

PRIME A320M-C R2.0



Motherboard

E12809
First Edition
April 2017

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Contents

| | |
|---|-----|
| Safety information | iv |
| About this guide | iv |
| Package contents | vi |
| PRIME A320M-C R2.0 specifications summary | vi |
| Chapter 1: Product introduction | |
| Motherboard overview | 1-1 |
| Central Processing Unit (CPU) | 1-7 |
| System memory | 1-8 |
| Chapter 2: BIOS information | |
| BIOS setup program | 2-1 |
| EZ Mode | 2-2 |
| Advanced Mode | 2-3 |
| Exit menu | 2-4 |
| Appendix | |
| Notices | A-1 |

Safety information

Electrical safety

- To prevent electrical shock hazard, disconnect the power cable from the electrical outlet before relocating the system.
- When adding or removing devices to or from the system, ensure that the power cables for the devices are unplugged before the signal cables are connected. If possible, disconnect all power cables from the existing system before you add a device.
- Before connecting or removing signal cables from the motherboard, ensure that all power cables are unplugged.
- Seek professional assistance before using an adapter or extension cord. These devices could interrupt the grounding circuit.
- Ensure that your power supply is set to the correct voltage in your area. If you are not sure about the voltage of the electrical outlet you are using, contact your local power company.
- If the power supply is broken, do not try to fix it by yourself. Contact a qualified service technician or your retailer.

Operation safety

- Before installing the motherboard and adding components, carefully read all the manuals that came with the package.
- Before using the product, ensure all cables are correctly connected and the power cables are not damaged. If you detect any damage, contact your dealer immediately.
- To avoid short circuits, keep paper clips, screws, and staples away from connectors, slots, sockets and circuitry.
- Avoid dust, humidity, and temperature extremes. Do not place the product in any area where it may be exposed to moisture.
- Place the product on a stable surface.
- If you encounter technical problems with the product, contact a qualified service technician or your retailer.

About this guide

This user guide contains the information you need when installing and configuring the motherboard.

How this guide is organized

This guide contains the following parts:

- **Chapter 1: Product introduction**
This chapter describes the features of the motherboard and the new technology it supports. It includes descriptions of the switches, jumpers, and connectors on the motherboard.
- **Chapter 2: BIOS information**
This chapter discusses changing system settings through the BIOS Setup menus.

Where to find more information

Refer to the following sources for additional information and for product and software updates.

1. ASUS websites

The ASUS website provides updated information on ASUS hardware and software products. Refer to the ASUS contact information.

2. Optional documentation

Your product package may include optional documentation, such as warranty flyers, that may have been added by your dealer. These documents are not part of the standard package.

Conventions used in this guide

To ensure that you perform certain tasks properly, take note of the following symbols used throughout this manual.



DANGER/WARNING: Information to prevent injury to yourself when completing a task.



CAUTION: Information to prevent damage to the components when completing a task.



IMPORTANT: Instructions that you **MUST** follow to complete a task.



NOTE: Tips and additional information to help you complete a task.

Typography

Bold text

Indicates a menu or an item to select.

Italics

Used to emphasize a word or a phrase.

<Key>

Keys enclosed in the less-than and greater-than sign means that you must press the enclosed key.

Example: <Enter> means that you must press the Enter or Return key.

<Key1> + <Key2> + <Key3>

If you must press two or more keys simultaneously, the key names are linked with a plus sign (+).

Package contents

Check your motherboard package for the following items.

| | |
|------------------------|---|
| Motherboard | ASUS PRIME A320M-C R2.0 motherboard |
| Cables | 2 x Serial ATA 6.0 Gb/s cables |
| Accessories | 1 x I/O Shield 1 x M.2 Screw Package |
| Application DVD | 1 x Support DVD |
| Documentation | 1 x User Manual |



If any of the above items is damaged or missing, contact your retailer.

PRIME A320M-C R2.0 specifications summary

| | |
|------------------------|--|
| CPU | AM4 socket for AMD Ryzen™ / 7th Generation A-series / Athlon™ processors Supports CPU up to 8 cores* * Due to CPU limitation, CPU cores supported vary by processor. ** Refer to www.asus.com for AMD CPU support list. |
| Chipset | AMD A320 Chipset |
| Memory | AMD Ryzen™ Processors 2 x DIMMs, max. 32GB, DDR4 2666/2400/2133 MHz, non-ECC, un-buffered memory AMD 7th Generation A-series/Athlon™ Processors 2 x DIMMs, max. 32GB, DDR4 2400/2133 MHz, non-ECC, un-buffered memory Dual-channel memory architecture * Refer to www.asus.com for the latest Memory QVL (Qualified Vendors List). |
| Graphics | Integrated AMD Radeon™ R Series Graphics in the 7th Generation A-Series APU Multi-VGA output support: HDMI, DVI-D and D-Sub ports - Supports HDMI 1.4b with maximum resolution of 4096 x 2160 @24Hz / 2560 x 1600 @60Hz - Supports DVI-D with maximum resolution of 1920 x 1200 @60Hz - Supports D-Sub with maximum resolution of 1920 x 1200 @60Hz - Maximum shared memory of 2048 MB |
| Expansion slots | AMD Ryzen™ Processors 1 x PCI Express 3.0/2.0 x16 slot (max. @x16 mode) AMD 7th Generation A-series/Athlon™ Processors 1 x PCI Express 3.0/2.0 x16 slot (max. @x8 mode) AMD A320 Chipset 2 x PCI Express 2.0 x1 slots 1 x PCI slot |
| LAN | Realtek® 8111H Gigabit LAN Controller |

