SUPERMICRO®

C7H61 (-L) MOTHERBOARD
QUICK REFERENCE GUIDE REV. 1.0A

Motherboard Layout and Features

SLOT1, SLOT2, SLOT3, SLOT4, SLOT5, SLOT6, SLOT7

RoHS

SUPERO DESIGNED IN USA

= mounting hole
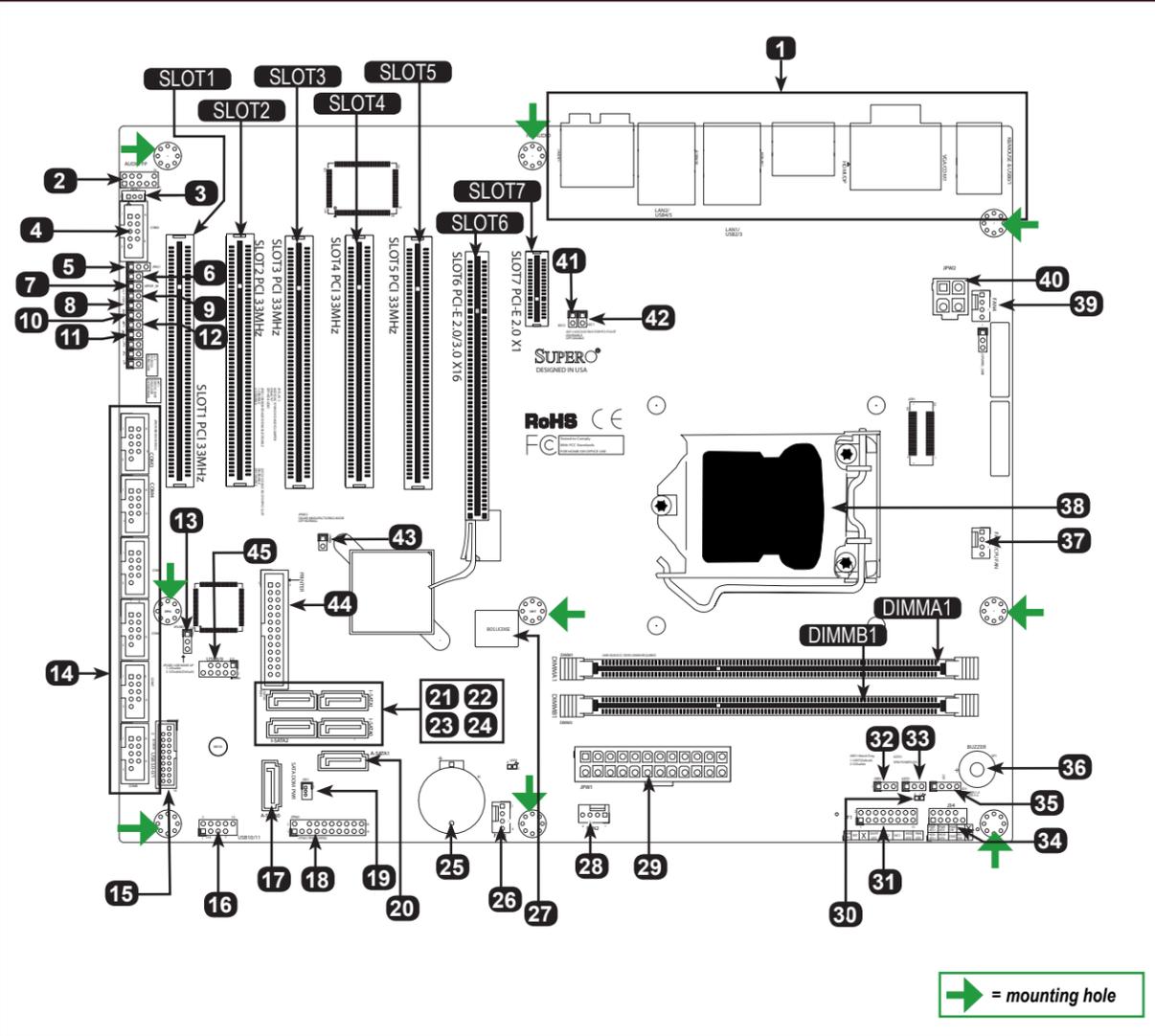
Jumpers, Connectors and LED Indicators

Jumpers

5	JPAC1	Audio Enable	Pins 1-2 (Enabled)
8,10	JI2C3,JI2C4	SMB Header for PCI Slots	C7H61-L: Short (Enabled), C7H61: Open (Disabled)
12	JBT1	CMOS Reset	Open (Disabled)
13	JPUSB1	USB Wake-Up	Pins 2-3 (Disabled)
32	JWD1	Watch Dog Timer Reset	Pins 1-2 (Reset)
41,42	JI2C2,JI2C1	SMB Header for PCIE Slots	Open (Disabled)
43	JPME2	Intel ME Manufacturing Mode	Pins 1-2 (Disabled)

