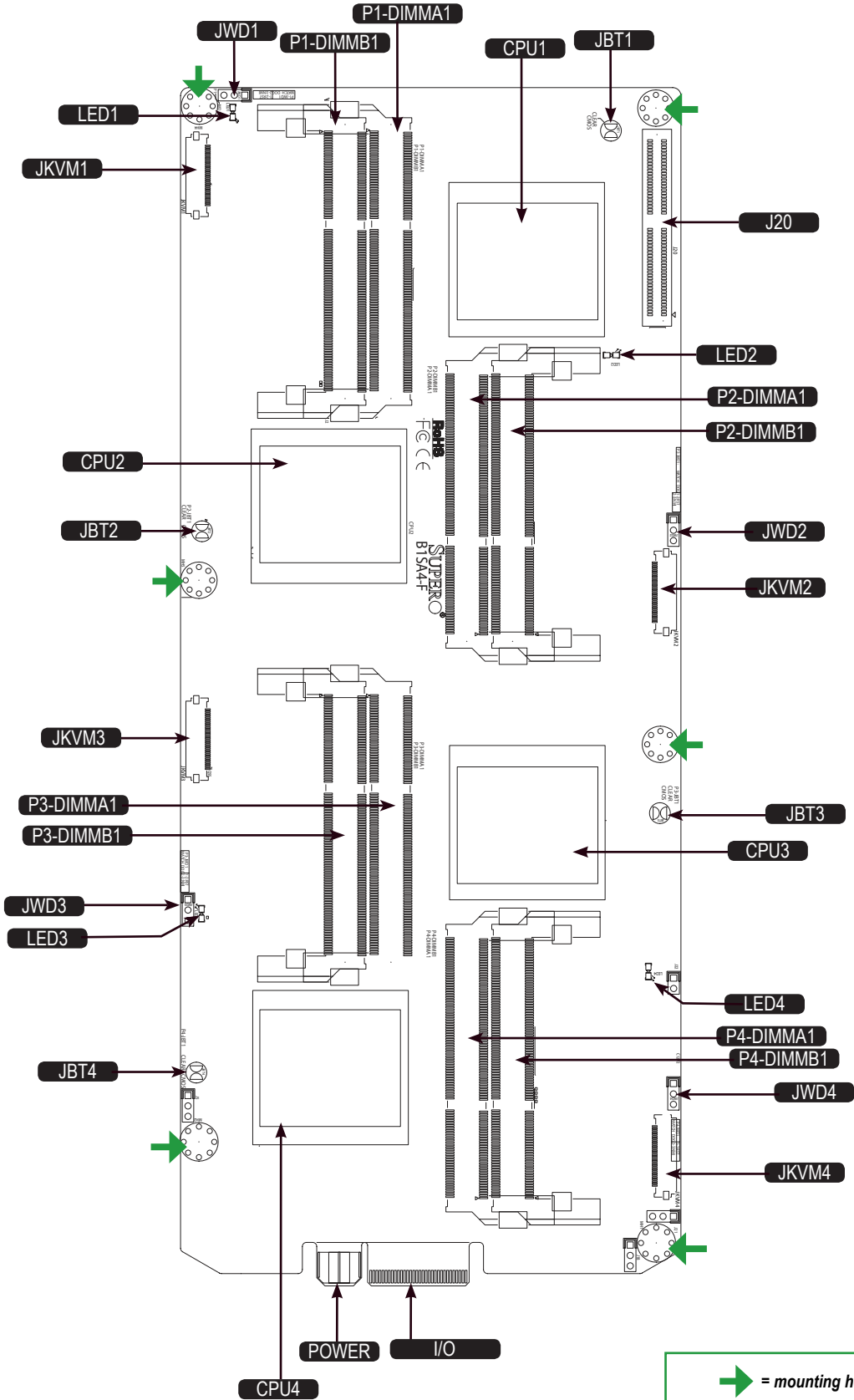


Motherboard Layout and Features



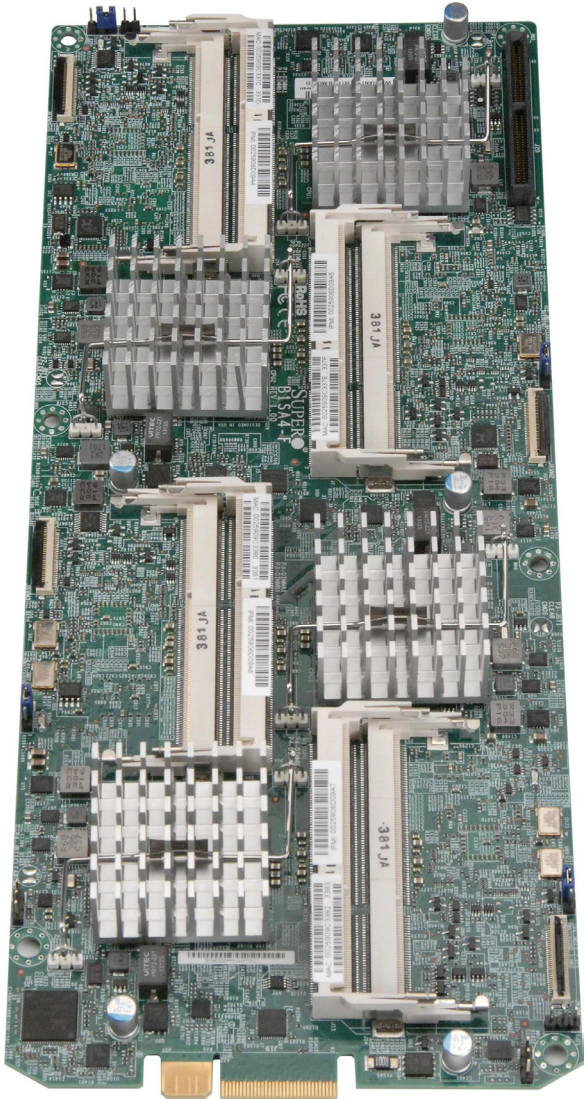
Note: Graphics shown in this quick reference guide are for illustration only. Your components may or may not look exactly the same as drawings shown in this guide.

Jumpers, Connectors and LED Indicators

Jumpers		
Jumper Name	Description	Default
JBT1~JBT4	CMOS Clear	(See Chapter 2 in User Manual)
JWD1~JWD4	Watch Dog Timer RST/NMI Selection	Pins 1-2 (Reset)

Connectors & LED Indicators	
Connector Name	Description
LED1~LED4	BMC Heartbeat LED
JKVM1~JKVM4	USB / VGA / UART Interface
CPU1~CPU4	Onboard CPU
P1~P4 DIMMA1~DIMMB1	SO DIMM Slots
J20	SATA Interface Connector
POWER	Back Panel Edge Connector (SATA/Power)
I/O	Back Panel Edge Connector (I/O, Network)

Motherboard Image



Note: Refer to Chapter 1 of the User Manual for detailed information on jumpers, connectors, and LED indicators.

Memory Support

The B1SA4-2750F/B1SA4-2550F supports up to 32GB of unbuffered 1333/1600 DDR3 ECC SO-DIMM memory in 2 DIMM slots per node.

Note: For memory optimization, use only SO-DIMM modules that have been validated by Supermicro. For the latest memory updates, please refer to our website at <http://www.supermicro.com/products/motherboard>.