(continued on the next page)

PRIME A320M-C R2.0 specifications summary

| | |
|----------------------|---|
| Storage | AMD Ryzen™ Processors - 1 x M.2 socket 3 with M Key, Type 2242/2260/2280 (PCIe 3.0 x4 and SATA modes) storage devices support |
| | AMD 7th Generation A-series/Athlon™ Processors - 1 x M.2 socket 3 with M Key, Type 2242/2260/2280 (SATA mode) storage devices support |
| | AMD A320 Chipset - 4 x Serial ATA 6.0 Gb/s connectors with RAID 0, RAID 1, and RAID 10 support |
| Audio | Realtek® ALC 887-VD2 8-Channel High Definition Audio CODEC * Use a chassis with HD audio module in the front panel to support an 8-channel audio output. |
| USB | 6 x USB 3.0 / 2.0 ports (4 ports at the rear panel; 2 ports at mid-board) 6 x USB 2.0 / 1.1 ports (2 ports at the rear panel; 4 ports at mid-board) |
| ASUS unique features | Dependable Stability ASUS 5X PROTECTION II - ASUS LANGuard - Surge-protected networking - ASUS Overvoltage Protection - World-class circuit-protecting power design - ASUS DRAM Overcurrent Protection - Enhanced DRAM overcurrent protection - ASUS Stainless Steel Back I/O - 3X more durable - ESD Guards - Electrostatic discharge protection |
| | Superb performance UEFI BIOS - Most advanced options with fast response time |
| | Easy PC DIY Safe motherboard mounting - Component-free areas to minimize damage risk |
| | Q-Design - ASUS Q-DIMM - ASUS Q-Slot |
| | UEFI BIOS EZ Mode - featuring friendly graphics user interface - ASUS CrashFree BIOS 3 - ASUS EZ Flash 3 |
| | Optimized Cooling - Stylish Fanless Design: Chipset Heat-sink solution - ASUS Fan Xpert |
| | 1 x PS/2 keyboard (purple) 1 x PS/2 mouse port (green) 1 x HDMI port 1 x DVI-D port 1 x D-Sub port 1 x COM port 1 x LAN (RJ-45) port 4 x USB 3.0/2.0 ports 2 x USB 2.0/1.1 ports 3 x Audio jacks support 8-channel audio output |

(continued on the next page)

PRIME A320M-C R2.0 specifications summary

| | |
|----------------------------|---|
| Internal connectors | <p>2 x USB 2.0/1.1 connectors support additional 4 USB 2.0/1.1 ports</p> <p>1 x USB 3.0 connector supports additional 2 USB 3.0 ports</p> <p>1 x M.2 socket 3 for M Key and type 2242/2260/2280 devices</p> <p>4 x SATA 6.0Gb/s connectors</p> <p>1 x 14-1 pin TPM connector</p> <p>1 x COM connector</p> <p>1 x Parallel connector</p> <p>1 x CPU Fan connector</p> <p>2 x Chassis Fan connector (Support DC & PWM mode)</p> <p>1 x Front panel audio connector</p> <p>1 x 24-pin EATX Power connector</p> <p>1 x 4-pin ATX 12V Power connector</p> <p>1 x 2-pin Clear CMOS header</p> <p>1 x System Panel connector</p> <p>1 x Chassis intrusion connector</p> <p>1 x Speaker connector</p> |
| BIOS features | <p>128 Mb Flash ROM, UEFI AMI BIOS, PnP, DMI3.0, WfM2.0, SM BIOS 3.0, ACPI 6.1, Multi-language BIOS, ASUS EZ Flash 3, ASUS CrashFree BIOS 3, My Favorites, Last Modified log, F12 PrintScreen, ASUS DRAM SPD (Serial Presence Detect) memory information, F6 Qfan Control</p> |
| Manageability | <p>WfM 2.0, DMI 3.0, WOL by PME, PXE</p> |
| Support DVD | <p>Drivers</p> <p>ASUS utilities</p> <p>ASUS Update</p> <p>Anti-virus software (OEM version)</p> |
| OS support | <p>Windows® 10 (64-bit)</p> |
| Form factor | <p>uATX form factor: 9.6 in. x 9.3 in. (24.4 cm x 23.6 cm)</p> |



Specifications are subject to change without notice.

