

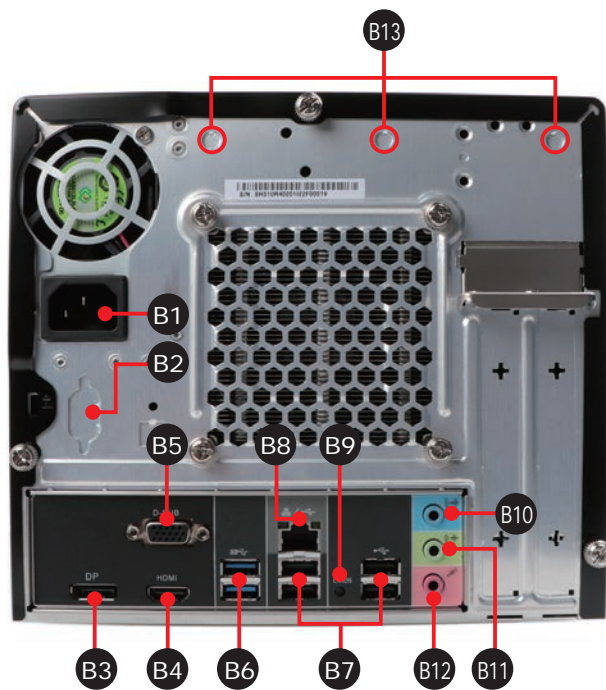
SH310R4 Quick Guide 【English】

Front Panel



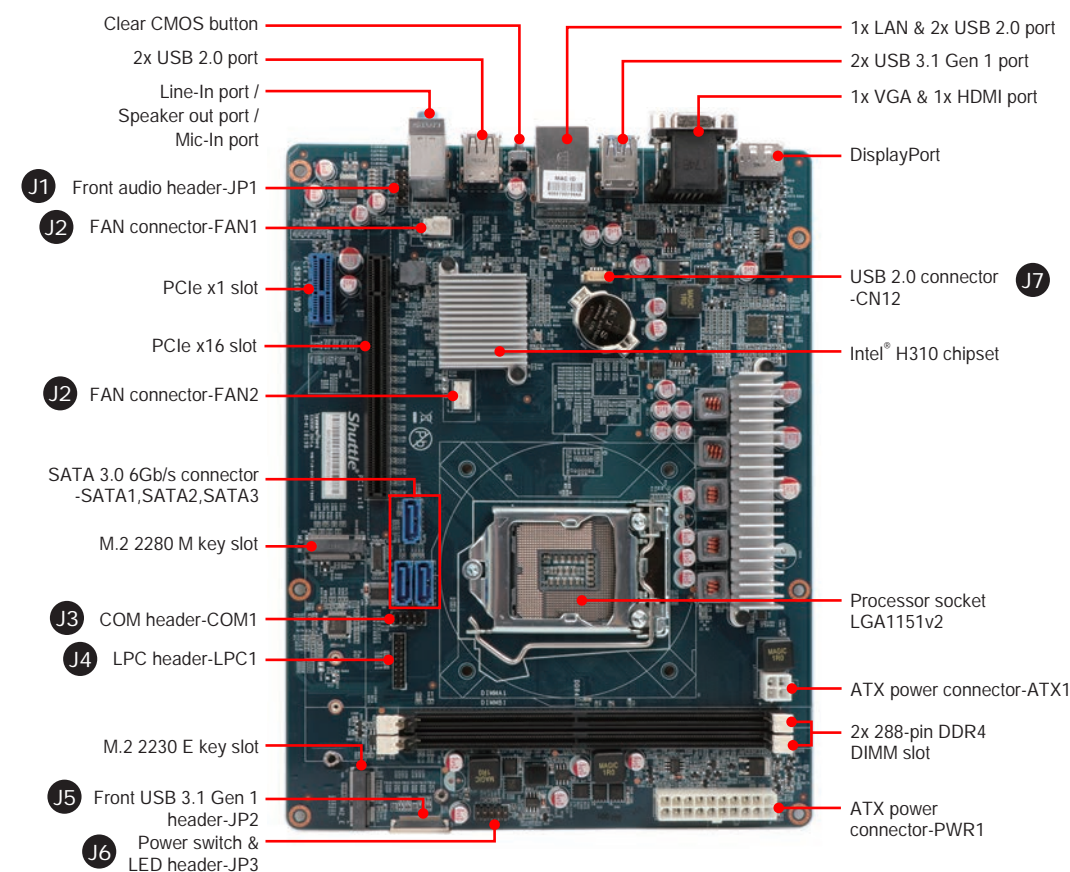
- F1. HDD LED
- F2. Power button / Power LED
- F3. 5.25" Bay
- F4. USB 3.1 Gen 1 ports
- F5. Mic-In
- F6. Headphones

