

SUPERMICR®
A2SDV-LN8F/LN10PF
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

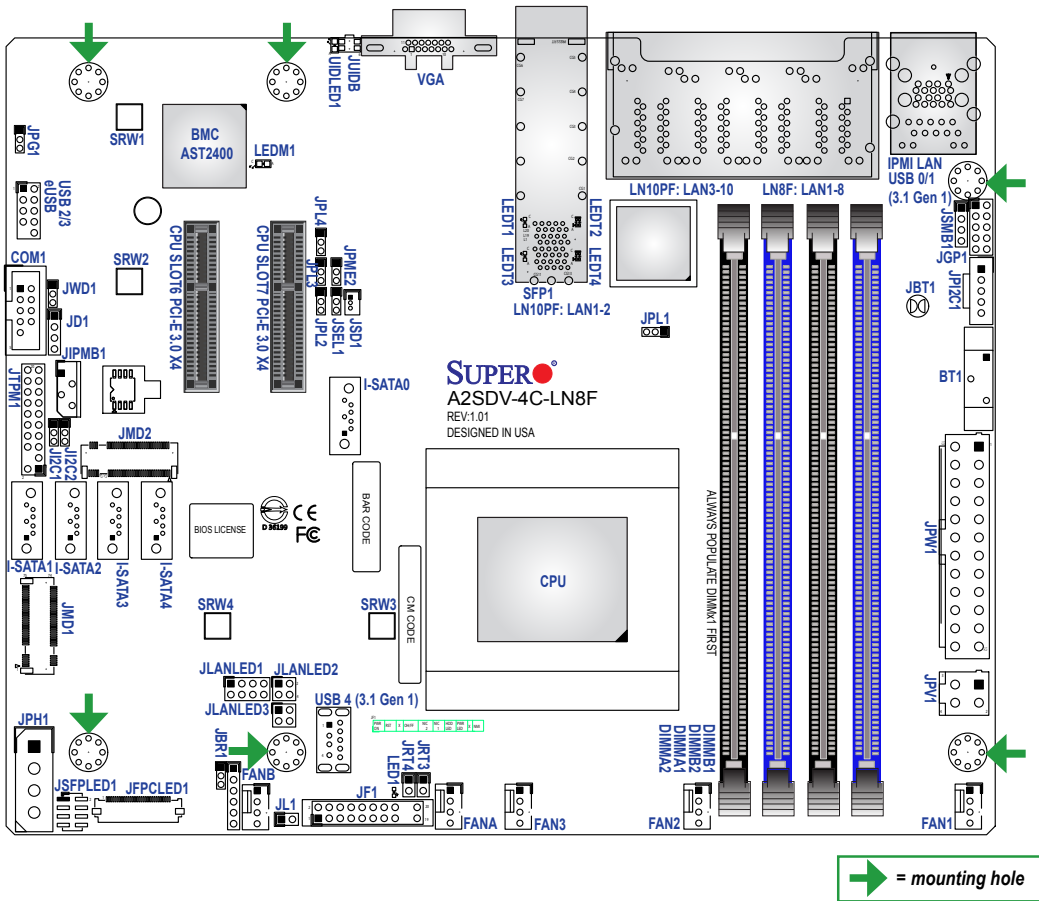
- One (1) Supermicro Motherboard
- Five (5) SATA Cable (three on -4C SKU)
- One (1) I/O Shield
- One (1) Quick Reference Guide



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.

- One (1) Plastic Standoff

Motherboard Layout and Features



Front Control Panel (JF1)

PWR } Power Button	1	2	Ground
	○	○	
Reset } Reset Button	○	○	Ground
	○	○	
3.3V	○	○	Power Fail LED
UID LED	○	○	OH/Fan Fail LED
3.3V Stby	○	○	LAN2 Activity LED
3.3V Stby	○	○	LAN1 Activity LED
3.3V Stby	○	○	HDD LED
3.3V	○	○	PWR LED
X	○	○	X
NMI	○	○	Ground
	19	20	

Back Panel I/O Connectors

#	-LN8F Description	-LN10PF Description
1	IPMI LAN	IPMI LAN
2	USB1	USB1
3	USB0	USB0
4	LAN2	LAN4
5	LAN1	LAN3
6	LAN4	LAN6
7	LAN3	LAN5
8	LAN6	LAN8
9	LAN5	LAN7
10	LAN8	LAN10
11	LAN7	LAN9
12	N/A	LAN2
13	N/A	LAN1
14	VGA	VGA

