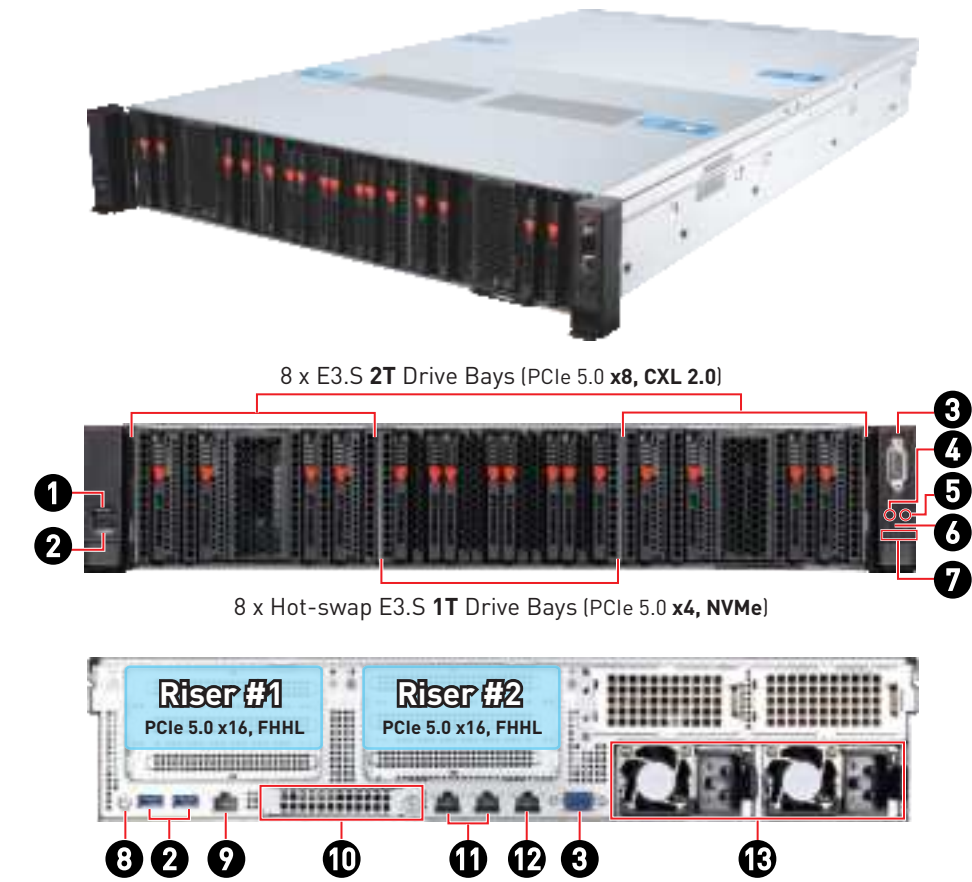


S2301 Server System

QUICK START GUIDE



1	USB 2.0 Type-A Port	8	UID LED Button (default)/ BMC Reset Button*
2	USB 3.2 Gen 1 Type-A Ports	9	COM RJ45 Port
3	VGA D-Sub Port	10	OCP 3.0 Mezzanine Card Slot
4	⏻ System Power Button/ LED	11	1000Base-T Ethernet Ports
5	Ⓜ UID Button/ LED	12	1000Base-T Dedicated Server Mgmt. Port
6	↺ System Reset Button	13	Power Supply Units
7	⚠ System Alarm LED 🔌 LAN1, LAN2 Activity LEDs 💡 HDD Activity LED	Note: * The UID LED button can also function as a BMC reset button, configured using jumper JUID_SEL1 .	

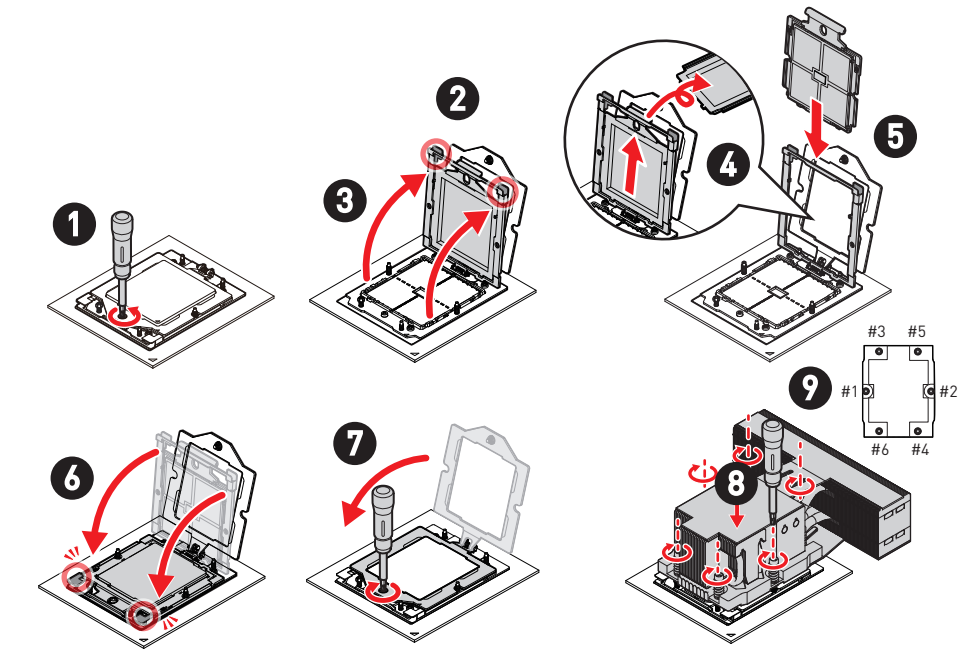
Front Panel FPC Connector

JFP1			
1	P3V3_AUX	2	P3V3_AUX
3	NA	4	UID_LED+
5	FP_PWR_LED-	6	FP_ID_LED_B_R-
7	P3V3	8	SYS_FLT_LED#-
9	SYS_ERR_LED#-	10	LED_HDD_ACT_LED-
11	FP_PWR_BTN-	12	NIC1_LED+
13	GND	14	NIC1_LED-
15	SYS_RST_BTN	16	BMC_SMB_FP_DAT
17	BMC_SMB_FP_CLK	18	GND
19	FP_ID_BTN-	20	NA
21	NA	22	NA
23	NIC2_LED+	24	NIC2_LED-
25	GND	26	GND