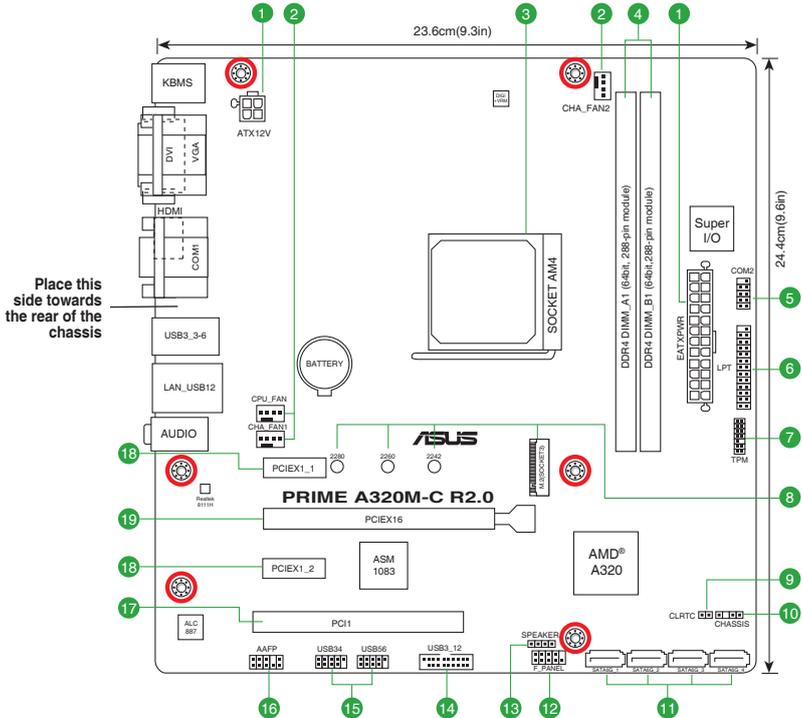
Product introduction

1

Motherboard overview



- Unplug the power cord from the wall socket before touching any component.
- Before handling components, use a grounded wrist strap or touch a safely grounded object or a metal object, such as the power supply case, to avoid damaging them due to static electricity.
- Before you install or remove any component, ensure that the ATX power supply is switched off or the power cord is detached from the power supply. Failure to do so may cause severe damage to the motherboard, peripherals, or components.
- Unplug the power cord before installing or removing the motherboard. Failure to do so can cause you physical injury and damage to motherboard components.



Scan the QR code to get the detailed pin definitions.



1 ATX power connectors (24-pin EATXPWR, 4-pin ATX12V)

Correctly orient the ATX power supply plugs into these connectors and push down firmly until the connectors completely fit.



- For a fully configured system, we recommend that you use a power supply unit (PSU) that complies with ATX 12 V Specification 2.0 (or later version) and provides a minimum power of 300 W.
- If you are uncertain about the minimum power supply requirement for your system, refer to the Recommended Power Supply Wattage Calculator at <http://support.asus.com/PowerSupplyCalculator/PSCalculator.aspx?SLanguage=en-us> for details.

2 CPU and chassis fan connectors (4-pin CPU_FAN, 4-pin CHA_FAN1/2)

Connect the fan cables to the fan connectors on the motherboard, ensuring that the black wire of each cable matches the ground pin of the connector.



Do not forget to connect the fan cables to the fan connectors. Insufficient air flow inside the system may damage the motherboard components. These are not jumpers! Do not place jumper caps on the fan connectors! The CPU_FAN connector supports a CPU fan of maximum 2A (24 W) fan power.



Only the 4-pin CPU fan supports the ASUS Fan Xpert feature.

3 AMD AM4 CPU socket

The motherboard comes with an AM4 socket designed for AMD Ryzen™ / 7th Generation A-series / Athlon™ processors up to 8-core.



For more details, refer to **Central Processing Unit (CPU)**.

4 DDR4 DIMM slots

Install 2 GB, 4 GB, 8 GB, and 16 GB, unbuffered and non-ECC DDR4 DIMMs into these DIMM sockets.



For more details, refer to **System memory**.

5 Serial port connector (10-1 pin COM2)

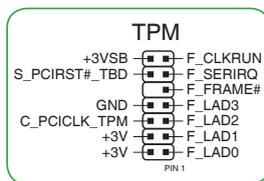
This connector is for a serial (COM) port. Connect the serial port module cable to this connector, then install the module to a slot opening at the back of the system chassis.

6 LPT connector (26-1 pin LPT)

The LPT (Line Printing Terminal) connector supports devices such as a printer. LPT standardizes as IEEE 1284, which is the parallel port interface on IBM PC-compatible computers.

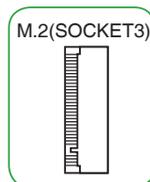
7 TPM connector (14-1 pin TPM)

This connector supports a Trusted Platform Module (TPM) system, which can securely store keys, digital certificates, passwords and data. A TPM system also helps enhance network security, protects digital identities, and ensures platform integrity.



8 M.2 socket 3

These sockets allow you to install M.2 (NGFF) SSD modules.



- For AMD Ryzen™ Processors, the M.2(SOCKET3) supports PCIe 3.0 x4 and SATA mode M Key design and type 2242 / 2260 / 2280 storage devices.
- For AMD 7th Generation A-series/Athlon™ Processors, the M.2(SOCKET3) supports SATA mode M Key design and type 2242 / 2260 / 2280 storage devices.



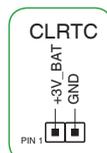
The M.2 SSD module is purchased separately.

9 Clear RTC RAM (2-pin CLRTC)

This header allows you to clear the CMOS RTC RAM data of the system setup information such as date, time, and system passwords.

To erase the RTC RAM:

1. Turn OFF the computer and unplug the power cord.
2. Use a metal object such as a screwdriver to short the two pins.
3. Plug the power cord and turn ON the computer.
4. Hold down the key during the boot process and enter BIOS setup to re-enter data.



If the steps above do not help, remove the onboard battery and short the two pins again to clear the CMOS RTC RAM data. After clearing the CMOS, reinstall the battery.

