

SUPERMICR®
A2SDV-8C/-12C+/-16C-TLN5F
QUICK REFERENCE GUIDE 1.00

CONTACT INFORMATION

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FOR YOUR SYSTEM TO WORK PROPERLY, PLEASE DOWNLOAD APPROPRIATE

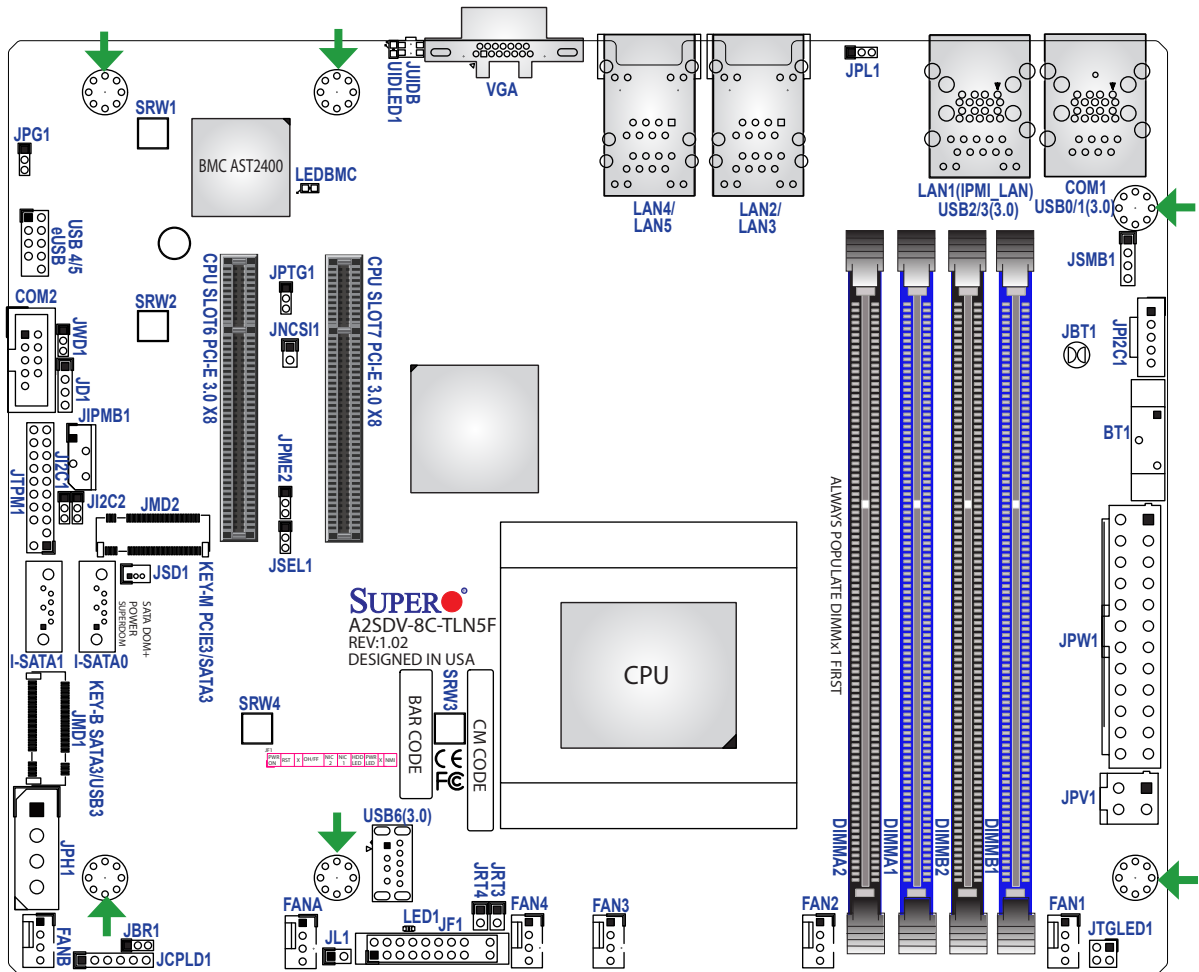
DRIVERS/IMAGES/USER'S MANUAL FROM THE LINKS BELOW:

- Manuals: <http://www.supermicro.com/support/manuals>
- Drivers & Utilities: <ftp://ftp.supermicro.com/CDR/Images/CDR-A1-A2-UP/>
- Safety: http://www.supermicro.com/about/policies/safety_information.cfm

PACKAGE CONTENTS

- One (1) Supermicro Motherboard
- Two (2) SATA Cable
- One (1) I/O Shield
- One (1) Quick Reference Guide
- One (1) Plastic Standoff

Motherboard Layout and Features



Front Control Panel (JF1)

	1	2	
PWR	Power Button	Ground	
Reset	Reset Button	Ground	
3.3V	Power Fail LED		
UID	OH/Fan Fail LED		
2.5V Stby	LAN3 Active LED		
2.5V Stby	LAN2 Active LED		
3.3V Stby	HDD LED		
3.3V	PWR LED		
X	X		
3.3V	NMI		
	19	20	

