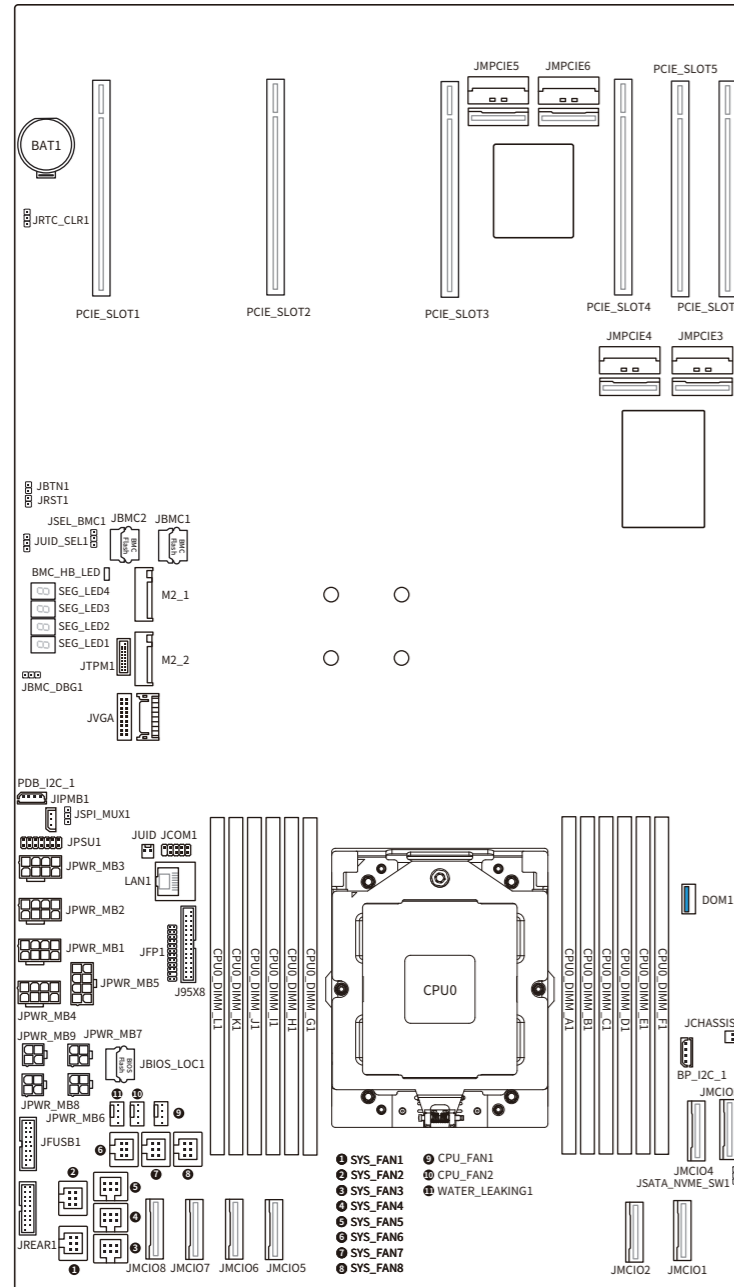


# G4101

## QUICK START GUIDE



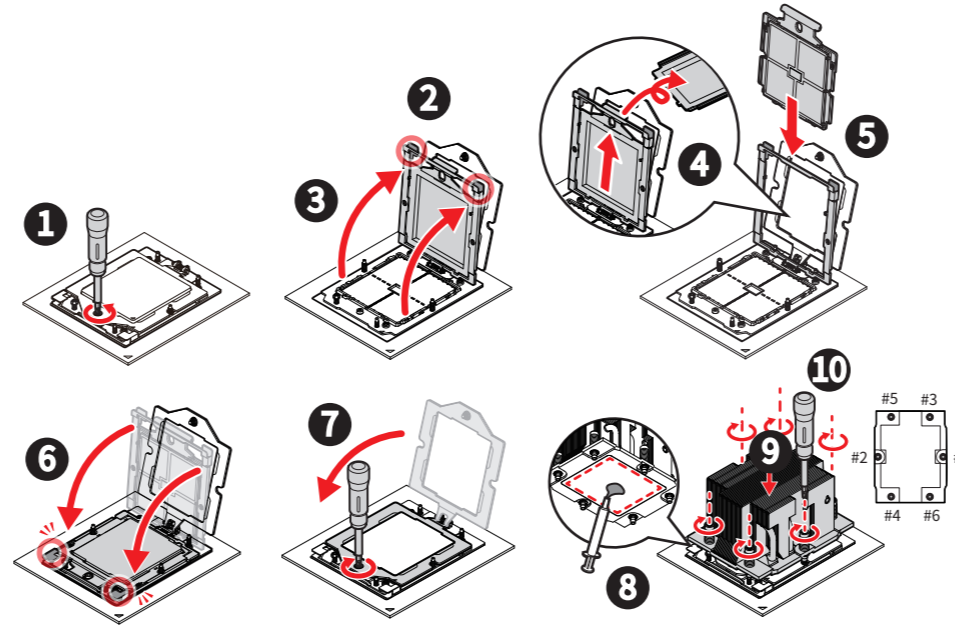
### CPU

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

### Front Panel Header

JFP1			
Pin	Signal	Pin	Signal
1	VDD_33_DUAL	2	P3V3_AUX
2		3	N/A
3		4	P3V3_AUX
5	FP_PWR_LED_B_R_N	6	FP_ID_LED_B_R_N
7	VDD_33_RUN	8	SYS_ERR_LED#_N
9	FP_HDD_ACT_LED_N	10	SYS_FLT_LED#_N
11	FP_PWR_BTN_L_R	12	VDD_33_DUAL
13	GND	14	LAN_NIC_0_ACT_N_R
15	FP_RST_BTN_L_R	16	SMB_BMC_HSBP_STBY_LVC3_SDA
17	GND	18	SMB_BMC_HSBP_STBY_LVC3_SCL
19	FP_ID_BTN_N_R	20	FP_CHASSIS_INTRUSION (TP)
21	GND	22	VDD_33_DUAL
23	NMI_BTN_N_R	24	LAN_NIC_1_ACT_N_R

## CPU and Heatsink Installation



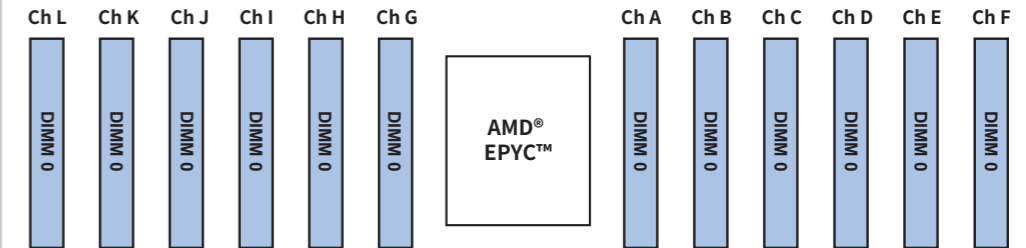
## Connectors, Jumpers and LED Indicators

Name	Description
JPWR_MB1~4	8-pin 12V power connectors (for MB PWR)
JPWR_MB5	8-pin 12V power connector (for BP PWR)
JPWR_MB6, JPWR_MB8	4-pin 5V power connectors
JPWR_MB7, JPWR_MB9	4-pin 3V power connectors
JPWR_HDD1	8-pin HDD/SATA power connector (on PDB)
JMCIO1~8	MCIO 8i connectors
M2_1	M.2 slot (M Key, PCIe 3.0 x4, 22110/ 2280)
M2_2	M.2 slot (M Key, PCIe 3.0 x2, 22110/ 2280)
PCIE_SLOT1~4	PCIe 5.0 x 16 FHFL slots
PCIE_SLOT5~6	PCIe 4.0 x 16 FHFL slots (x8 signal)
SYS_FAN1~8	System/CPU fan connectors
CPU_FAN1~2	CPU pump connectors
WATER_LEAKING1	CPU pump water leak detection connector
DOM1	USB 3.2 Gen 1 Type-A port
JREAR1, JFUSB1	USB 3.2 Gen 1 headers
JVGA	Front VGA header
LAN1	1000Base-T dedicated server management port
JFP1	Front panel connector
JTPM1	SPI TPM header
J95X8	95X8 I/O board header
JIPMB1	IPMB header