10**Chassis intrusion header (4-1 pin CHASSIS)**

This connector is for a chassis-mounted intrusion detection sensor or switch. Connect one end of the chassis intrusion sensor or switch cable to this connector. The chassis intrusion sensor or switch sends a high-level signal to this connector when a chassis component is removed or replaced. The signal is then generated as a chassis intrusion event.



The chassis intrusion detection feature is disabled by default. To enable it, set the **Chassis Intrude Detect Support** item in the BIOS to [On].

11**Serial ATA 6.0Gb/s connectors (7-pin SATA6G_1~4)**

These connectors connect to Serial ATA 6.0 Gb/s hard disk drives via Serial ATA 6.0 Gb/s signal cables.

12**System panel connector (10-1 pin F_PANEL)**

This connector supports several chassis-mounted functions.

13**Speaker connector (4-pin SPEAKER)**

This 4-pin connector is for the chassis-mounted system warning speaker. The speaker allows you to hear system beeps and warnings.

14**USB 3.0 connector (20-1 pin USB3_12)**

Connect a USB 3.0 module to this connector for additional USB 3.0 front or rear panel ports. This connector complies with USB 3.0 specifications and provides faster data transfer speeds of up to 5 Gbps, faster charging time for USB-chargeable devices, optimized power efficiency, and backward compatibility with USB 2.0.

15**USB 2.0 connectors (10-1 pin USB34, USB56)**

Connect the USB module cable to any of these connectors, then install the module to a slot opening at the back of the system chassis. These USB connectors comply with USB 2.0 specifications and support up to 480Mbps connection speed.

16**Front panel audio connector (10-1 pin AAFP)**

This connector is for a chassis-mounted front panel audio I/O module that supports either HD Audio or legacy AC'97 audio standard. Connect one end of the front panel audio I/O module cable to this connector.



-
- We recommend that you connect a high-definition front panel audio module to this connector to avail of the motherboard's high-definition audio capability.
 - If you want to connect a high-definition front panel audio module to this connector, set the **Front Panel Type** item in the BIOS setup to [HD Audio]. If you want to connect an AC'97 front panel audio module to this connector, set the item to [AC97]. By default, this connector is set to [HD Audio].
-

17

PCI slot

The PCI slot supports cards such as a LAN card, SCSI card, USB card, and other cards that comply with PCI specifications.

18

PCI Express 2.0 x1 slots

This motherboard supports PCI Express 2.0 x1 network cards, SCSI cards, and other cards that comply with the PCI Express specifications

19

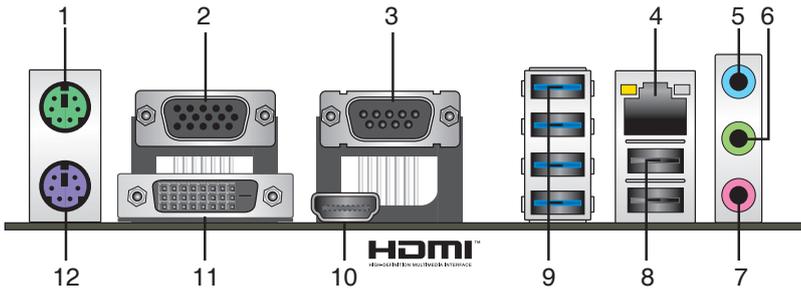
PCI Express 3.0/2.0 x16 slot

This motherboard supports PCI Express x16 network cards, SCSI cards, and other cards that comply with the PCI Express specifications.



Due to CPU limitation, PCI Express 3.0/2.0 x16 slot supported varies by processor.

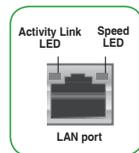
Rear panel connectors



- PS/2 Mouse port (green).** This port is for a PS/2 mouse.
- Video Graphics Adapter (VGA) port.** This 15-pin port is for a VGA monitor or other VGA-compatible devices.
- Serial port.** This 9-pin COM port is for pointing devices or other serial devices.
- LAN (RJ-45) port.** This port allows Gigabit connection to a Local Area Network (LAN) through a network hub.

LAN port LED indications

| Activity/Link LED | | Speed LED | |
|-------------------|---------------|-----------|--------------------|
| Status | Description | Status | Description |
| OFF | No link | OFF | 10Mbps connection |
| ORANGE | Linked | ORANGE | 100Mbps connection |
| BLINKING | Data activity | GREEN | 1Gbps connection |



- Line In port (light blue).** This port connects to the tape, CD, DVD player, or other audio sources.

6. **Line Out port (lime).** This port connects to a headphone or a speaker. In the 2.1, 4.1, 5.1 and 7.1-channel configurations, the function of this port becomes Front Speaker Out.
7. **Microphone port (pink).** This port connects to a microphone.



Refer to the audio configuration table for the function of the audio ports in 2.1, 4.1, 5.1, or 7.1-channel configuration.

Audio 2.1, 4.1, 5.1, or 7.1-channel configuration

| Port | Headset 2.1-channel | 4.1-channel | 5.1-channel | 7.1-channel |
|-------------------------|---------------------|-------------------|-------------------|-------------------|
| Light Blue (Rear panel) | Line In | Rear Speaker Out | Rear Speaker Out | Rear Speaker Out |
| Lime (Rear panel) | Line Out | Front Speaker Out | Front Speaker Out | Front Speaker Out |
| Pink (Rear panel) | Mic In | Mic In | Bass/Center | Bass/Center |
| Lime (Front panel) | - | - | - | Side Speaker Out |



To configure a 7.1-channel audio output:

Use a chassis with HD audio module in the front panel to support a 7.1-channel audio output.

