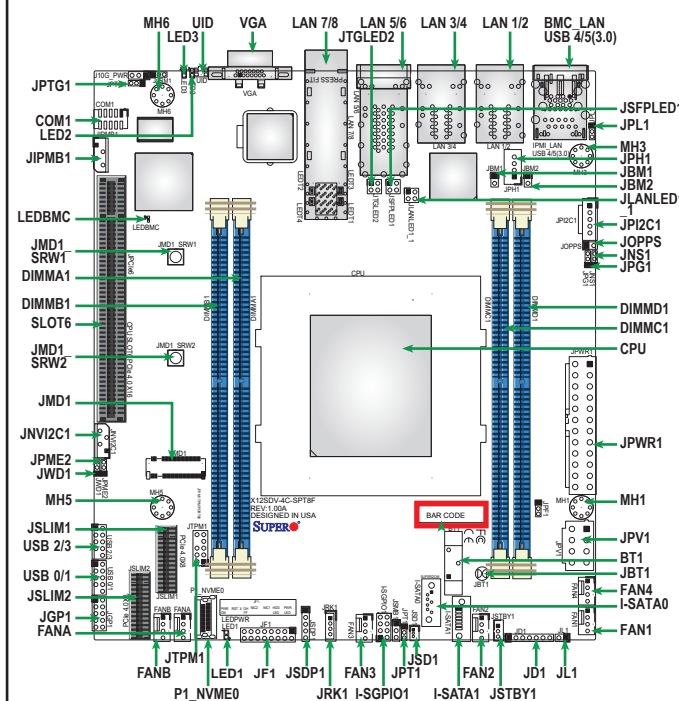


SUPERMICR SuperServer 110D-4C/8C/14C/16C/20C-FRA(D)N8TP Quick Reference Guide

Board Layout



Connector	Description
BT1	Onboard Battery
COM1	COM Header
FAN1 - FAN4, FANA, FANB	CPU/System Fan Headers
BMC LAN	Dedicated BMC LAN Port
I-SATA0, I-SATA1	Intel PCH SATA 3.0 Ports (I-SATA0 has built-in SATA DOM Power on Pin 8)
I-SGPI01	Serial Link General Purpose I/O Header
JD1	Speaker/Power LED Indicator (Pins 1-3: Power LED, Pins 4-7: Speaker)
JF1	Front Control Panel Header
JGP1	General Purpose I/O Header
JIPMB1	System Management Bus Header (for BMC only)
JL1	Chassis Intrusion Header
JLANLED1_1	LAN3/4 Activity LED Header
JMD1	M.2 M-Key 2242/2280 (PCIe x4/SATA) Slot
JMD1_SRW1, JMD1_SRW2	M.2 Holding Screws
JNVPC1	Non-Volatile Memory (NVMe) IFC Header
JOPPS	Reserved for One Pulse Per Second
JPH1	4-pin HDD Power Connector
JPIC1	Power IFC System Management Bus (Power SMB) Header
JPWR1	24-pin ATX Power Connector (Required)
JPV1	8-pin CPU Power Connector (Required)
JRK1	Intel RAID Key Header
JSD1	SATA DOM Power Connectors
JSDP1	Reserved for time synchronization
JSFPLED1	LAN7/8 Activity LED Header
JSLIM1, JSLIM2	PCIe 4.0 x8 SlimSAS Connector
JSTBY1	Standby Power Header
JTGLED2	LAN5/6 Activity LED Header
JTPM1	Trusted Platform Module/Port 80 Connector
LAN1/2, LAN3/4	1GbE RJ45 LAN Ports
LAN5/6	10G BASE-T RJ45 LAN Ports
LAN7/8	25GbE SFP28 LAN Ports
P1_NVME0	OCuLink Connector (to 4x SATA3.0 or PCIe 3.0 x4)
SLOT6	CPU1 PCIe 4.0 x16 Slot
UID	Unit Identifier Switch
USB0/1, USB2/3	Front Accessible USB 2.0 Headers
USB4/5	Back Panel USB 3.0 Ports
VGA	VGA Port

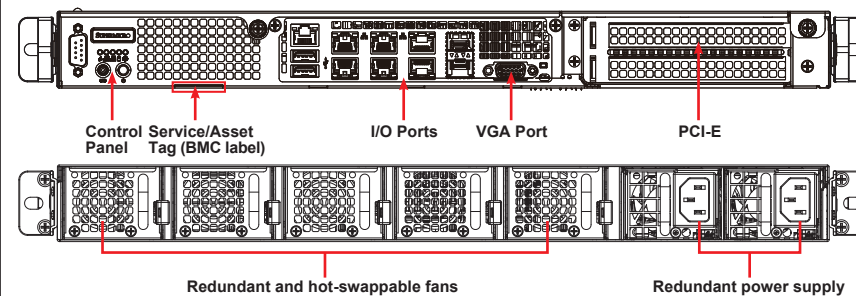
System Features

This chapter provides a brief outline of the functions and features of the SuperServer SYS-110D-4C/8C/14C/16C/20C-FR(A/D)N8TP. It is based on the X12SDV-4C/8C/14C/16C/20C-SPT8F motherboard and the CSE-515M-R000NP2 chassis. The following provides an overview of the specifications and capabilities.