Jumpers and Connectors

Jumpers		
Jumper	Description	Default
JBR1	BIOS Recovery	Pins 1-2 (Normal)
JBT1	CMOS Clear	Open: Normal, Short: Clear CMOS
JI2C1, JI2C2	SMB to PCI-E Slots Enable/Disable	Pins 2-3 (Disabled)
JPG1	Onboard VGA Enable/Disable	Pins 1-2 (Enabled)
JPL1	LAN1 SFP Port Enable/Disable (LN10PF only)	Pins 1-2 (Enabled)
JPL2	LAN2 SFP Port Enable/Disable (LN10PF only)	Pins 1-2 (Enabled)
JPL3	LN8F: LAN1-4 Ports Enable/Disable LN10PF: LAN3-6 Ports Enable/Disable	Pins 1-2 (Enabled)
JPL4	LN8F: LAN5-8 Ports Enable/Disable LN10PF: LAN7-10 Ports Enable/Disable	Pins 1-2 (Enabled)
JPME2	ME Manufacturing Mode	Pins 1-2 (Normal)
JSEL1	PCI-E Slot 6/7 Selection	Pins 1-2: Slot 7
JWD1	Watch Dog	Pins 1-2 (Reset)

Connectors	
BT1	Onboard battery
COM1	COM Header
FAN1 - FAN3, FANA, FANB	CPU/System Fan Headers
IPMI LAN	IPMI LAN Port
I-SATA0-4	SATA 3.0 Ports (SATA3/4 on -8C-LN8F/LN10PF SKUs Only) (-4C-LN10PF: SATA1/2 are disabled when SLOT6/SLOT7 set to PCI-E 3.0 x2 in the BIOS.)
JD1	Speaker (Pins 1-4)
JF1	Front Control Panel Header
JFPCLED1	RJ45 LAN LED Board Cable Connector for FPB-FPE300-LED10
JGP1	General Purpose I/O Header
JIPMB1	System Mangement Bus Header (for IPMI card)
JL1	Chassis Intrusion Header
JLANLED1	LAN3-6 Activity LED
JLANLED2	LAN7-8 Activity LED
JLANLED3	LAN9-10 Activity LED (-LN10PF SKUs Only)
JMD1	M.2 B-Key PCI-E 3.0/SATA 3.0/USB 3.0 Slot
JMD2	M.2 M-Key PCI-E 3.0/SATA 3.0 Slot (8C-LN8F/LN10PF SKUs Only)
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 Header
JSFPLED1	SFP LAN LED Board Cable Connector for FPB-FPE300-LED10 (-LN10PF SKUs Only)
JSMB1	System Management Bus Header
JTPM1	Trusted Platform Module (TPM)
JUIDB	Unit ID Button

Connectors and LED Indicators

Connectors	
Connector	Description
LAN1 - LAN10	LN8F: LAN1-8 GbE Ethernet RJ45 Port LN10PF: LAN1-2 GbE Ethernet SFP Port, LAN3-10 GbE Ethernet RJ45 Port
SLOT6, SLOT7	Single PCI-E Expansion Slot (Slot6 or Slot7 selectable with JSEL1) (8C-LN8F/LN10PF: PCI-E 3.0 x4) (4C-LN8F: PCE-E 3.0 x2) (4C-LN10PF: PCI-E 3.0 x2 or Disabled - Selectable in BIOS Setup)
SRW1 - SRW4	M.2 Holding Screws
USB0/1	Back Panel USB 3.1 Gen 1 Ports
USB2/3	Front Accessible USB 2.0 Header
USB4	USB 3.1 Gen 1 Type A Header
VGA	VGA Port

LED Indicators		
LED	Description	Status
LED1	Power LED	Solid Green: Power On
LEDM1	BMC Heartbeat	Blinking Green: BMC Normal
UIDLED1	UID LED	Solid Blue: Unit Identified

CPU Support

The A2SDV-4C/8C-LN8F and A2SDV-4C/8C-LN10PF series motherboard supports an Intel® Atom C3000 series with up to 8 Cores and a TDP of 25W.

Memory Support

The A2SDV-4C/8C-LN8F and A2SDV-4C/8C-LN10PF series motherboard supports up to 256GB of ECC RDIMM or 64GB of Non-ECC/ECC UDIMM DDR4 memory in four DIMM slots.

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.
- The motherboard will support odd-numbered modules (one or three modules installed). Mixed DIMM speeds can be installed. However, all DIMMs will run at the speed of the slowest DIMM. 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.

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