Back Panel



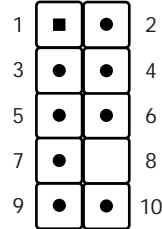
- B1. AC power socket
- B2. Serial port (optional)
- B3. DisplayPort
- B4. HDMI port
- B5. VGA port
- B6. USB 3.1 Gen 1 ports
- B7. USB 2.0 ports
- B8. LAN port
- B9. Clear CMOS button
- B10. Line-In port
- B11. Speaker out port
- B12. Mic-In port
- B13. Wireless LAN perforation (optional)

Motherboard Illustration



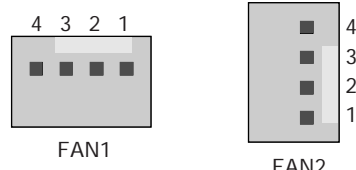
J1 Front audio header (JP1)

- | | |
|-----------|----------------|
| 1=MIC_L | 2=AGND |
| 3=MIC_R | 4=Front_Detect |
| 5=HP_R | 6=Mic_detect |
| 7=Sense_B | 8=NULL |
| 9=HP_L | 10=HP_Detect |



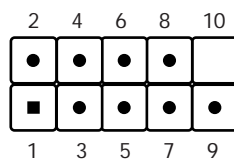
J2 Fan connectors (FAN1, FAN2)

- | |
|---------------|
| 1=GND |
| 2=+12V |
| 3=SPEED_SENSE |
| 4=PWM_CTRL |



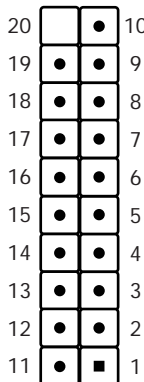
J3 COM header (COM1)

- | | |
|--------|---------|
| 1=DCD | 2=RXD |
| 3=TXD | 4=DTR |
| 5=GND | 6=DSR |
| 7=RTS | 8=CTS |
| 9=XRI1 | 10=NULL |



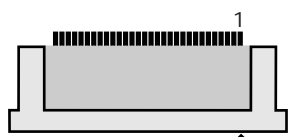
J4 LPC header (LPC1)

- | | |
|-------------|------------|
| 1=+12V | 2=VCC |
| 3=5V_DUAL | 4=SERIRQ |
| 5=LPC24M_1 | 6=LPC24M_2 |
| 7=SIORST- | 8=LFRAME- |
| 9=LAD3 | 10=LAD2 |
| 11=-12V | 12=3VSB |
| 13=NA | 14=LDRQ0- |
| 15=PCH_PME- | 16=LAD1 |
| 17=LAD0 | 18=VCC3 |
| 19=GND | 20=NULL |



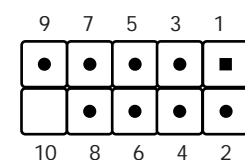
J5 Front USB 3.1 Gen 1 header (JP2)

- | | |
|----------------|----------------|
| 1=USB30_PWR2 | 2=USB30_PWR2 |
| 3=USB30_PWR2 | 4=USB30_PWR2 |
| 5=USB3_1_RX_N | 6=USB3_1_RX_P |
| 7=GND | 8=GND |
| 9=USB3_1_TX_N | 10=USB3_1_TX_P |
| 11=GND | 12=GND |
| 13=USB2_1_N | 14=USB2_1_P |
| 15=USB30_PWR2 | 16=USB30_PWR2 |
| 17=USB30_PWR2 | 18=USB30_PWR2 |
| 19=USB3_2_RX_N | 20=USB3_2_RX_P |
| 21=GND | 22=GND |
| 23=USB3_2_TX_N | 24=USB3_2_TX_P |
| 25=GND | 26=GND |
| 27=USB2_2_N | 28=USB2_2_P |
| 29=GND | 30=GND |



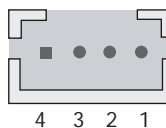
J6 Power switch & LED header (JP3)

- | | |
|-----------|-----------|
| 1=+HD_LED | 2=PWR_LED |
| 3=-HD_LED | 4=GND |
| 5=RST_SW- | 6=PWR_SW- |
| 7=GND | 8=GND |
| 9=NA | 10=NULL |



J7 USB 2.0 connector (CN12)

- | |
|-----------|
| 1=GND |
| 2=USB2P |
| 3=USB2N |
| 4=5V_DUAL |



Safety Information

Read the following precautions before setting up a Shuttle XPC.