JPSU1	PDB header
BP_I2C_1, PDB_I2C_1	I2C headers
JCOM1	COM header
JBTN1	Power button header
JRST1	Reset button header
JUID	UID button header
JCHASSIS1	Chassis intrusion header
JRTC_CLR1	CMOS clear jumper (default pin 1-2, normal)
JUID_SEL1	UID/ BMC select jumper (default pin 1-2, UID button)

Name	Description
JSEL_BMC1	BMC select jumper (default pin 2-3, BMC1)
JSPI_MUX1	BIOS select jumper (default pin 1-2, BIOS control by BMC SEL)
JSATA_NVME_SW1	JMCIO1~2 SATA/ NVMe signal select jumper (default pin 2-3, NVMe)
BMC_HB_LED	BMC heartbeat LED
SEG_LED1~4	Port 80 debug LEDs

## Memory

The server board supports DDR5 RDIMMs and 3DS RDIMMs with memory speeds up to 6400 MT/s (1DPC).



Channel	CPU						MEM					
	L	K	J	I	H	G	A	B	C	D	E	F
Qty. of DDR5	V	V	V	V	V	V	V	V	V	V	V	V
12	V	V	V	V	V	V	V	V	V	V	V	V
10		V	V	V	V	V	V	V	V	V	V	V
8		V		V	V	V	V	V	V	V	V	V
6				V	V	V	V	V	V	V	V	V
4				V		V	V	V	V	V	V	V
2						V	V	V	V	V	V	V
1							V	V	V	V	V	V

"V" indicates DIMMs are populated with DDR5.

## Key Parameters for DIMM Configuration

Parameter	Possible Values
# of DIMMs Populated Per Channel	1DPC (1 DIMM per channel)
DIMM Type	RDIMM, 3DS RDIMM
DIMM Construction	RDIMM
	1R (1 rank)
	2R (2 ranks)
	3DS RDIMM
	2S2R (4 ranks)
	2S4R (8 ranks)
	2S8R (16 ranks)
	6400 MT/s memory speed supported

### Important

- There should be at least 1 DDR5 DIMM populated.
- Paired memory installation for Max performance.
- Populate the same DIMM type in each channel, specifically: 1. Use the same DIMM size; 2. Use the same number of ranks per DIMM.
- We don't suggest other memory installation.