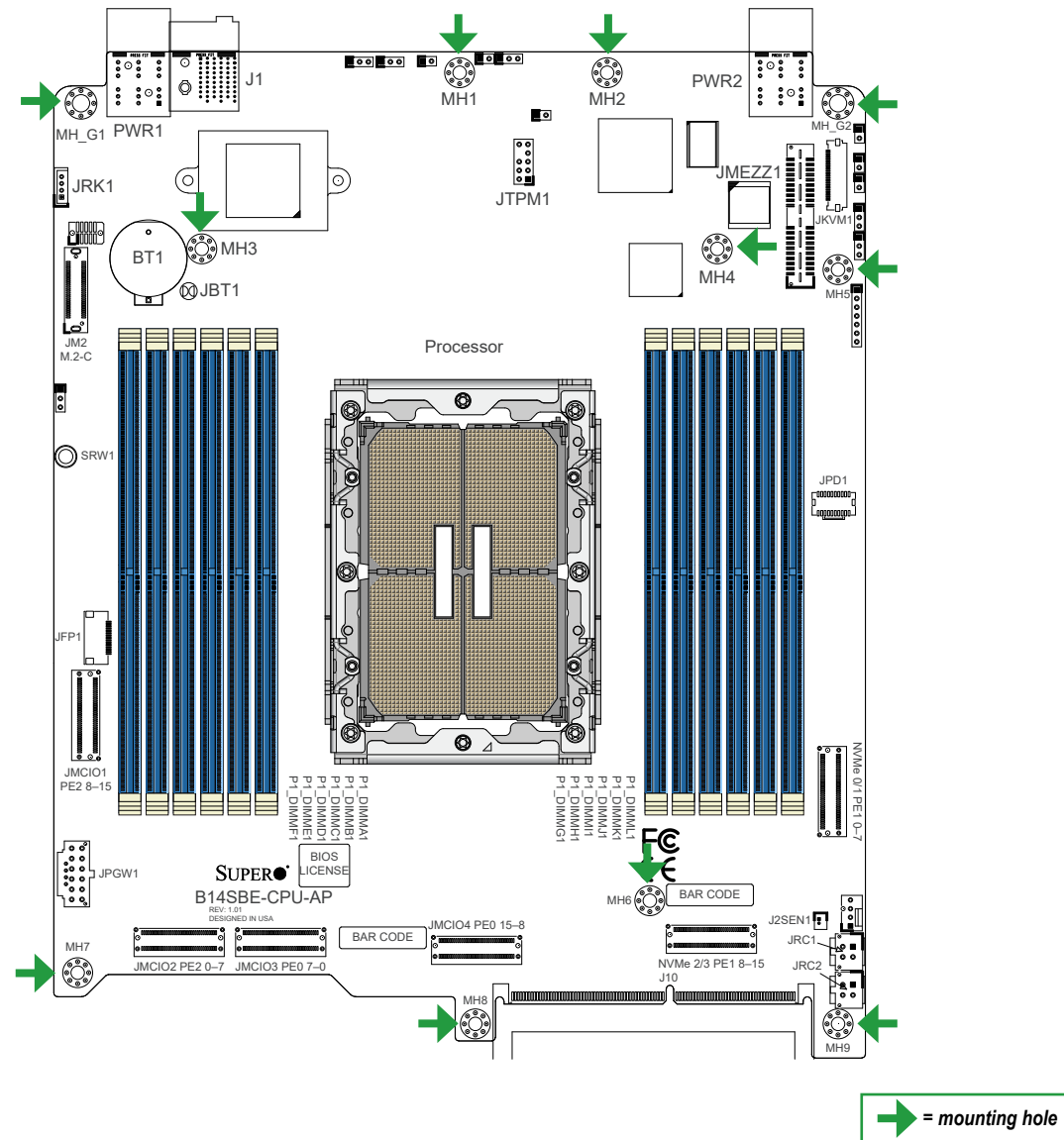


SUPERMICR® B14SBE-CPU-AP Quick Reference Guide

Package Contents
 • One Supermicro Motherboard
 • One Quick Reference Guide
 • One I/O Shield

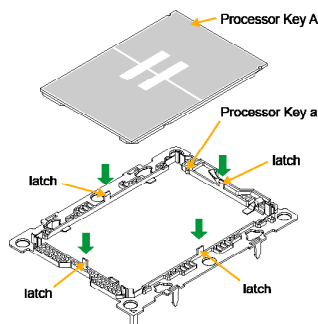
WARNING: This product can expose you to chemicals including lead, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov

Motherboard Layout and Features

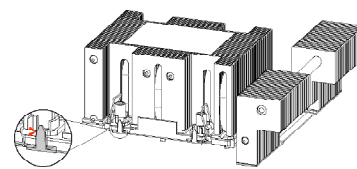


Processor and PHM Installation

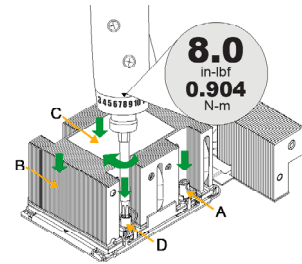
1 Align the key on the processor marked Processor Key A with the key on the carrier Processor Key a. With the processor keys aligned, gently push the processor into the carrier to latch the processor onto the processor carrier.



