PDSML-LN2

- RoHS Compliant
- Best Thermal Optimized Design
- Most Cost Effective UP Solution
- Smallest Dual Core CPU Server micro1U

Key Features

1. Intel® Pentium® D, Pentium® 4 Extreme Edition, Pentium 4, Pentium Extreme Edition & Celeron D in LGA775 Package(FSB 1066/800/533)
2. Intel® E7230 (Mukilteo) Chipset
3. Up to 8GB unbuffered ECC / non-ECC DDR2 667/533 SDRAM
4. 1x Intel® 82573L PCI-e Gigabit LAN 1x Intel® 82573V PCI-e Gigabit LAN
5. Built-in SATA ICH7R Controller 4x SATA (3 Gbps) Drive with RAID 0, 1, 5, 10 Support
6. 1 (x4) PCI-Express, 1 Universal [1 (x8) PCI-Express, or 1x 32-bit 33MHz PCI] slot, 1x 32-bit 33MHz PCI
7. On board XGI XG20 Graphics with DDR 16MB video memory
8. 1U IPMI 2.0

Links & Resources

- Tested Memory List
- Motherboard Manual
- Update Your BIOS
- Download the Latest Drivers and Utilities

Product SKUs	
MBD-PDSML-LN2-O	▪ PDSML-LN2 (Standard Retail Pack)
MBD-PDSML-LN2-B	▪ PDSML-LN2 (Bulk Pack)

Physical Stats	
Form Factor	▪ MicroATX (uATX)
Dimensions	▪ 9.6" width x 9.6 " length , (24.4cm x 24.4cm), 6 layers

Processor/Cache	
CPU	▪ Single LGA775 ZIF Socket ▪ Supports an **Intel® Pentium® D (Smithfield Dual Core)** processor ▪ Supports an **Intel® Pentium® Extreme Edition** processor ▪ Supports an **Intel® Pentium® 4** processor up to 3.8GHz ▪ Supports an **Intel® Pentium® 4 Extreme Edition** processor up to 3.73GHz ▪ Supports an **Intel® Celeron® D** processor with 256KB L2 Cache up to 3.06GHz ▪ Hyper-Threading (HT) capable ▪ 2MB / 1MB L2 Cache ▪ Will not support E2000 processors
System Bus	▪ 1066 / 800 / 533 MHz system bus

System Memory	
Memory Capacity	▪ Four 240-pin DIMM sockets ▪ Supports up to 8 GB of unbuffered ECC / non-ECC 533/667MHz memory
Memory Type	▪ DDR2 667/533MHz unbuffered ECC / non-ECC SDRAM, 240-pin gold-plated DIMMs
DIMM Sizes	▪ 256 MB, 512 MB, 1 GB, 2GB
Memory Voltage	▪ 1.8V only

On-Board Devices	
Chipset	▪ Intel E7230 (Mukilteo) Smithfield chipset ▪ ICH7R + Intel® 82573V/L
Serial ATA	▪ Intel® ICH7R SATA2 (3 Gbps) controller built-in ▪ Intel: RAID 0, 1, 5, 10 support (Windows Only) ▪ Adaptec: RAID 0 (Two, three, four drives only) RAID 1 (Two hard drives only)
IPMI	▪ 1U support for Intelligent Platform Management Interface v.2.0 (Optional: AOC-1UIPMI-B)
Network Controllers	▪ 1x Intel® 82573V Gigabit PCI-Express Ethernet ▪ 1x Intel® 82573L Gigabit PCI-Express Ethernet ▪ Supports 10Base-T, 100Base-TX, 1000BASE-TX, RJ45 output
VGA	▪ On-board XGI XG20 graphics, 16MB DDR video memory
Super I/O	▪ Winbond 83627H chip
Clock Generator	▪ CK410

Input / Output	
Serial ATA	▪ Four Serial ATA ports (3 Gbps performance) ▪ Four SATA hard drives supported
IDE	▪ One EIDE channel supports up to two UDMA IDE devices
Floppy	▪ 1 Floppy controller; 1.44 MB
LAN	▪ 2x RJ45 LAN ports
USB	▪ 6x USB 2.0 compliant / 1.1 compatible ▪ 4x internal USB headers ▪ 2x rear ports
VGA	▪ 1x VGA Port
Keyboard / Mouse	▪ PS/2 keyboard and mouse ports
Serial Ports	▪ 1x Fast UART 16550 serial port ▪ 1x Header

