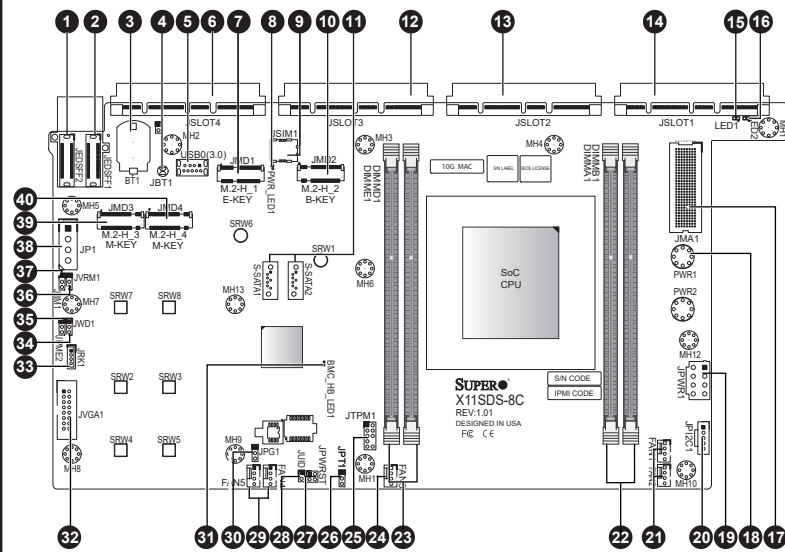


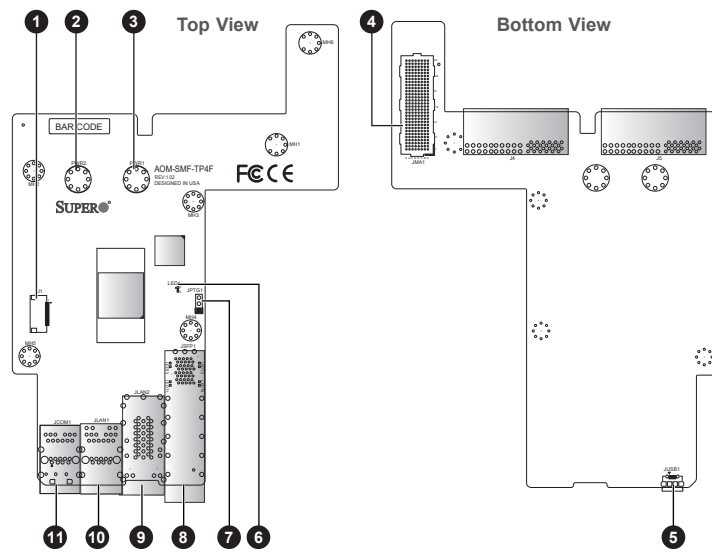
# SUPERMICR® SuperServer 1019D-(12C/14C/16C)-FRN5TP Quick Reference Guide

## Board Layout



No.	Description
1	EDSFF Short Header (Shared with M.2 M-Keys)
2	EDSFF Short Header (Shared with M.2 M-Keys)
3	Onboard Battery
4	JBT1 CMOS Clear
5	USB3.0 Gen 1 Type A Header
6	Slot 4 PCI-E 3.0 x8 (for optional AIOM)
7	M.2 Slot E-Key 2230 (PCI-E 3.0 x2/USB2.0)
8	Power LED
9	Nano SIM Card Socket
10	M.2 Slot B-Key 2242/3042 (PCI-E 3.0 x2/SATA3.0/USB3.0)
11	S-SATA2 3.0 Ports
12	Slot 3 PCI-E 3.0 x8 (for optional AIOM)
13	Slot 2 PCI-E 3.0 x8 (for optional AIOM)
14	Slot 1 PCI-E 3.0 x8 (for optional AIOM)
15	UID LED
16	Overheat/PWR Fail/Fan Fail
17	Receptacle for AOM-SMF-TP4F
18	Bus Bar Connector (to AOM-SMF-TP4F)
19	8-pin +12V DC Power Connector
20	Power I <sup>2</sup> C System Management Bus (Power SMB) Header
21	CPU/System Fan Headers
22	DIMMA1~DIMMB1
23	DIMMD1~DIMME1
24	CPU/System Fan Headers
25	Trusted Platform Module (TPM)/Port 80 Connector
26	Onboard TPM 2.0 Enable/Disable
27	Power and Reset Button
28	UID Switch Header
29	CPU/System Fan Headers
30	Onboard VGA Enable/Disable
31	BMC Heartbeat
32	VGA Header
33	Intel RAID Key Header (supporting AIOM Slots)
34	Manufacturing Mode Select
35	Watch Dog Timer
36	VRM SMB Data (to BMC or PCH)
37	IPMI Shared LAN Enable/Disable
38	4-pin Power Connector for HDD use
39	M.2 Slot M-Key 2242/80/110 (PCI-E 3.0 x4/SATA3.0) Shared with JEDSFF1
40	M.2 Slot M-Key 2242/80/110 (PCI-E 3.0 x4/SATA3.0) Shared with JEDSFF2