CAUTION

Incorrectly replacing the battery may damage this computer. Replace only with the same or equivalent as recommended by Shuttle. Disposal of used batteries according to the manufacturer's instructions.

Laser compliance statement

The optical disc drive in this PC is a laser product. The drive's classification label is located on the drive.

CLASS 1 LASER PRODUCT

CAUTION: INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.

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.

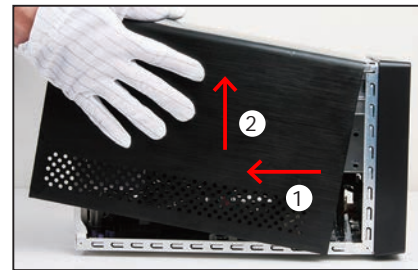


62RQSH3100-5201 SH310R4
English, Spanish, Russian,
Traditional Chinese, Japanese,
French, German Quick Guide

A. Begin Installation

For safety reasons, please ensure that the power cord is disconnected before opening the case.

- Unscrew 3 thumbscrews of the chassis cover.
- Slide the cover backwards and upwards.

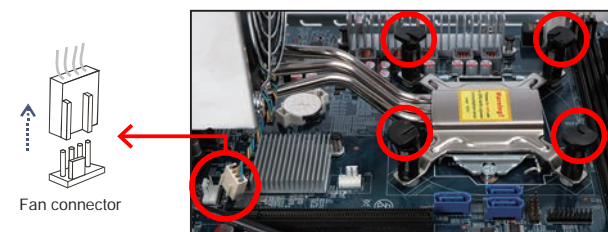


- Unfasten the rack mount screws and remove the rack.



B. CPU and ICE Installation

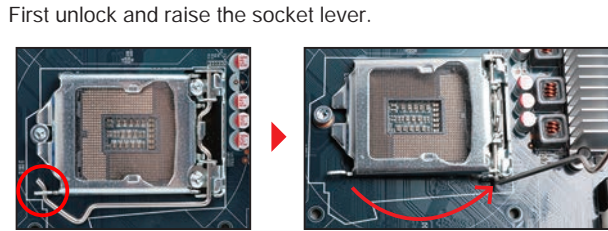
- Unfasten the ICE fan thumbscrews on the back of the chassis.
- Unfasten the four ICE module attachment screws and unplug the fan connector.



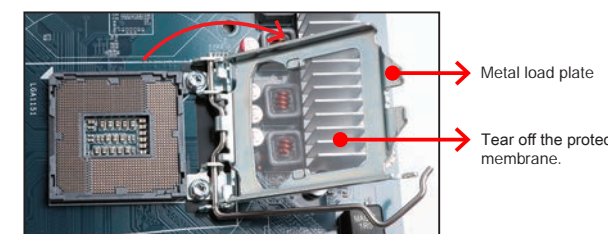
- Remove the ICE module from the chassis and put it aside.

This 1151-pin socket is easily damaged and pins bend quickly. Always use extreme care when installing a CPU and limit the number of times that you remove or change the CPU. Before installing the CPU, make sure to turn off the computer and unplug the power cord from the power outlet to prevent damage of the CPU.

- Follow the steps below to correctly install the CPU into the motherboard CPU socket.

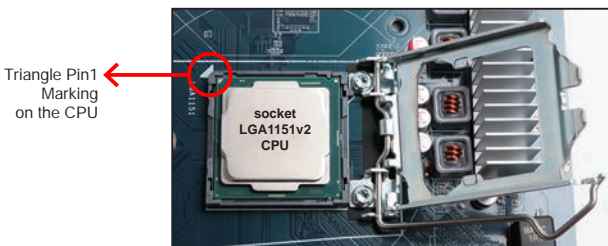


- Tear off the protective membrane from the metal load plate. Lift the metal load plate off the CPU socket.



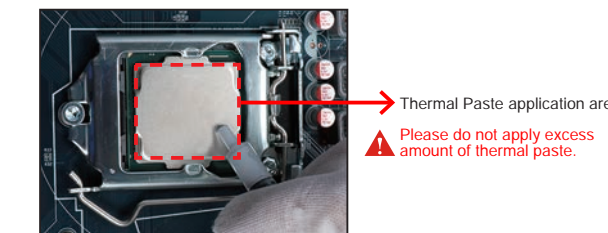
DO NOT touch socket contacts. To protect the CPU socket, always replace the protective socket cover when the CPU is not installed.

