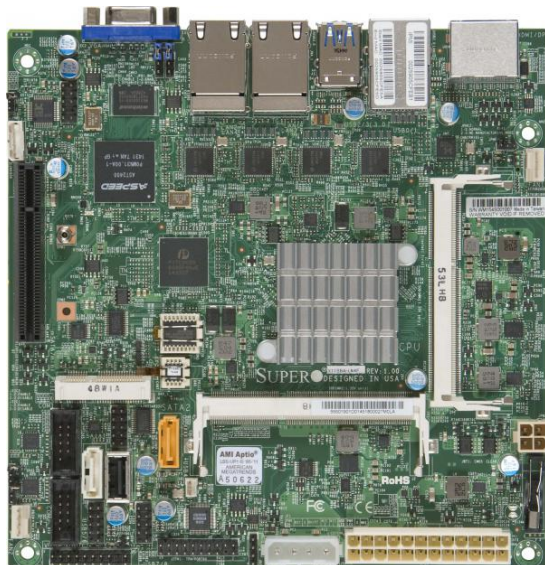


X11SBA-LN4F



IPMI Quad LAN Quad Core Embedded

Key Features

1. Intel® Pentium® Processor N3710., Single Socket FCBGA1170 supported, CPU TDP support 6W
2. System-on-Chip
3. Up to 8GB 1600MHz DDR3 Non-ECC SO-DIMM in 2 sockets
4. 1 PCI-E 2.0 x1 (in x8),
1 Mini-PCIe (mSATA support)
5. Quad GbE LAN w ith Intel® i210-AT
6. 1 HDMI, 1 DP, Intel HD Graphics,
VGA port for BMC
7. 2 USB 3.0 ports (2 rear), 7 USB 2.0 (2 rear, 4 via header(s), 1 Type A)
8. I/O: 1 SATA DOM, 2 COM, TPM 1.2 header, ALC 888S HD Audio
9. IPMI 2.0 w ith dedicated Port and KVM
10. Supports 12V DC pow er input

Links & Resources

[Tested Memory List](#)

[Tested M.2 List](#)

[Tested AOC List](#)

[Motherboard Manual](#)

[Quick Reference Guide](#)

[Update Your BIOS](#)

[BMC/IPMI Firmware](#)

[Download the Latest Drivers and Utilities](#)

[Download Drivers CD](#)

[OS Compatibility](#)

[Optimization](#)

Specifications

Product SKUs

MBD-X11SBA-LN4F	■ X11SBA-LN4F
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Physical Stats

Form Factor	■ Mini-ITX
Dimensions	■ 6.7" x 6.7" (17.02cm x 17.02cm)

Processor/Cache

CPU	■ Intel® Pentium® Processor N3710. ■ Single Socket FCBGA1170 supported, CPU TDP support 6W
Cores / Cache	■ 4 cores, 4 threads / 2MB L2 cache

System Memory

Memory Capacity	■ Up to 8GB Unbuffered non-ECC SO-DIMM, DDR3-1600MHz, in 2 DIMM slots ■ Max total memory up to 8GB only
Memory Type	■ 1600/1333/1066MHz DDR3 SO-DIMM, 204-pin gold-plated DIMMs
DIMM Sizes	■ 2GB, 4GB, 8GB
Memory Voltage	■ 1.35V

On-Board Devices

Chipset	■ System on Chip
SATA	■ SoC controller for 2 SATA3 (6 Gbps) ports;
IPMI	■ IPMI 2.0 w ith virtual media over LAN and KVM-over-LAN support
Network Controllers	■ Quad LAN w ith Intel® Ethernet Controller I210-AT Single LAN w ith 1 Realtek RTL8211E PHY (dedicated IPMI)
Audio	■ ALC 888S HD Audio
Graphics	■ SoC, Aspeed AST2400 BMC ■ Intel HD Graphics via SoC

Input / Output

SATA	■ 2 SATA3 (6Gbps) port
LAN	■ 4 RJ45 Gigabit Ethernet LAN ports ■ 1 RJ45 Dedicated IPMI LAN port
USB	■ 7 USB 2.0 ports (2 rear + 4 headers + 1 Type A) ■ 2 USB 3.0 ports (2 rear)
Video Output	■ 1 HDMI port, 1 DP (DisplayPort) port, 1 VGA port, ■ Intel HD Graphics via SoC
Serial Port / Header	■ 2 COM Ports (2 headers)
TPM	■ 1 TPM Header