## I/O Module

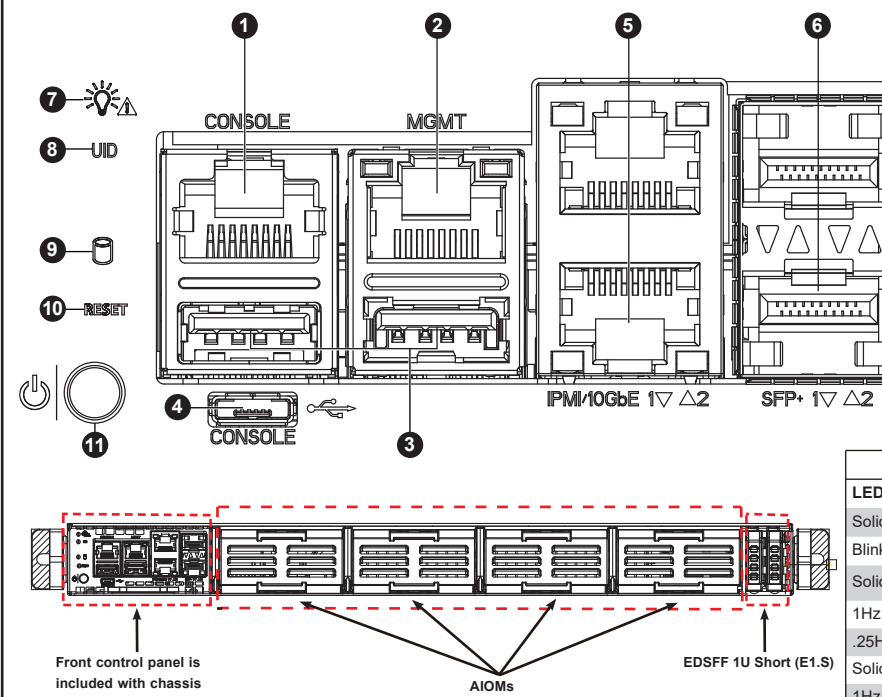


No.	Description
1	Front Control Panel Cable Header
2	PWR1: Bus Bar Connector
3	PWR2: Bus Bar Connector
4	Receptacle for X11SDS-8C/16C
5	Micro USB Serial Console Port (Shared with Serial Console Port)
6	Power LED (Solid Green: Power On)
7	10G LAN Enable/Disable (Pins 1-2 Enabled)
8	Dual 10G SFP+ Ports
9	Dual 10G RJ45 Ports
10	1G RJ45 Port and USB 3.0 Port
11	Serial Console Port and USB 3.0 Port

## System Features

<b>Motherboard</b>	
X11SDS-8C for 1019D-FRN5TP / X11SDS-12C for 1019D-12C-FRN5TP / X11SDS-14C for 1019D-14C-FRN5TP / X11SDS-16C for 1019D-16C-FRN5TP	
<b>CPU</b>	
Intel Xeon D-2146NT up to 80W for 1019D-FRN5TP / Intel Xeon D-2163IT up to 75W for 1019D-12C-FRN5TP / Intel Xeon D-2173IT up to 70W for 1019D-14C-FRN5TP / Intel Xeon D-2183IT up to 100W for 1019D-16C-FRN5TP	
<b>Memory</b>	
Supports up to 256GB of ECC RDIMM or 512GB of ECC LRDIMM DDR4 memory Speed of up to 2133MHz for 1019D-FRN5TP, 1019D-12C-FRN5TP, and 1019D-14C-FRN5TP Speed of up to 2400MHz for 1019D-16C-FRN5TP	
<b>Expansion Slots</b>	
Two M.2 M-Key 2280/22110 (one 2.5" drive bay space shared with M.2) / One M.2 E-Key 2230 / One M.2 B-Key 2242/3042 / Four PCI-E 3.0 x8 for Advanced I/O Module (AIOM) (AIOM is sold separately)	
<b>Hard Drives</b>	
Two EDSFF and two internal 2.5" drives OR two M.2 and one internal 2.5" drive	
<b>Chassis</b>	<b>Power</b>
SC103-R407B	400W AC-DC, 80+ Platinum level
<b>Socket Type</b>	<b>Cooling</b>
FCBGA2518	Five 40 x 40 x 56 mm 13K-11K RPM counter-rotating fans
<b>Chipset</b>	<b>Form Factor</b>
System on Chip	1U rackmount
<b>Dimensions</b>	
(WxHxD) 17.2 x 1.7 x 15 in. (437 x 43 x 381 mm)	