- Please orientate the CPU correctly and align the CPU notches with the socket alignment keys. Make sure the CPU sits perfectly horizontal, then push it gently into the socket.



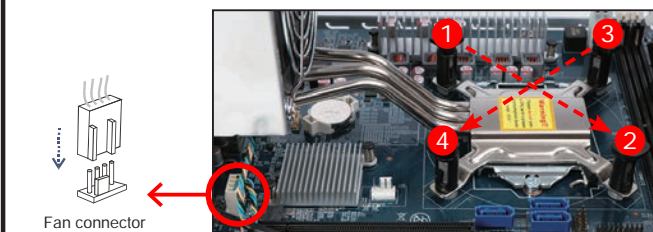
Please be aware of the CPU orientation, DO NOT force the CPU into the socket to avoid bending of pins and damage of CPU!

- Close the metal load plate, lower the CPU socket lever and lock in place.
- Spread thermal paste evenly on the CPU surface.

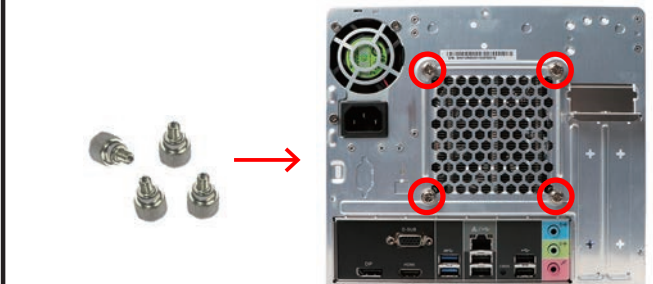


- Screw the ICE module to the mainboard. Note to press down on the opposite diagonal corner while tightening each screw.

- Connect the fan connector.



- Fasten the Smart Fan to the chassis with the four thumbscrews.



C. Memory Module Installation

Guidelines for Memory Configuration

Before installing DIMMs, read and follow these guidelines for memory configuration.

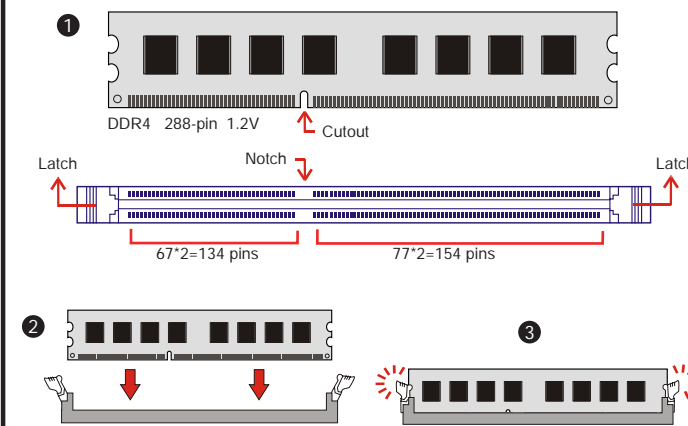
Make sure that the motherboard supports the memory. It is recommended that memory of the same capacity, brand, speed, and chips are used. (Go to Shuttle's website for the latest memory support list.) Memory modules have a foolproof design. A memory module can be installed in only one direction. If you are unable to insert the memory, switch direction.

Installing memory modules

DDR4 and DDR3/DDR2 DIMMs are not compatible to each other or other DDR DIMMs. Be sure to install DDR4 DIMMs on this motherboard only. Follow the steps below to correctly install your memory modules in the memory sockets.

- Unlock the DIMM latch.
- Align the memory module's cutout with the DIMM slot notch. Slide the memory module into the DIMM slot.

A DDR4 memory module has a cutout, so it only fits in one direction.



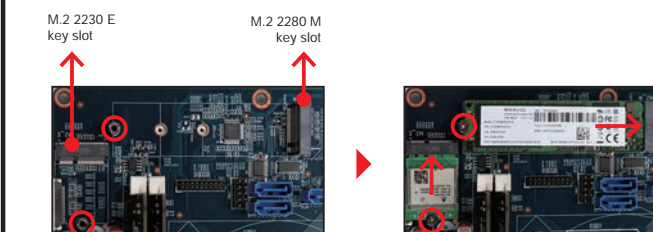
- Check if the latches are closed and if all memory modules are firmly installed.



Repeat the above steps to install additional memory modules, if required.