2 Hold the processor carrier assembly so the processor's gold contacts are facing up, then align the holes of the processor carrier assembly with the holes on the heatsink. Press the processor carrier assembly down until it snaps into place. The plastic clips of the processor carrier assembly will lock at the four corners.



3 After assembling the PHM, mount it onto the processor socket. With a T30 bit torque driver set to a force of 8.0 in-lbf (0.904 N-m), gradually tighten the four screws.



The processor carriers are included in the shipping package.

Jumpers and Connectors

Jumpers		
Jumper	Description	Default Setting
JBT1	Onboard CMOS Clear	Open (Normal)
Connectors		
Connector	Description	
BT1	Onboard CMOS Battery	
J1	Chassis Backplane Connector	
J10	SIOM PCIe 4.0 x16 Connector for One SAS Card or Two M.2 x4 or Two PCIe 4.0 NVMe	
J2SEN1	Liquid Cooling Leakage Sensor Header	
JFP1	Front Control Panel Connector	
JPGW1	2x6 + 4 SA Pin +12 V Power Connector	
JM2 M.2-C	EDSFF Vertical Connector for an M.2 2280 Adapter Card	
JMCIO1-JMCIO4, NVME0/1, NVME2/3	MCIO PCIe 5.0 x8 Connectors	
JMEZZ1	AOM Mezzanine Card PCIe 4.0 x16 Connector	
JPD1	Power Distributor Board Connector	
JRC1, JRC2	Proprietary Riser Power Connectors	
JRK1	Intel VROC RAID Key Header	
JTPM1	Trusted Platform Module (TPM)/Port 80 Connector	
PWR1, PWR2	Chassis Backplane Power Receptacles	
MH_G1-MH_G2, MH1-MH8	Motherboard Mounting Holes	
SRW1	Mounting Hole for EDSFF Vertical Connector Card	

Processor and Memory Support

Processor Support
 The B14SBE-CPU-AP motherboard supports the Intel® Xeon® 6900-series processors with P-cores in socket BR1A LGA 7529 with a TDP of up to 500 W.

Intel Xeon 6900-Series Processor with P-cores Memory Support

With the Intel Xeon 6900-series processor with P-cores, the motherboard supports up to 3 TB of DDR5 RDIMM, 3DS RDIMM, and MRDIMM with speeds of up to 6400 MT/s with RDIMM/3DS RDIMM and 8800 MT/s with MRDIMM. The motherboard supports 32 GB, 48 GB, 64 GB, 96 GB, 128 GB, and 256 GB DDR5 RDIMM, 3DS RDIMM, and MRDIMM memory capacities.

Memory Population Sequences

Number of DIMMs	Memory Population Sequence (RDIMM, 3DS RDIMM, MRDIMM)
1	P1-DIMMA1
8	P1-DIMMC1/P1-DIMMD1/P1-DIMME1/P1-DIMMF1/P1-DIMMI1/P1-DIMMJ1/P1-DIMMK1/P1-DIMML1 P1-DIMMA1/P1-DIMMB1/P1-DIMMD1/P1-DIMME1/P1-DIMMF1/P1-DIMMG1/P1-DIMMH1/P1-DIMMJ1/P1-DIMMK1 P1-DIMMA1/P1-DIMMB1/P1-DIMMC1/P1-DIMMF1/P1-DIMMG1/P1-DIMMH1/P1-DIMMI1/P1-DIMML1
12	P1-DIMMA1/P1-DIMMB1/P1-DIMMC1/P1-DIMMD1/P1-DIMME1/P1-DIMMF1/P1-DIMMG1/P1-DIMMH1/P1-DIMMJ1/P1-DIMMK1/P1-DIMML1

Front Control Panel

Function	State	Description
Power Button	N/A	Turns the blade module on and off.
Power LED	Green	Indicates power status "On."
	Solid Orange Flashing Orange	Indicates power status "Off" with power cables plugged in. Indicates the node is not ready or not enough power to turn on.
KVM/UID LED	Blue	Indicates KVM is in use by the blade unit.
	Flashing Blue	Indicates UID is activated on the blade module.
Network/IB LED	Flashing Green	Indicates network activity over LAN.
	Flashing Orange	Indicates network activity over the Infiniband module.
System Fault LED	Red	Indicates a memory error, overheat, VGA error, or any other error that prevents booting.