## Front View and Features



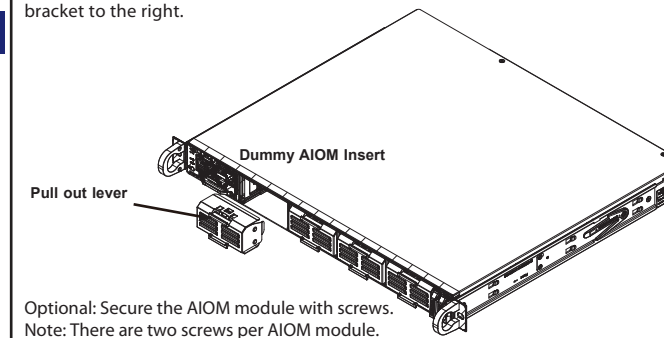
Item	Description
1	Console
2	MGMT
3	USB3.0 Ports
4	Micro USB Console
5	10G GbE Ports 1 and 2 IPMI share LAN on Port 1
6	SFP+ Ports 1 and 2 (Small Form-factor Pluggable)
7	Informational LED
8	UID LED
9	HDD LED
10	Reset LED
11	Power Button with LED

Informational LED	
LED Appearance	Description
Solid Green	The node is powered on and operating normally.
Blinking Green	The node is in the process of shutting down.
Solid Red	The node is detecting an overheated condition.
1Hz Blinking Red	The node is detecting a fan failure.
.25Hz Blinking Red	The node is detecting a power failure.
Solid Blue	The node local UID is on.
1Hz Blinking Blue	The node remote UID is on.
No Illumination	The node is powered down.

## AIOM Device Bays

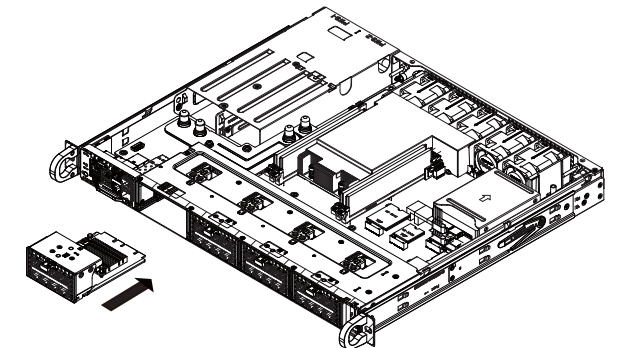
### Inserting the AIOM Module

Power down the system. Once the dummy AIOM insert is removed, gently slide the AIOM module into the slot by aligning the PCB edge into the chassis rail, gently push the module by the metal bracket until the module is fully engaged into the chassis. Push the spring loaded pin into engage with the chassis. Slide the lock on the metal bracket to the right.



Optional: Secure the AIOM module with screws.  
Note: There are two screws per AIOM module.

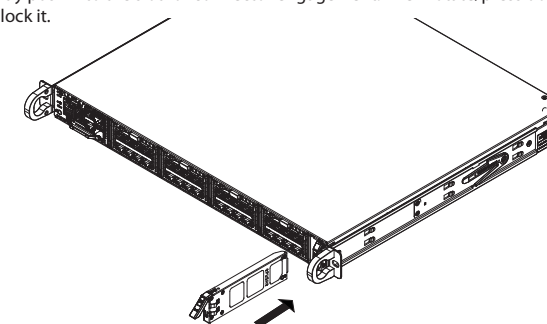
**Caution:** The AIOM slot and device are **NOT hot-swappable**. Please disconnect the power from the system before attempting to install or remove any AIOM network adapter.



## EDSFF Module

### Inserting the EDSFF Module

Power down the system. Once the dummy is removed, gently slide the EDSFF module into the slot, gently push into the slot for connector engagement. Then rotate/press down on the latch to lock it.



## 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](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>