Connectors

1		Back panel I/O	See "Back panel I/O Connectors" below
2		AUDIO FP	Front Panel Audio Header
3		JWOL	Legacy Wake-On-LAN Header
4,14		COM2, COM3~8	COM2 Header, COM3~8 (Not supported on C7H61-L))
6,7		S/PDIF OUT, S/PDIF IN	S/PDIF OUT/IN Digital Audio Headers
9		JL1	Chassis Intrusion Header
11		JWOR	Wake-On-Ring Header
15		USB 3.0 1/0	USB Header 1/0 (3.0) (Not supported on C7H61-L)
16,45		USB10/11,8/9	USB 2.0 Headers 10/11,8/9
17,20		A-SATA 0,1 (ASMedia)	SATA 3.0 Ports (up to 6Gb/s)
18		JTPM1	Trusted Platform Module (TPM) Header
19		JSD1	Disk-On-Module (DOM) Power Header
24,22,23,21		I-SATA 0,1,2,3 (Intel)	SATA 2.0 Ports
25		B1	System Battery
26,28,37,39		FAN 3,2,1,4	System FAN Headers 3,2,1 (CPU FAN),4
27		U5	BIOS Chip
29,40		JPW1,JPW2	24-Pin, 4-Pin Aux Power Supply Connectors
31		JF1	Front Control Panel Header
33		JLED1	3-Pin Power LED Header
34		Test Header	Reserved for OEM
35		JD1	External Speaker Header (Pins 2-3 shorted for internal buzzer)
36		SP1	Internal Buzzer
38		CPU	Socket H2 for an LGA 1155 CPU
44		PRINTER	LPT1 Header

LED Indicators

30	LED1	Onboard Standby PWR LED	Green: Solid on	Standby Power is On

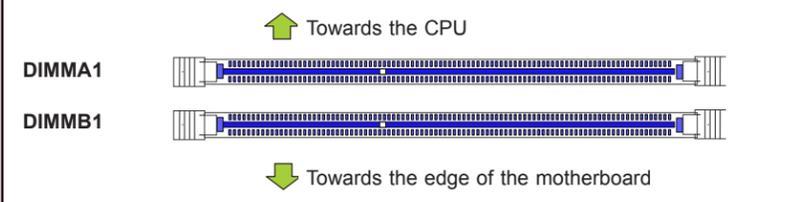*Note: Refer to Chapter 1 of the User Manual for detailed information on jumpers, connectors, and LED indicators.*

Memory Support

The C7H61 motherboard series supports up to 16GB of Unbuffered (UDIMM) non-ECC DDR3 1600/1333/1066 MHz in two memory slots.

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

DIMM Memory Installation

⬆ Towards the CPU

DIMMA1

DIMMB1

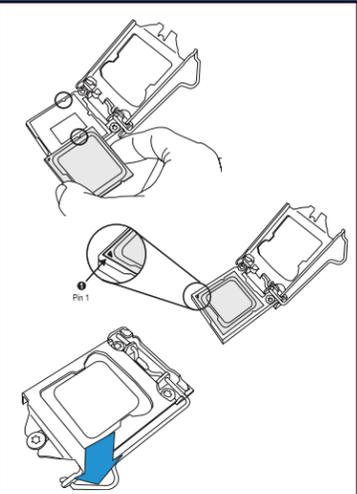⬇ Towards the edge of the motherboard

Memory Population Guidelines

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

- Always use DDR3 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.

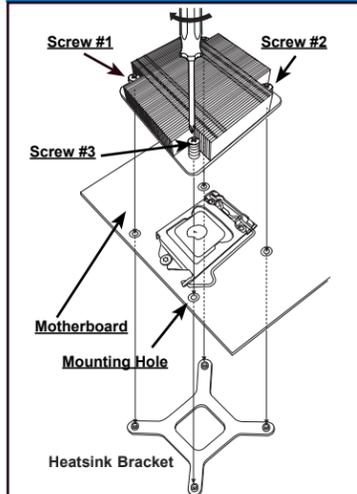- The motherboard will support one DIMM module. However for best memory performance, install DIMM modules in pairs.

Recommended Population (Balanced)		
DIMMA1 Slot	DIMMB1 Slot	Total System Memory
2GB		2GB
2GB	2GB	4GB
4GB		4GB
4GB	4GB	8GB
8GB		8GB
8GB	8GB	16GB

Note: Due to memory allocation to system devices, the amount of memory that remains available for operational use will be reduced when 4 GB of RAM is used.
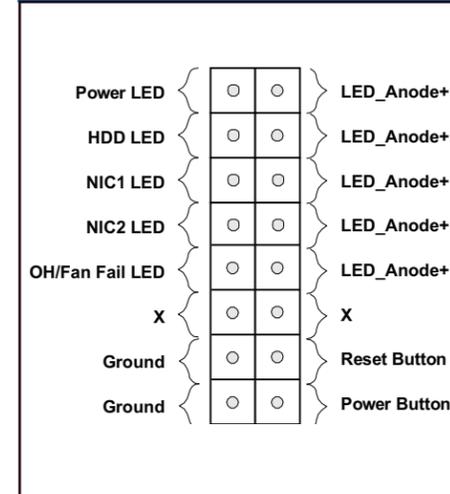
CPU Installation

Pin 1

Heatsink Installation

Screw #1, Screw #2, Screw #3

Motherboard Mounting Hole

Heatsink Bracket

Front Control Panel (JF1)

Power LED	○ ○	LED_Anode+
HDD LED	○ ○	LED_Anode+
NIC1 LED	○ ○	LED_Anode+
NIC2 LED	○ ○	LED_Anode+
OH/Fan Fail LED	○ ○	LED_Anode+
X	○ ○	X
Ground	○ ○	Reset Button
Ground	○ ○	Power Button

Back Panel I/O Connectors

A. KB/Mouse Port	H. LAN1 Port	N. Center/LFE Out
B. USB 0 (2.0)	I. USB 2 (2.0)	O. Surround Out
C. USB 1 (2.0)	J. USB 3 (2.0)	P. S/PDIF Out (Optical)
D. COM 1 (C7H61 Only)	K. LAN2 Port	Q. Line In
E. VGA Port	L. USB 4 (2.0)	R. Line Out
F. VESA DisplayPort	M. USB 5 (2.0)	S. Microphone In
G. HDMI Port		

Audio

MNL-1455-QRG 1.0A

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.