DIMM Memory Installation

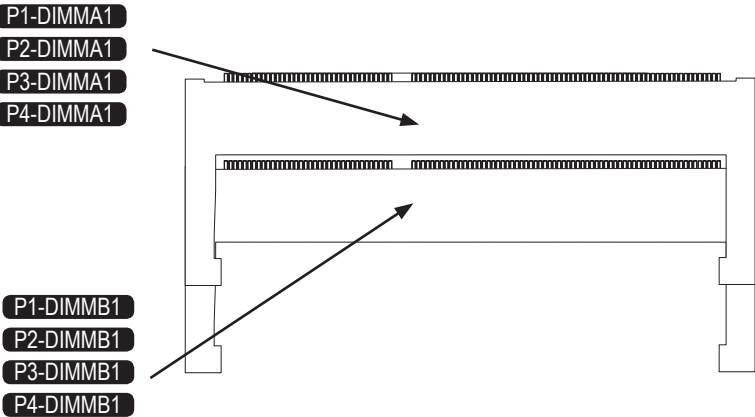
Memory Population Guidelines

When installing memory modules, the SO-DIMM slots should be populated in the following order: DIMMA1, DIMMB1.

- Always use DDR3 SO-DIMM modules of the same size, type and speed.
- Mixed DIMM speeds can be installed. However, all DIMMs will run at the speed of the slowest DIMM.
- The motherboard will support one DIMM module or three DIMM modules installed. For best memory performance, install DIMM modules in pairs.

Memory Population Guidelines		
P1/P2/P3/P4-DIMMA1	P1/P2/P3/P4-DIMMB1	Total System Memory
2GB		2GB
2GB	2GB	4GB
4GB		4GB
4GB	4GB	8GB
8GB		8GB
8GB	8GB	16GB
16GB		16GB
16GB	16GB	32GB

Each of the four nodes has its own memory bank. Populate Channel A first, the Channel B. In this example, Channel A of Node 1 is designated as P1-DIMMA1 and Channel B is P1-DIMMB1. Be sure to populate the sockets with SO-DIMM memory with the same speed.



Note: Refer to Chapter 2 of the User Manual for detailed information on memory support and CPU/motherboard installation instructions.