## CONTACT INFORMATION

- Website: www.supermicro.com

- DRIVERS/IMAGES/USER'S MANUAL FROM THE LINKS BELOW: General Information: marketing@supermicro.com
  Technical Support: support@supermicro.com
  Phone: +1 (408) 503-8000, Fax: +1 (408) 503-8008 • Manuals: http://www.supermicro.com/support/manuals

JTPM1

JUIDB1

LAN1/LAN2

I-SATA0

PCI-E Slot

SP1

SW1

L-SAS0 - L-SAS15

31

8

3. 4

12

35

42

44

Drivers & Utilities: ftp://ftp.supermicro.com/CDR Images/CDR-A1-UP/

Trusted Platform Module (TPM)/Port 80 Connector

Unit Identifier (UID) Button

LSI 2116 SAS Ports 0-15 Intel Serial ATA Port 0

PCI-E Slot 2.0 x4 (x8)

Power Button

Internal Speaker/Buzzer

Gigabit Ethernet (RJ45) Ports

FOR YOUR SYSTEM TO WORK PROPERLY, PLEASE DOWNLOAD APPROPRIATE

Safety: http://www.supermicro.com/about/policies/safety\_information.cfm

# **Motherboard Layout and Features** AST2400 34 33 12 LSI 2116 SUPER® F© 30 MAC CODE BAR CODE 1 VED IN USA **ROHS** 19 20 21 22 23 24 25 13 14 15 = mounting hole Note: Item numbers are in counterclockwise order

### Front Panel Control (JF1) **Back Panel I/O Connectors** FP PWR LED 3.3 V 3.3V Stb HDD I FD 0 0 3.3V Stby 0 0 3.3V Stby NIC1 Link LED Backplane I/O Panel UID LED A. USB Port 1 E. IPMI LAN 3.3V B. USB Port 2 F. VGA 0 0 C. LAN Port 1 G. Power Button PWR > Power Button D. LAN Port 2 H. UID Switch

#### **Jumpers, Connectors and LED Indicators** Jumper Item # Description Default 30 CMOS Clear Open: Normal Operation, Short: Clear CMOS SMB to PCI-Exp. Slots JI<sup>2</sup>C1/JI<sup>2</sup>C2 40, 41 Off (Disabled) VGA Enable Pins 1-2 (Enabled) JPL1 36 Ethernet LAN Ports Enable Pins 1-2 (Enabled) JWD1 43 Watch Dog Enable Pins 1-2 (Reset) Connector Item # Description Battery (JBAT1) 18 Onboard Battery COM1 32 COM1 Header FAN1-FAN7 23, 22, 21, 20 CPU/System Cooling Fans 19, 14, 15 IPMI LAN 5 IPMI Dedicated LAN 27 Motherboard 5V Standby Power Input 24 JF1 Front Panel Control Header 13 JIPMB1 4-pin External SMbus I2C Header (for an IPMI Card) JL1 16 Chassis Intrusion Header JOH1 17 Overheat/Fan Fail LED Header 25 HDD Backplane Power Control header 28 JPI<sup>2</sup>C1 Power Supply System Management Bus (SMBus) I<sup>2</sup>C Header JPWR1 29 +12V 8-pin Motherboard Power connector 34 JSD1 SATA DOM (Device\_On\_Module) Power Connector

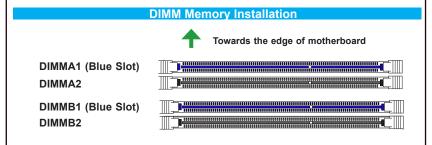
USB1/USB2		1, 2	Backpanel USB 2.0 Ports 1/2					
USB 3		33	USB 2.0 Front Access Support/Type A Connector)					
VGA		6	Backpanel VGA Port					
J27		45	NC-SI header for AOC-STGN-i1SF 10GbE card					
J28		46	Power to AOC-STGN-i1SF 10GbE card					
LED Indicators								
LED	Item #	Description		Color/State	Status			
LED2	37	BMC Heartbeat LED		Green: Blinking	BMC: Normal			
LED3	39	LSISAS2116 Heartbeat LED		Green: Blinking	SAS Controller: Normal			
LED4	26	Power LED		Green: On	System Power On			
LED7	9	UID Switch LED		Blue: On	Unit Identified			
LED8	10	Overheat/PWR Fail/Fan Fail LED		Red: Solid on/Blinking	Solid On: Overheat, Blinking: PWR Fail or Fan Fail			
LED9	38	LSISA2116 Error LED		Red: On	LSISAS2116 Error Status			

# **Memory Support**

The A1SA7-2750/2550F motherboard supports up to 64GB of DDR3 ECC or Non-ECC Unbuffered (UDIMM) 1600/1333 MHz in x8 data width only, in 4 memory slots. Populating these DIMM modules with a pair of memory modules of the same type and same size will result in better memory performance.

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MNL-1616-QRG

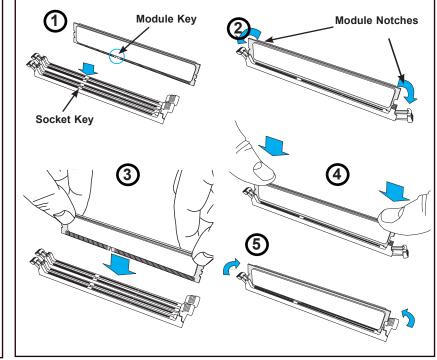


# **Memory Population Guidelines**

When installing memory modules, the DIMM slots should be populated in the following order: DIMMA1, DIMMB1, then DIMMA2, DIMMB2.

- Always use DDR3 DIMM modules of the same size, type and speed.
- The motherboard will support one DIMM module or three DIMM modules installed. However for best memory performance, install DIMM modules in pairs.
- Be sure to use memory modules of the same type, same speed, and same frequency on the same motherboard. Mixing of memory modules of different types and speeds is not allowed.

Recommended Population (Balanced)								
DIMMA1 Slot	DIMMB1 Slot	DIMMA2 Slot	DIMMB2 Slot	Total System Memory				
4GB	4GB			8GB				
4GB	4GB	4GB	4GB	16GB				
8GB	8GB			16GB				
8GB	8GB	8GB	8GB	32GB				



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