CPU

Dual AMD EPYC™ 9004 and 9005 series processors, TDP up to 500W.

CPU & Heatsink Installation



Connectors, Jumpers and LED Indicators

Name	Description
PSU_PWR1~2	CRPS power connectors
GPU_PWR1~2	8-pin GPU power connectors
HDD_PWR1~3	8-pin HDD BP power connectors
RISER_PWR1~2	4-pin PCIe riser power connector
JMCIO1~8	MCIO 8i connectors (for HDD BP MS-S362M)
JMCIO11~14	MCIO 8i connectors (for HDD BP MS-S362N)
JMCIO_SLOT1-1~2	MCIO 8i connectors (for PCIe riser cable)
Riser Cable Slot #1	PCIe 5.0 x 16 slot (from CPU0)
Riser Cable Slot #2	PCIe 5.0 x 16 slot (from CPU1)
OCP1	OCP 3.0 LAN mezzanine slot (supports OCP NIC 3.0 SFF, PCIe 5.0 x16 from CPU0)
M2_1~2	M.2 slots (M Key, PCIe 3.0 x2, 2280)
MSD1	Micro SD card slot
CPU_FAN1~2	4-pin CPU fan connectors
F2U-1~6	10-pin 2U system fan connectors
JUSB1	USB 3.2 Gen 1 Type-A port
JUSB2	USB 3.2 Gen 1/ USB 2.0 FPC connector (for front USB, USB 3.2 Gen 1 Type-A + USB 2.0 Type-A)
JFP1	Front panel FPC connector
JFP_VGA1	Front VGA header
JTPM1	SPI TPM header
FBP_I2C_1~3	I2C headers
JIPMB1	IPMB header
JCHASSIS1	Chassis intrusion header
JSPI_MUX1	BIOS select jumper (default pin 1-2, SYS BIOS ROM & control by BMC)
JSEL_BMC1	BMC select jumper (default pin 1-2, BMC1)
JRTC_CLR1	CMOS clear jumper (default pin 1-2, normal)
JUID_SEL1	UID/ BMC select jumper (default pin 1-2, UID button)

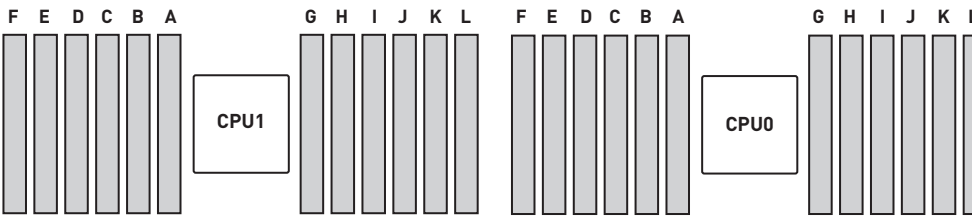
Name	Description
JCXL_NVME_SW1	HDD BP CXL/ NVMe select jumper (default pin 1-2, 8 x CXL, 8 x NVMe)
SEG_LED1~4	Port 80 debug LEDs
BMC_HB_LED	BMC heartbeat LED

Memory

The system is equipped with 24 DDR5 DIMM slots, supporting both **RDIMMs** and **3DS-RDIMMs**. Each DIMM has a maximum capacity of **256GB**.

Max Frequency

- AMD EPYC™ 9004: 4800 MT/s (1DPC)
- AMD EPYC™ 9005: 6000 MT/s (1DPC)



1 CPU													
Channel		F	E	D	C	B	A	C P U					
Qty. of DDR5	12	V	V	V	V	V	V	V	V	V	V	V	V
	10		V	V	V	V	V	V	V	V	V		
	8		V		V	V	V	V	V	V			
	6				V	V	V	V	V	V			
	4				V		V	V	V	V			
	2						V	V	V	V			
Qty. of DDR5	1						V	V	V	V			
2 CPUs													
Channel		F	E	D	C	B	A	C P U					
24	CPU1	V	V	V	V	V	V	V	V	V	V	V	V
	CPU0	V	V	V	V	V	V	V	V	V	V	V	V
20	CPU1		V	V	V	V	V	V	V	V	V		
	CPU0		V	V	V	V	V	V	V	V	V		
16	CPU1		V		V	V	V	V	V	V		V	
	CPU0		V		V	V	V	V	V	V		V	
12	CPU1				V	V	V	V	V	V			
	CPU0				V	V	V	V	V	V			
8	CPU1				V		V	V	V	V			
	CPU0				V		V	V	V	V			
4	CPU1						V	V	V	V			
	CPU0						V	V	V	V			
2	CPU1						V	V	V	V			
	CPU0						V	V	V	V			
1	CPU1							V	V	V			
	CPU0						V	V	V	V			

"V" indicates DIMMs are populated with **DDR5**.



There should be at least one DDR5 DIMM populated.