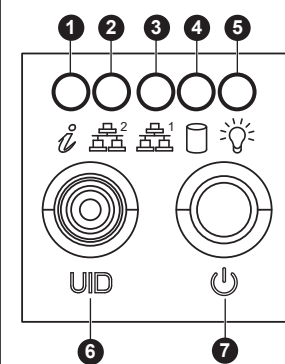
System Overview	
Motherboard	X12SDV-4C/8C/14C/16C/20C-SPT8F
Chassis	CSE-515M-R000NP2
Processor Support	Intel® Xeon D Ice Lake 4/8/14/16/20 Cores Processor from 65W to 120W
Memory	Four DIMM slots, up to 256GB ECC RDIMM or 512GB LRDIMM DDR4 memory with speeds of up to 2933MT/s Note: 128GB RDIMM is not compatible with the system.
Drive Support	Two internal 2.5" SATA3 drive bays
Expansion Slots	One PCIe 4.0 x16 slots (FHFL slots) One M.2 PCIe 3.0 x4/SATA3 slot (supports M-Key 2280 and 2242)
I/O Ports	Four GbE LAN ports, two 10G BASE-T LAN ports, two 25G SFP28 ports One dedicated RJ45 BMC LAN port One VGA port Two USB 3.0 Type A
System Cooling	Five counter-rotating, hot-swappable fans
Power	SYS-110D-4C/8C/14C/16C/20C-FRAN8TP: Two 800W AC redundant power supplies SYS-110D-4C/8C/14C/16C/20C-FRDN8TP: Two 600W DC redundant power supplies
Form Factor	1U; (WxHxD) 17.2 x 1.7 x 15.7 in (437 x 43 x 398.78 mm)

Note: The Quick Reference Guide can be found on the product page for SYS-110D-4C/8C/14C/16C/20C-FR(A/D)N8TP. The following safety agency or regulatory models associated with the SYS-110D-4C/8C/14C/16C/20C-FRA(D)N8TP have been certified as compliant with UL or CSA: 515M-R8X12, 515M-8, 515 M-R6DX12, and 515M-6D.

Front View and Rear Features



Front View Control Panel



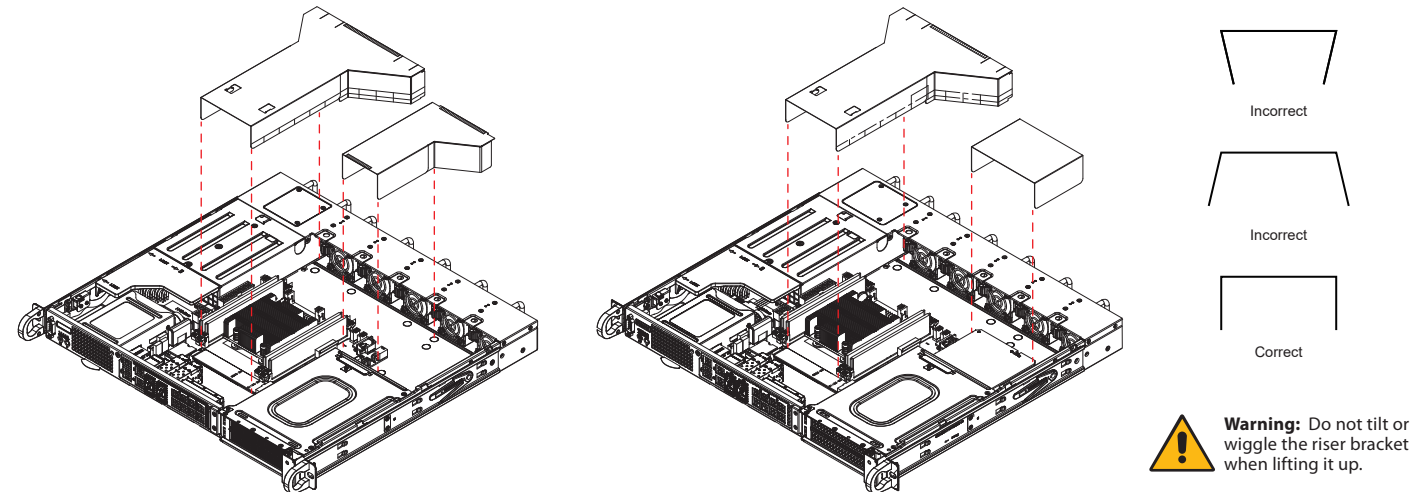
Item	Features	Description
1	Informational LED	Indicates one of multiple conditions
2	NIC2 LED	Indicates network activity on LAN port 2 when flashing.
3	NIC1 LED	Indicates network activity on LAN port 1 when flashing.
4	HDD LED	Indicates hard drive activity when flashing.
5	Power LED	Indicates power is being supplied to the system power supply.
6	UID Button	The UID is used to switch/turn on/turn off UID LED next to the PCI-E slots.
7	Power	The main power button is used to apply or remove power from the power supply to the server.