8. **USB 2.0 ports.** These 4-pin Universal Serial Bus (USB) ports are for USB 2.0/1.1 devices.
9. **USB 3.0 ports.** These 9-pin Universal Serial Bus (USB) ports are for USB 3.0/2.0 devices.



- USB 3.0 devices can only be used as data storage only.
- Due to the design of AMD AM4 series chipset, all USB devices connected to the USB 2.0 and USB 3.0 ports are controlled by the xHCI controller.

10. **HDMI port.** This port is for a High-Definition Multimedia Interface (HDMI) connector, and is HDCP compliant allowing playback of HD DVD, Blu-Ray, and other protected content.
11. **DVI-D port.** This port is for any DVI-D compatible device.

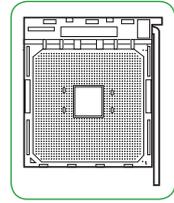


DVI-D can not be converted to output from RGB Signal to CRT and is not compatible with DVI-I.

12. **PS/2 Keyboard port (purple).** This port is for a PS/2 keyboard.

Central Processing Unit (CPU)

The motherboard comes with an AM4 socket designed for AMD Ryzen™ / 7th Generation A-series / Athlon™ processors up to 8-core.

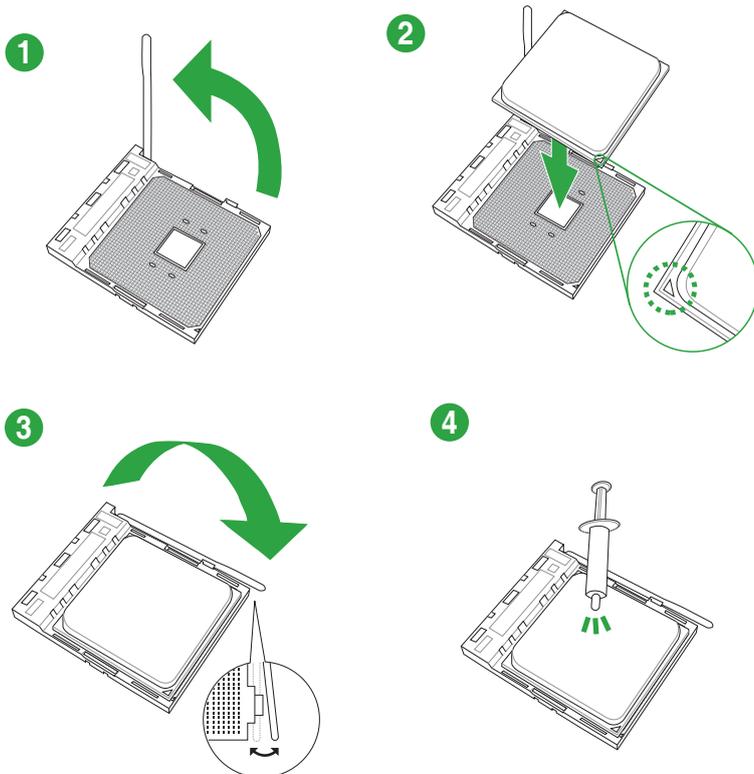


Unplug all power cables before installing the CPU.



The AM4 socket has a different pinout from the FM2+/FM2 socket. Ensure that you use a CPU designed for the AM4 socket. The CPU fits in only one correct orientation. **DO NOT** force the CPU into the socket to prevent bending the pins and damaging the CPU!

Installing the CPU



Apply the Thermal Interface Material to the CPU heatsink and CPU before you install the heatsink and fan if necessary.

System memory

Overview

This motherboard comes with two Double Data Rate 4 (DDR4) Dual Inline Memory Module (DIMM) sockets. A DDR4 module is notched differently from a DDR, DDR2, or DDR3 module. DO NOT install a DDR, DDR2, or DDR3 memory module to the DDR4 slot.



| Channel | Sockets |
|-----------|---------|
| Channel A | DIMM_A1 |
| Channel B | DIMM_B1 |

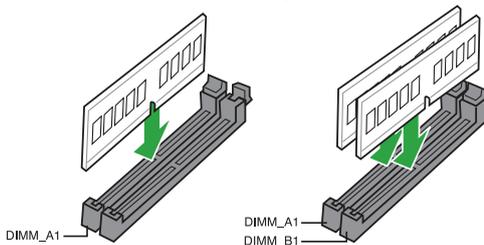


- You may install varying memory sizes in Channel A and Channel B. The system maps the total size of the lower-sized channel for the dual-channel configuration. Any excess memory from the higher-sized channel is then mapped for single-channel operation.
- Always install the DIMMS with the same CAS Latency. For an optimum compatibility, we recommend that you install memory modules of the same version or data code (D/C) from the same vendor. Check with the vendor to get the correct memory modules.
- This motherboard does not support DIMMs made up of 512Mb (64MB) chips or less.



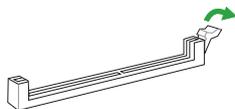
Visit the ASUS website at www.asus.com for the latest QVL.