Back Panel I/O Connectors

#	Definition	#	Description	#	Description
1	COM1	5	USB3	9	LAN5
2	USB1	6	USB2	10	LAN4
3	USB0	7	LAN3	11	VGA
4	LAN1/IPMI	8	LAN2		

Jumpers and Connectors

Jumpers		
Jumper	Description	Default
JBR1	BIOS Recovery	Pins 1-2 (Normal)
JBT1	CMOS Clear	Open: Normal, Chort: Clear CMOS
JIC2C1/JIC2C2	SMB to PCI-E Slots Enable/Disable	Pins 1-2 (Enabled)
JNCS1	IPMI Shared LAN Port Selection	ON (short): LAN1, OFF (open): LAN2
JPG1	Onboard VGA Enable/Disable	Pins 1-2 (Enabled)
JPL1	LAN1 GbE Enable/Disable	Pins 1-2 (Enabled)
JPME2	ME Manufacturing Mode	Pins 1-2 (Normal)
JPTG1	LAN2/3/4/5 10GbE Enable/Disable	Pins 1-2 (Enabled)
JSEL1	PCI-E Slot Selection	Pins 1-2: Slot 7, Pins 2-3: Slot 6
JWD1	Watch Dog	Pins 1-2 (Reset)

Connectors	
BT1	Onboard battery
COM1	COM Port (on the rear I/O panel)
COM2	COM Header
FAN1 - FAN4, FANA, FANB	CPU/System Fan Headers
IPMI_LAN	Shared IPMI LAN Port (Default: shared with LAN1)
I-SATA0-1	Intel® PCH SATA 3.0 Ports (I-SATA0: SuperDOM)
JD1	Speaker/Buzzer (Pins 1-4: Speaker, Pins 3-4: Buzzer)
JF1	Front Control Panel Header
JIPMB1	System Mangement Bus Header (for IPMI card)
JL1	Chassis Intrusion Header
JMD1	M.2 B-Key PCIe3/SATA3/USB3 Connector
JMD2	M.2 M-Key PCIe3/SATA3 Connector
JPI2C1	Power Supply SMBus I2C Header
JPH1	4-pin Power Connector for HDD use
JPW1	24-pin ATX Power Connector
JPV1	4-pin 12V DC Power Connector (To provide alternative power for the special enclosure when the 24-pin ATX power is not in use.)
JRT3	Thermal Diode 1
JRT4	Thermal Diode 2
JSD1	SATA DOM Power Connector
JSMB1	System Management Bus Header
JTGLED1	LAN4/LAN5 Activity LED Header
JTPM1	Trusted Platform Module (TPM)/Port80 Header
JUIDB1	Unit ID Button
LAN1 - LAN5	LAN1: Gigabit Ethernet (RJ45) Port LAN2 ~ 5: 10Gigabit Ethernet (RJ45) Ports
SLOT6, SLOT7	PCI-E 3.0 x8 Slots (single slot use, selectable with JSEL1)
SRW1 - SRW4	M.2 Holding Screws
USB0/1, USB2/3	Back Panel USB 3.0 Ports
USB4/5	Front Accessible USB 2.0 Header
USB6	USB 3.0 Type A Header
VGA	VGA Port

LED Indicators

LED Indicators		
LED	Description	Status
LED1	Power LED	Solid Green: Power On
LEDBMC	BMC Heartbeat	Blinking Green: BMC Normal
UIDLED1	UID LED	Solid Blue: Unit Identified

CPU Support

The A2SDV-8C/-12C+/-16C-TLN5F motherboard supports an Intel® Atom C3000 series with up to 16 Cores and a TDP of 31W.

Memory Support

The A2SDV-8C/-12C+/-16C-TLN5F motherboard supports up to 256GB of ECC RDIMM and 64GB of Non-ECC/ECC UDIMM DDR4 memory with speeds of up to 2400MHz.

DIMM Memory Installation

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

- Always use DDR4 DIMM modules of the same type, size, and speed.
- Mixed DIMM speeds can be installed. However, all DIMMs will run at the speed of the slowest DIMM.
- The motherboard will support odd-numbered modules (1 or 3 modules installed). However, for best memory performance, install DIMM modules in pairs to activate memory interleaving.

Recommended Population (Balanced)				
DIMMA1	DIMMB1	DIMMA2	DIMMB2	Total System Memory
4GB	4GB			8GB
4GB	4GB	4GB	4GB	16GB
8GB	8GB			16GB
8GB	8GB	8GB	8GB	32GB
16GB	16GB			32GB
16GB	16GB	16GB	16GB	64GB
32GB	32GB			64GB
32GB	32GB	32GB	32GB	128GB
64GB	64GB			128GB
64GB	64GB	64GB	64GB	256GB

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.

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

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