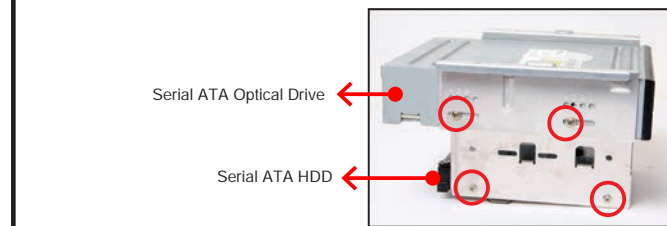
D. Component Installation

- Please proceed as shown in the illustration, and locate the M.2 key slot on the mainboard.
- Install the M.2 device into the M.2 slot and secure with a screw.

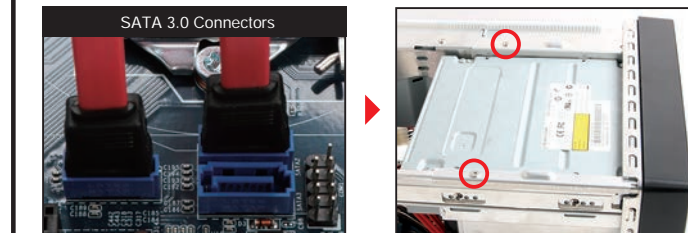


E. Installation of Drives

- Loosen the purse lock and separate the Serial ATA and power cables.
- Place the HDD and optical drive in the rack and secure with screws from the side.



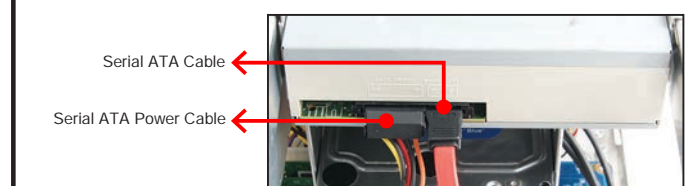
- Connect the Serial ATA Cable to the motherboard.
- Place the rack in the chassis and refasten the rack.



- Connect the Serial ATA and power cables to the HDD.



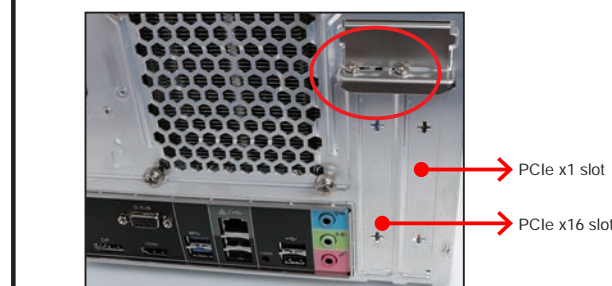
- Connect the Serial ATA and power cables to the optical drive.



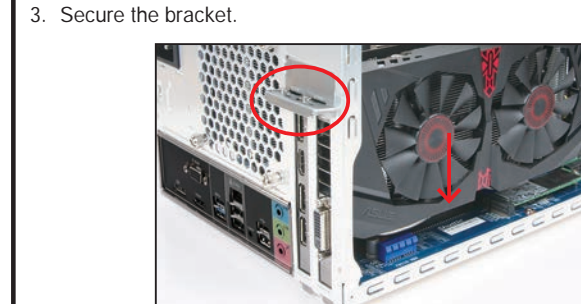
F. Installation of Expansion Cards

- Unfasten the expansion slot bracket screws. Remove the back panel bracket and put it aside.

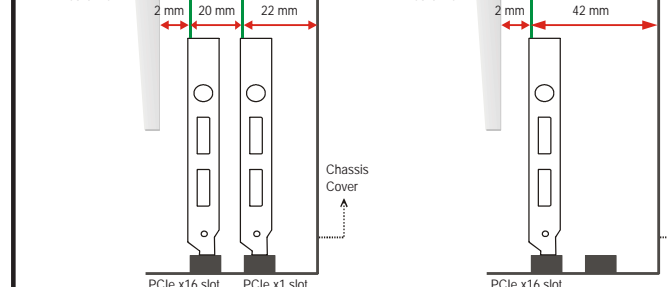
The maximum size acceptable for display cards is 273 mm x 98 mm x 38 mm.



- Install the PCIe x1 / PCIe x16 card into the PCIe x1 / PCIe x16 slots.



- Secure the bracket.



G. Complete

- Replace the cover and refasten the thumbscrews.



- Complete.

Please press the "Del" key while booting to enter BIOS. Here, please load the optimised BIOS settings.