Recommended memory configurations

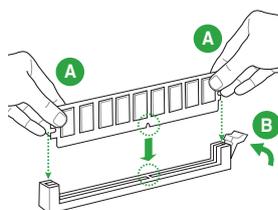


Installing a DIMM

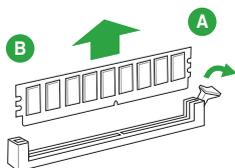
1



2



To remove a DIMM



BIOS information

2



- Scan the QR code to view the BIOS update guide.
- Before using the ASUS CrashFree BIOS 3 utility, rename the BIOS file in the removable device into **A320MCR2.CAP**.



BIOS setup program

Use the BIOS Setup program to update the BIOS or configure its parameters. The BIOS screens include navigation keys and brief online help to guide you in using the BIOS Setup program.

Entering BIOS Setup at startup

To enter BIOS Setup at startup:

Press <Delete> or <F2> during the Power-On Self Test (POST). If you do not press <Delete> or <F2>, POST continues with its routines.

Entering BIOS Setup after POST

To enter BIOS Setup after POST:

- Press <Ctrl>+<Alt>+ simultaneously.
- Press the reset button on the system chassis.
- Press the power button to turn the system off then back on. Do this option only if you failed to enter BIOS Setup using the first two options.



Using the power button, reset button, or the <Ctrl>+<Alt>+ keys to force reset from a running operating system can cause damage to your data or system. We recommend you always shut down the system properly from the operating system.



- The BIOS setup screens shown in this section are for reference purposes only, and may not exactly match what you see on your screen.
- Visit the ASUS website at www.asus.com to download the latest BIOS file for this motherboard.
- If the system becomes unstable after changing any BIOS setting, load the default settings to ensure system compatibility and stability. Select the **Load Optimized Defaults** item under the Exit menu or press hotkey F5.
- If the system fails to boot after changing any BIOS setting, try to clear the CMOS and reset the motherboard to the default value. See section **Motherboard overview** for information on how to erase the RTC RAM.

BIOS menu screen

The BIOS setup program can be used under two modes: **EZ Mode** and **Advanced Mode**. Press <F7> to change between the two modes.

EZ Mode

By default, the EZ Mode screen appears when you enter the BIOS setup program. The EZ Mode provides you an overview of the basic system information, and allows you to select the display language, system performance mode, fan profile and boot device priority. To access the Advanced Mode, click **Advanced Mode(F7)** or press <F7>.



The default screen for entering the BIOS setup program can be changed.

Displays the CPU/motherboard temperature, CPU voltage output, CPU/chassis fan speed, and SATA information

Selects the display language of the BIOS setup program

ASUS UEFI BIOS Utility - EZ Mode

04/10/2017 Monday 18:06 English

Information
PRIME A320M-C R2.0 BIOS Ver. 0219
AMD A12-9800E RADEON R7, 12 COMPUTE CORES 4C+8G
Speed: 3100 MHz
Memory: 8192 MB (DDR4 2133MHz)

DRAM Status
DIMM_A1: N/A
DIMM_B1: Kingston 8192MB 2133MHz

D.O.C.P.
Disabled Disabled

FAN Profile
CPU FAN 917 RPM
CHA2 FAN N/A

Information
CPU Temperature 46°C
Motherboard Temperature 30°C

VDD/CR CPU Voltage
1.231 V

SATA Information
SATABG_1: N/A
SATABG_2: N/A
SATABG_3: N/A
SATABG_4: N/A
M.2: N/A

EZ System Tuning
Click the icon below to apply a pre-configured profile for improved system performance or energy savings.
Quiet
Performance
Energy Saving
Normal

Boot Priority
Choose one and drag the items. Switch all
UEFI: KingstonDataTraveler 3.0PMAP, Partition 1 (3000MB)
KingstonDataTraveler 3.0PMAP (3000MB)

QFan Control

Default(F5) Save & Exit(F10) Advanced Mode(F7) Search on FAQ

Displays the CPU Fan's speed. Click the button to manually tune the fans

Loads optimized default settings

Saves the changes and resets the system

Shows the bootable devices

Displays the Advanced mode menus

Search on FAQs

Selects the boot device priority



The boot device options vary depending on the devices you installed to the system.

Advanced Mode

The Advanced Mode provides advanced options for experienced end-users to configure the BIOS settings. The figure below shows an example of the **Advanced Mode**. Refer to the following sections for the detailed configurations.



To access the EZ Mode, click **EzMode(F7)** or press <F7>.

The screenshot shows the ASUS UEFI BIOS Utility in Advanced Mode. The interface includes a menu bar at the top with options like My Favorites, Main, AI Tweaker, Advanced, Monitor, Boot, Tool, and Exit. A left sidebar lists configuration categories such as HD Audio Controller, Front Panel Type, and Realtek LAN Controller. The main area displays settings for 'Charging USB devices in Power State S5', with a dropdown menu set to 'Disabled'. A 'Hardware Monitor' panel on the right shows CPU and memory statistics. A bottom status bar contains 'Last Modified', 'EzMode(F7)', and 'Search on FAQ'.