Accessing the System and installing the add-on Card

Installing the Air Shroud

The SYS-110D-4C/8C/14C/16C/20C-FRA(D)N8TP supports two types of PCI-E expansion card air shrouds, one for full-height cards and one for half-height cards. (Optional)

1. Position the air shrouds in the chassis, as illustrated below. The air shroud fits just behind the fans.
2. Slide the air shroud into the grooves just behind the fan rack. If necessary, move any cables that interfere with the air shroud placement.
3. Remove perforated tabs, if necessary, for a good fit.



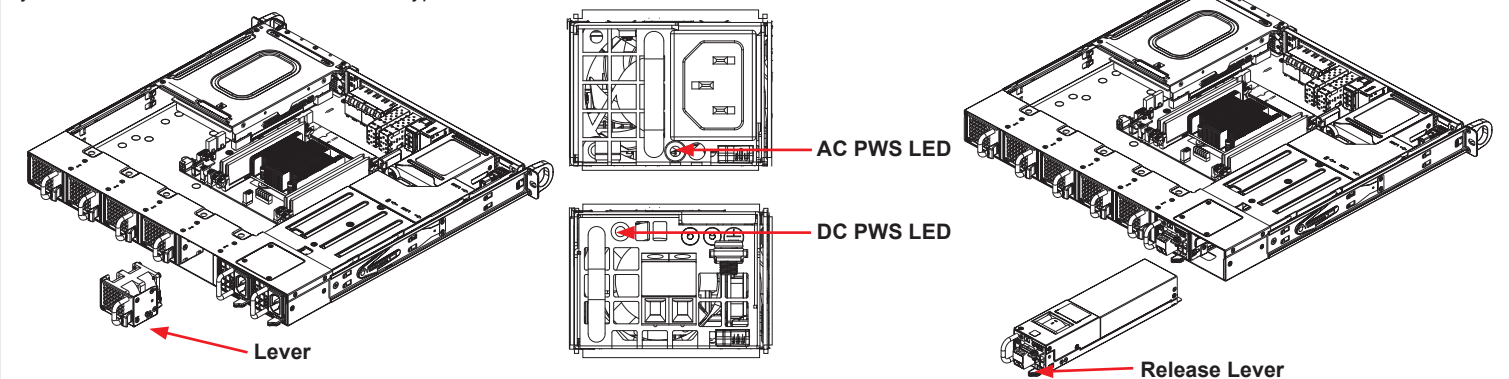
Replacing the Fans and Power Supply

System Fans

The fans can adjust their speed according to the heat level sensed in the system, which results in more efficient and quieter fan operation. Fan speed is controlled by IPMI. Each fan has its own separate tachometer. If a fan fails, the remaining fans will ramp up to full speed, the overheat/fan fail LED on the control panel will blink on and off, and an alarm will sound. Replace any failed fan at your earliest convenience with the same type and model.

Power Supply

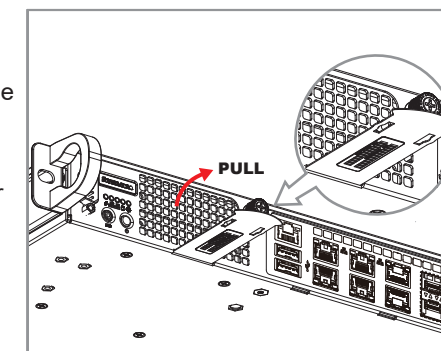
The power supplies are auto-switching capable. The 800W AC power supplies can operate at a 100V to 240V input range. The 600W DC power supplies can operate at -48V DC input range. If replacing a power supply, the system does not need to be powered down.



BMC Password Label

Pull-out tag with BMC unique password underneath.

Each system comes with a unique default password for the ADMIN user. This can be found on a sticker on the motherboard and a sticker underneath the service tag on chassis. If necessary, the password can be reset by the Supermicro IPMICFG tool.



For more information, please visit <https://www.supermicro.com/en/solutions/management-software/bmc-resources>

Caution

SAFETY INFORMATION

IMPORTANT: See installation instructions and safety warning before connecting system to power supply. http://www.supermicro.com/about/policies/safety_information.cfm

WARNING:

To reduce risk of electric shock/damage to equipment, disconnect power from server by disconnecting all power cords from electrical outlets. If any CPU socket empty, install protective plastic CPU cap.

WARNING:

Always be sure all power supplies for this system have the same power output. If mixed power supplies are installed, the system will not operate.

For more information go to: <http://www.supermicro.com/support>

