kanan*
- * Sambungkan perangkat audio ke salah satu konektor audio.
 - 2 x Header USB 2.0 (Mendukung 4 port USB 2.0) (Mendukung Perlindungan dari ESD)
 - 2 x Header USB 3.0 (Mendukung 4 port USB 3.0) (Mendukung Perlindungan dari ESD)
 - 1 x Sakelar Clear CMOS
 - 1 x Dr. Debug disertai LED
 - 1 x Tombol Daya disertai LED
 - 1 x Tombol Atur Ulang disertai LED
 - 1 x Sakelar CPU Xtreme OC

Fitur BIOS

- AMI UEFI Legal BIOS dengan dukungan GUI
- Mendukung “Plug and Play”
- ACPI 5.1 kompatibel dengan aktivitas pengaktifan
- Mendukung jumperfree
- Dukungan SMBIOS 2.3
- CPU, VCORE_NB, DRAM, VPPM, PCH 1,05V, +1,8V, VDDP, PROM 2,5V, Penyesuaian Multi Voltase

Monitor Perangkat Keras

- Deteksi Suhu: Kipas CPU, CPU Opsional/Pompa Air, Sasis, Sasis Opsional/Pompa Air

- Takometer Kipas: Kipas CPU, CPU Opsional/Pompa Air, Sasis, Sasis Opsional/Pompa Air
- Kipas Hening (Penyesuaian otomatis kecepatan kipas sasis berdasarkan suhu CPU): Kipas CPU, CPU Opsional/Pompa Air, Sasis, Sasis Opsional/Pompa Air
- Kontrol Multikecepatan Kipas: Kipas CPU, CPU Opsional/Pompa Air, Sasis, Sasis Opsional/Pompa Air
- Pemantauan voltase: +12V, +5V, +3,3V, CPU Vcore, VCORE_NB, DRAM, PCH 1,05V, +1,8V, VDDP

OS

- Microsoft® Windows® 10 64-bit
- * Untuk info rinci tentang driver Windows® 10 terbaru, kunjungi situs web ASRock: <http://www.asrock.com>

Sertifikasi

- FCC, CE
- Siap untuk ErP/EuP (memerlukan catu daya untuk siap ErP/EuP)

* Untuk informasi rinci tentang produk, kunjungi situs web kami: <http://www.asrock.com>



Perlu diketahui, overclocking memiliki risiko tertentu, termasuk menyesuaikan pengaturan pada BIOS, menerapkan Teknologi Untied Overclocking, atau menggunakan alat bantu overclocking pihak ketiga. Overclocking dapat mempengaruhi stabilitas sistem, atau bahkan mengakibatkan kerusakan komponen dan perangkat sistem. Risiko dan biaya apapun menjadi tanggungan Anda. Kami tidak bertanggung jawab atas kemungkinan kerusakan karena overclocking.

Contact Information

If you need to contact ASRock or want to know more about ASRock, you're welcome to visit ASRock's website at <http://www.asrock.com>; or you may contact your dealer for further information. For technical questions, please submit a support request form at <http://www.asrock.com/support/tsd.asp>

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EC-Declaration of Conformity

For the following equipment:

Motherboard

(Product Name)

Fatal1ty X399 Professional Gaming Series / ASRock

(Model Designation / Trade Name)

ASRock Incorporation

(Manufacturer Name)

2F., No.37, Sec. 2, Zhongyang S. Rd., Beitou District, Taipei City 112, Taiwan (R.O.C.)

(Manufacturer Address)

is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility Directive (2004/108/EC) and Safety Directive (2006/95/EC), the following standards are applied:

- ☒ EN 55022: 2006+A1:2007
- ☒ EN 61000-3-2: 2009
- ☒ EN 61000-3-3: 2008
- ☒ EN 55024: 1998 + A1:2001 + A2:2003
 - IEC 61000-4-2: 2008;
 - IEC 61000-4-3: 2010; IEC 61000-4-4: 2010;
 - IEC 61000-4-5: 2005; IEC 61000-4-6: 2008;
 - IEC 61000-4-8: 2009; IEC 61000-4-11: 2004;
- ☒ EN 60950-1: 2005 + A1:2009
 - IEC 60950-1: 2006 + A11:2009 + A1:2010 + A12:2011

The following manufacturer / importer or authorized representative established within the EUT is responsible for this declaration:

ASRock EUROPE B.V.

(Company Name)

Bijsterhuizen 1111 6546 AR Nijmegen The Netherlands

(Company Address)

Person responsible for making this declaration:

(Name, Surname)

A.V.P

(Position / Title)

August 18, 2017

(Date)