Labels pointing to specific features in the screenshot include:

- Language**: Points to the language selection icon.
- MyFavorite**: Points to the MyFavorite(F3) icon.
- Q-Fan control**: Points to the Q Fan Control(F6) icon.
- Hot Keys**: Points to the Hot Keys icon.
- Menu bar**: Points to the top navigation tabs.
- Sub-menu item**: Points to 'Advanced/Onboard Devices Configuration' in the sidebar.
- Menu items**: Points to the list of configuration options in the sidebar.
- General help**: Points to the information icon in the popup window.
- Configuration fields**: Points to the 'Enabled' dropdown menu.
- Popup window**: Points to the information box at the bottom left.
- Last modified settings**: Points to the 'Last Modified' text in the status bar.
- Goes back to EZ Mode**: Points to the 'EzMode(F7)' button.
- Search on FAQs**: Points to the 'Search on FAQ' button.
- Displays the CPU temperature, CPU and memory voltage output**: Points to the 'Hardware Monitor' panel.

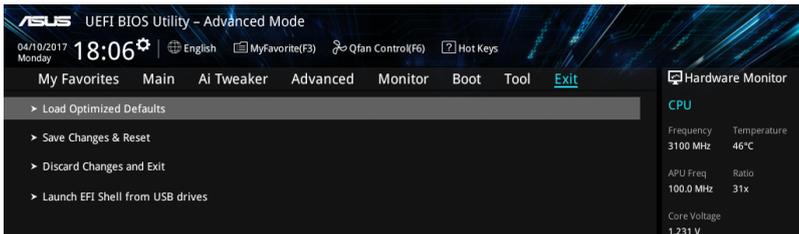
Search on FAQ

Move your mouse over this button to show a QR code. Scan this QR code with your mobile device to connect to the ASUS BIOS FAQ web page. You can also scan the QR code below.



Exit menu

The Exit menu items allow you to load the optimal default values for the BIOS items, and save or discard your changes to the BIOS items.



Load Optimized Defaults

This option allows you to load the default values for each of the parameters on the Setup menus. When you select this option or if you press <F5>, a confirmation window appears. Select OK to load the default values.

Save Changes & Reset

Once you are finished making your selections, choose this option from the Exit menu to ensure the values you selected are saved. When you select this option or if you press <F10>, a confirmation window appears. Select OK to save changes and exit.

Discard Changes and Exit

This option allows you to exit the Setup program without saving your changes. When you select this option or if you press <Esc>, a confirmation window appears. Select OK to discard changes and exit.

Launch EFI Shell from USB drives

This option allows you to attempt to launch the EFI Shell application (shellx64.efi) from one of the available USB devices.

Appendix

Notices

Federal Communications Commission Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with manufacturer's instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



The use of shielded cables for connection of the monitor to the graphics card is required to assure compliance with FCC regulations. Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Compliance Statement of Innovation, Science and Economic Development Canada (ISED)

This Class B digital apparatus complies with Canadian ICES-003, RSS-210, and CAN ICES-3(B)/NMB-3(B).

This device complies with Industry Canada license exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Déclaration de conformité de Innovation, Sciences et Développement économique Canada (ISED)

Cet appareil numérique de classe B est conforme aux normes canadiennes ICES-003, RSS-210 et CAN ICES-3(B)/NMB-3(B).

Cet appareil est conforme aux normes CNR exemptes de licence d'Industrie Canada. Le fonctionnement est soumis aux deux conditions suivantes : (1) cet appareil ne doit pas provoquer d'interférences et (2) cet appareil doit accepter toute interférence, y compris celles susceptibles de provoquer un fonctionnement non souhaité de l'appareil.

VCCI: Japan Compliance Statement

Class B ITE

この装置は、クラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをして下さい。

V C C I - B

KC: Korea Warning Statement

B급 기기 (가정용 방송통신기자재)

이 기기는 가정용(B급) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다.

REACH

Complying with the REACH (Registration, Evaluation, Authorisation, and Restriction of Chemicals) regulatory framework, we published the chemical substances in our products at ASUS REACH website at <http://csr.asus.com/english/REACH.htm>.



DO NOT throw the motherboard in municipal waste. This product has been designed to enable proper reuse of parts and recycling. This symbol of the crossed out wheeled bin indicates that the product (electrical and electronic equipment) should not be placed in municipal waste. Check local regulations for disposal of electronic products.



DO NOT throw the mercury-containing button cell battery in municipal waste. This symbol of the crossed out wheeled bin indicates that the battery should not be placed in municipal waste.

ASUS Recycling/Takeback Services

ASUS recycling and takeback programs come from our commitment to the highest standards for protecting our environment. We believe in providing solutions for you to be able to responsibly recycle our products, batteries, other components as well as the packaging materials. Please go to <http://csr.asus.com/english/Takeback.htm> for detailed recycling information in different regions.

Regional notice for California



WARNING

Cancer and Reproductive Harm -
www.P65Warnings.ca.gov

English ASUSTeK Computer Inc. hereby declares that this device is in compliance with the essential requirements and other relevant provisions of related Directives. Full text of EU declaration of conformity is available at: www.asus.com/support

Français ASUSTeK Computer Inc. déclare par la présente que cet appareil est conforme aux critères essentiels et autres clauses pertinentes des directives concernées. La déclaration de conformité de l'UE peut être téléchargée à partir du site Internet suivant : www.asus.com/support

Deutsch ASUSTeK Computer Inc. erklärt hiermit, dass dieses Gerät mit den wesentlichen Anforderungen und anderen relevanten Bestimmungen der zugehörigen Richtlinien übereinstimmt. Der gesamte Text der EU-Konformitätserklärung ist verfügbar unter: www.asus.com/support