Expansion Slots

PCI-E	■ 1 PCI-E 2.0 x1 (in x8 slot) ■ 1 Mini-PCI-E w ith mSATA support
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System BIOS

BIOS Type	■ AMI UEFI
BIOS Features	■ ACPI 5.0 ■ UEFI 2.3.1 ■ Plug and Play (PnP) ■ SMBIOS 2.7.1 ■ DMI 2.3 ■ USB Keyboard support ■ RTC (Real Time Clock) Wakeup

Management

Software	■ IPMI (Intelligent Platform Management Interface) v2.0 w ith KVM support, IPMI2.0, KVM w ith dedicated LAN, NMI, SuperDoctor® 5, Watchdog
Power Configurations	■ ACPI Pow er Management ■ Pow er-on mode for AC pow er recovery

PC Health Monitoring

Voltage	■ +1.8V, +12V, +3.3V, +5V, +5V standby, Chassis intrusion header, Memory, Memory Voltages, Supports system management utility, System level control, System temperature, VBAT
FAN	■ 2x 4-pin fan headers (up to 2 fans), Fan speed control, Low noise fan speed control, Overheat LED indication, Pulse Width Modulated (PWM) fan connectors, PWM fan speed control, System level control, Thermal control tachometer fan connectors
Temperature	■ Monitoring for CPU and chassis environment, CPU thermal trip support, Thermal Monitor 2 (TM2) support, PECI
LED	■ Standby alert LED, CPU / System Overheat LED
Other Features	■ 12V DC or ATX Pow er Source, 4-pin 12v DC pow er connector, ACPI pow er management, ATX Pow er connector, Chassis intrusion detection, Chassis intrusion header, Control of pow er-on for recovery from AC pow er loss, CPU thermal trip support for processor protection, RoHS, System level control, UID, WOL

Operating Environment

Operating Temperature Range	■ 0°C ~ 60°C (32°F ~ 140°F)
Non-Operating Temperature Range	■ -20°C ~ 60°C (-4°F ~ 140°F)
Operating Relative Humidity Range	■ 10% ~ 85% (non-condensing)
Non-Operating Relative Humidity Range	■ 10% ~ 95% (non-condensing)

Parts List

Parts List (Bulk Package)			
Name	Part Number	Qty	Description
Motherboard	MBD-X11SBA-LN4F	1	X11SBA-LN4F Motherboard
I/O Cables	CBL-0044L	1	57.5CM SATA FLAT S-S PBF
I/O Shield	MCP-260-00058-0N	1	Standard I/O Shield for X10SBA with EMI Gasket

Parts List (Retail Package)			
Name	Part Number	Qty	Description
Motherboard	MBD-X11SBA-LN4F	1	X11SBA-LN4F Motherboard
QRG	MNL-1794-QRG	1	Motherboard Quick Reference Guide
I/O Cables	CBL-0044L	2	57.5CM SATA FLAT S-S PBF
I/O Shield	MCP-260-00058-0N	1	Standard I/O Shield for X10SBA with EMI Gasket

Optional Parts List			
Name	Part Number	Qty	Description
1U I/O Shield	MCP-260-00068-0B	--	1U I/O Shield for X10SBA with EMI Gasket in CSE-510/505/504
mSATA 64GB	SSD-DM064-PHI	--	Supermicro mSATA 64GB MLC
mSATA 128GB	SSD-DM128-SMCMVN1	--	Supermicro mSATA 128GB MLC
TPM security module	AOM-TPM-9655V AOM-TPM-9655H	--	TPM Module with Infineon 9655, RoHS/REACH,PBF; Vertical or Horizontal

Chassis (Optimized for X11SBA-LN4F)

Embedded Compact	1U	2U	3U	Mid/Mini-Tower	4U/Tower
	SC504-203B SC505-203B				

 = Most optimized Chassis for SuperServer Configuration
Blue color = Compatible
Green color = Global SKU & Compatible
Red dot & green color = Optimized + Global SKU

Server (Optimized for X11SBA-LN4F)

Server Name
SYS-E200-9B