

Industrial Single Board Computer

5.25" Embedded Miniboard

LS-573

Support Intel Penryn CPU with DDRIII SO-DIMM, CRT, LVDS, DVI, HDTV, Gigabit LAN, PCI slot, USB, Serial ATAll, Mini PCI, PCI Express mini card, HD Audio, RS232/422/485.



Form Factor	5.25-inch Embedded Miniboard
CPU	Support Intel Penryn Processor Package type: Micro-FCPGA478 (Socket-P) Front side bus: 667/800/1066 MHz
Memory	Two DDRIII 800/1066 up to 8GB
Chipset	Intel GM45 & ICH9-M (82801BM)
Real Time Clock	Chipset integrated RTC with onboard lithium battery
Watchdog Timer	Generates a system reset with internal timer for 1min/s ~ 255min/s
Power Management	ACPI 1.0 compliant, supports power saving mode
Serial ATA Interface	4 x serial ATAll interface with 300MB/s transfer rate
VGA Interface	Intel integrated extreme GMA 4500MHD(Graphic Media Accelerator) Technology One optional RGB DAC with 10-pin DB9 connector (Only LS-573T2X)
Video Memory	Up to 384MB shared with system memory
DVI Interface	Onboard DVI transmitter with 26-pin DVI connector (Only LS-573TXD)
LVDS Interface	Onboard 18/24-bit dual channel LVDS interface with +3.3V/+5V/+12V supply
Audio Interface	Intel integrated ICH9-M with Realtek ALC888 HD Audio
LAN Interface	6 x Intel 82574L Gigabit LAN
GPIO interface	Onboard programmable 8-bit Digital I/O interface
Extended Interface	One PCI Express mini card, One PCI slot, One Mini PCI Type IIIA socket
Internal I/O Port	1 x GPIO, 1 x Parallel, 6x USB, 1 x LVDS, 1 x LCD inverter connector, 1 x HDTV, 1 x Front panel Audio, 1 x CDIN connector, 1 x PS/2, 1 x RS232/422/485, 4 x RS-232, 1 x IrDA, 1 x SMBus, 1 x DVI (Only LS-573TXD), 1 x VGA (Only LS-573T2X)
External I/O Port	1 x RS-232 Port, 6 x LAN Port, 2 x USB Port, 1 x VGA Port, 1 x DC connector
Temperature	Operating within 0~60 centigrade Storage within -20~85 centigrade
Power Requirement	Standard 20-pin ATX power supply or 9~24V full range DC Input (8~30V is operative)
Dimension	203 mm x 146 mm

Ordering Code

LS-573TX	Onboard CRT, LVDS, HDTV, 6 x Intel Gigabit LAN, 8 x USB2.0, PCI, Mini-PCI, GPIO, IrDA, PCI Express mini card, Parallel, RS232/422/485, 4 x SATA, HD Audio and SMBus
LS-573T2X	Onboard 2 X CRT , LVDS, HDTV, 6 x Intel Gigabit LAN, 8 x USB2.0, PCI, Mini-PCI, GPIO, IrDA, PCI Express mini card, Parallel Port, RS232/422/485, 4 x SATA, HD Audio and SMBus
LS-573TXD	Onboard CRT, LVDS, HDTV, 6 x Intel Gigabit LAN, 8 x USB2.0, PCI, Mini-PCI, GPIO, IrDA, PCI Express mini card, Parallel, RS232/422/485, 4 x SATA, HD Audio and SMBus, DVI
MPX-574D	PCI Express mini card supports single Giga LAN (Only LS-573TX)
MPX-SDVOD	SDVO to DVI module (LS-573TX, LS-573TXD, LS-573T2X)
ADP-L2T	18bit LVDS to TTL module

For further product information please visit the website at <http://www.commell.com.tw>

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Stage For Your Success

LS-573

5.25" Miniboard with 6 x Intel Gigabit Ethernet

5.25" Mainboard with Intel® GM45 provides platform for Intel® Core™ 2 Duo with Socket P @ FSB 667/800/1066 MHz, DDR3 up to 8GB, 6 Giga LAN, CRT, LVDS, HDTV, SATA, HD Audio, 6 x COM, Mini PCI and PCI expand slot