Italiano ASUSTeK Computer Inc. con la presente dichiara che questo dispositivo è conforme ai requisiti essenziali e alle altre disposizioni pertinenti con le direttive correlate. Il testo completo della dichiarazione di conformità UE è disponibile all'indirizzo: www.asus.com/support

Русский Компания ASUS заявляет, что это устройство соответствует основным требованиям и другим соответствующим условиям соответствующих директив. Подробную информацию, пожалуйста, смотрите на www.asus.com/support

Български С настоящото ASUSTeK Computer Inc. декларира, че това устройство е в съответствие със съществени изисквания и другите приложими постановления на свързаните директиви. Пълният текст на декларацията за съответствие на ЕС е достъпна на адрес: www.asus.com/support

Hrvatski ASUSTeK Computer Inc. ovim izjavljuje da je ovaj uređaj skladan s bitnim zahtjevima i ostalim odgovarajućim odredbama vezanih direktiva. Cijeli tekst EU izjave o skladnosti dostupan je na: www.asus.com/support

Čeština Společnost ASUSTeK Computer Inc. tímto prohlašuje, že toto zařízení splňuje základní požadavky a další příslušná ustanovení souvisejících směrnic. Plné znění prohlášení o shodě EU je k dispozici na adrese: www.asus.com/support

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Eesti Käesolevaga kinnitab ASUSTeK Computer Inc, et see seade vastab asjakohaste direktiivide olulistele nõuetele ja teisteles asjassepuutuvatele sätetele. EL vastavusdeklaratsiooni täielik tekst on saadaval järgmisel aadressil: www.asus.com/support

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Magyar Az ASUSTeK Computer Inc. ezennel kijelenti, hogy ez az eszköz megfelel a kapcsolódó irányelvek lényeges követelményeinek és egyéb vonatkozó rendelkezéseinek. Az EU megfeleléségi nyilatkozat teljes szövege innen letölthető: www.asus.com/support

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Polski Firma ASUSTeK Computer Inc. niniejszym oświadcza, że urządzenie to jest zgodne z zasadniczymi wymogami i innymi właściwymi postanowieniami powiązanych dyrektyw. Pełny tekst deklaracji zgodności UE jest dostępny pod adresem: www.asus.com/support

Portugués A ASUSTeK Computer Inc. declara que este dispositivo está em conformidade com os requisitos essenciais e outras disposições relevantes das Diretivas relacionadas. Texto integral da declaração da UE disponível em: www.asus.com/support

Română ASUSTeK Computer Inc. declară că acest dispozitiv se conformează cerințelor esențiale și altor prevederi relevante ale directivelor conexe. Textul complet al declarației de conformitate a Uniunii Europene se găsește la: www.asus.com/support

Srpski ASUSTeK Computer Inc. ovim izjavljuje da je ovaj uređaj u saglasnosti sa osnovnim zahtevima i drugim relevantnim odredbama povezanih Direktiva. Pun tekst EU deklaracije o usaglasnosti je dostupan da adresi: www.asus.com/support

Slovensky Spoločnosť ASUSTeK Computer Inc. týmto vyhlasuje, že toto zariadenie vyhovuje základným požiadavkám a ostatým príslušným ustanoveniam príslušných smerníc. Celý text vyhlásenia o zhode pre štáty EÚ je dostupný na adrese: www.asus.com/support

Slovenščina ASUSTeK Computer Inc. izjavlja, da je ta naprava skladna z bistvenimi zahtevami in drugimi ustreznimi določbami povezanih direktiv. Celotno besedilo EU-izjave o skladnosti je na spletnem mestu: www.asus.com/support

Español Por la presente, ASUSTeK Computer Inc. declara que este dispositivo cumple los requisitos básicos y otras disposiciones pertinentes de las directivas relacionadas. El texto completo de la declaración de la UE de conformidad está disponible en: www.asus.com/support

Svenska ASUSTeK Computer Inc. förklarar härmed att denna enhet överensstämmer med de grundläggande kraven och andra relevanta föreskrifter i relaterade direktiv. Fulltext av EU-försäkran om överensstämmelse finns på: www.asus.com/support

Українська ASUSTeK Computer Inc. заявляє, що цей пристрій відповідає основним вимогам та іншим відповідним положенням відповідних Директив. Повний текст декларації відповідності стандартам ЄС доступний на: www.asus.com/support

Türkçe ASUSTeK Computer Inc., bu aygıtın temel gereksinimlerle ve ilişkin Yönergelelerin diğer ilgili koşullarına uyumlu olduğunu beyan eder. AB uygunluk bildirimini tam metni şu adreste bulabilirsiniz: www.asus.com/support

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DECLARATION OF CONFORMITY

Per FCC Part 2 Section 2. 1077(a)



Responsible Party Name: **Asus Computer International**

Address: **800 Corporate Way, Fremont, CA 94539.**

Phone/Fax No: **(510)739-3777/(510)608-4555**

hereby declares that the product

Product Name : Motherboard

Model Number : PRIME A320M-C R2.0

Conforms to the following specifications:

FCC Part 15, Subpart B, Unintentional Radiators

Supplementary Information:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Representative Person's Name : Steve Chang / President

A handwritten signature in blue ink that reads "Steve Chang". The signature is written in a cursive style and is placed over a light blue rectangular background.

Signature :

Date : Apr. 12, 2017

Ver. 140331