▪ SC733T-645

Chassis (Optimized for PDSML-LN2)	
1U	▪ SC811T-300 (Do not use riser card bracket with IPMI card) ▪ SC513F-260 (OEM and SuperServer only) ▪ SC512F-260 (OEM and SuperServer only) ▪ SC813MFT-300 (OEM and SuperServer only) ▪ CSE-510-200B
4U / Tower	▪ SC743i-645 ▪ SC743i-650 ▪ SC743i-R760 ▪ SC742i-450 ▪ SC742i-600
Important Note	▪ Only Supermicro 1U chassis is recommended for 1U Building Block Solutions

Expansion Slots	
PCI-Express	▪ 1 (x4) PCI-e slot ▪ 1 Universal [1 (x8) PCI-Express or 1x 32-bit 33MHz PCI] slot
PCI	▪ 1x 32-bit 33MHz PCI (5V) slot
IPMI	▪ 1U IPMI x1

System BIOS	
BIOS Type	▪ 8Mb Flash EEPROM with Phoenix BIOS®
BIOS Features	▪ Plug and Play (PnP) ▪ DMI 2.3 support ▪ PCI 2.2 ▪ ACPI 1.0 ▪ ACPI 1.0 (limited) ▪ USB Keyboard support ▪ SMBIOS 2.3

Management	
Software	▪ Optional IPMI (Intelligent Platform Management Interface) 2.0 ▪ SuperDoctor® III ▪ Watch Dog
Power Configurations	▪ ACPI / ACPM Power Management ▪ Main Switch Override Mechanism ▪ Wake-On-LAN (WOL) header ▪ Power-on mode control for AC power loss recovery

PC Health Monitoring	
Voltage	▪ Monitors for CPU Cores +1.8V, +3.3V, +5V, ±12V, +5V Standby ▪ CPU 4-Phase-switching voltage regulator with auto-sense from 0.8375V-1.6000V
FAN	▪ Total of six 4-pin fan headers ▪ 6 fans with tachometer monitoring ▪ Status monitor with firmware speed control ▪ Low noise fan speed control ▪ Status monitor for on/off control ▪ Support 3-pin fans (without speed control) ▪ Pulse Width Modulated (PWM) fan connector
Temperature	▪ Monitoring for CPU and chassis environment ▪ Thermal Monitor 2 (TM2) support ▪ CPU Thermal Trip support
LED	▪ +3.3V Standby Alert LED ▪ CPU / system overheat LED
Other Features	▪ Chassis Intrusion Detection ▪ Chassis Intrusion Header

Operating Environment / Compliance	
RoHS	▪ RoHS Compliant 6/6, Pb Free
Environmental Spec.	▪ Operating Temperature: 10°to 35°C (50°to 95°F) ▪ Non-operating Temperature: -40°to 70° C (-40°to 158°F) ▪ Operating Relative Humidity: 8% to 90% (non-condensing) ▪ Non-operating Relative Humidity: 5 to 95% (non-condensing)

OS Compatibility
• Please see our OS Compatibility Chart

Regulatory	
FCC	▪ Passed to meet FCC standard requirement

Note: For optimized or compatible chassis, additional parts may be required, please check with Supermicro sales rep

Parts List

Standard Retail Package			
	Part Number	Qty	Description
PDSML-LN2	MBD-PDSML-LN2-O	1	PDSML-LN2 Motherboard
Manual(s)	MNL-0839	1	Motherboard Manual for PDSML-LN2
I/O Cables	CBL-0022L	1	ATX Floppy Cable
	CBL-0036L-03	1	ATA 66/100 IDE LP Cable
	CBL-0044L	4	SATA Cable (2Ft.)
Driver Disk	CDR-PD	1	Version 1.21 (or newer) CD
I/O Shield	CSE-PT07L	1	I/O Shield for PDSML-LN2

Optional Parts List			
	Part Number	Qty	Description
Heat Sink	SNK-P0016	-	1U, Pentium® D LGA775, Passive Heatsink
Riser Card	RSC-RR1U-32L	-	1U 32-bit PCI Riser Card for PDSML-LN2 (Full height, full length)
	RSC-RR1U-E8	-	1U Universal (SXB-E) Slot to PCI-E Slot Riser Card for PDSML-LN2

Note: Items in a Standard Retail Package may differ from items in a Standard Bulk Package.

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Specifications