Overview

Taiwan Commate Computer Inc.(COMMELL), the worldwide leader of single board computers, introduced the 5.25" LS-573 that miniboard incorporates an Intel Socket P pin-out compatible with Intel Core 2 Duo Mobile Penryn or Core 2 Extreme processors @ [FSB 667/800/1066 MHz](#) support for T8100, T8300, T9300, T9400, T9500, X9100, X9000 & Mobile Celeron 578,575, Validated with the [Mobile GM45](#) Express chipset, providing excellent flexibility for developers of embedded applications by offering outstanding

graphics, memory and I/O bandwidth, asset management capabilities, storage speed and reliability, such as interactive clients, gaming platforms and industrial automation equipment. **It also comes with six Intel Gigabit LAN ports, was specifically designed for mainstream IDS/IPS, Anti-virus, VPN gateway and UTM applications.**

The LS-573 Miniboard integrated Mobile Intel Graphics Accelerator 4500MHD, Intel Clear Video Technology, and graphics core speeds up to 533MHz provide enhanced graphics and 3D rendering performance and enable high-definition video playback, it also supports for numerous display, includes VGA, LVDS, HDTV,DVI.

COMMELL's LS-573 Miniboard supports **DDR3 SDRAM** up to 8GB, and comes with PS/2 Keyboard and Mouse, 5 x RS232C and 1 x RS232/422/485, 8 x USB2.0 ports, It offers Realtek ALC888 HD audio, 4 x SATA interface, Expansion with one Mini PCI, one PCIe mini card, one PCI slot.

Key Feature

- **CPU:** Intel® Core™ 2 Duo processor with Socket P @ 667/800/1066 MHz FSB
- **Memory:** 2 x DDR3 SO-DIMM support 800/1066 MHz up to 8GB.
- **Chipset:** Intel® GM45 and ICH9M.
- **VGA Interface:** built-in Intel® extreme GMA 4500MHD Technology.
- **LVDS interface:** Onboard 24-bit Dual channel LVDS connector.
- **DVI interface:** Onboard 26-pin DVI connector (LS-573TXD).
- **Serial ATA:** 4 x Serial ATA interface with 300 MB/s transfer rate.
- **LAN Interface:** 6 x Intel® 82574L Gigabit Ethernet .
- **Audio:** Realtek ALC888 HD Audio.
- **GPIO interface:** Onboard 8-bit Digital I/O interface.
- **Extended interface:** 1 x PCI , 1 x Mini-PCI and 1 x PCI Express Mini card.
- **External I/O ports:** 6 x LAN , 2 x USB , VGA , COM , DC input connector.

Specification

Form Factor	5.25" Miniboard (203 x 146 mm)
CPU	Intel® Core 2 Duo with Socket P @ 667/800/1066 MHz FSB
Memory	2 x DDR3 SO DIMM support 800/1066 MHz up to 8GB
Chipset	Intel® GM45 & ICH9M
Real Time Clock	Chipset integrated RTC with onboard lithium battery
Watchdog Timer	Generates a system reset internal timer for 1sec/min ~ 255 sec/min
Power Management	ACPI 1.0 compliant, supports power saving mode
VGA Interface	Intel® GM45 integrated GMA 4500MHD Technology
LVDS Interface	24-bit dual channel LVDS interface
DVI Interface	Onboard 26-pin DVI connector (LS-573TXD only)
Serial ATA Interface	4 x Serial ATA Interface with 300 MB/s transfer rate.
Audio Interface	Realtek ALC888 HD Audio
LAN Interface	6 x Intel® 82574L Gigabit Ethernet
GPIO Interface	Onboard programmable 8-bit digital I/O interface
Extend Interface	PCI slot , Min-PCI and PCI Express Mini card sockets

External I/O Port	6 x RJ45 LAN, 2 x USB, 1 x DC input, 1 x VGA, 1 x COM
Internal I/O Port	1 x RS232/422/485, 4 x RS232, 1 x IrDA, 4 x USB 2.0, 1 x 8-bit GPIO, 1 x Audio, 1 x CDIN, LVDS and LCD inverter connector, 1 x HDTV, 1 x SMBus, 1 x DVI (LS-573TXD only) 1 x VGA (LS-573T2X only)
Power Requirement	Standard 20-pin ATX P/S or DC 9V ~ 24V full range input
Board Dimension	203mm x 146mm (L x W)
Operation Temperature	0 ~ 60°C (32 ~ 140°F)

Ordering Guide	
LS-573TX	Intel® Core™ 2 Duo 5.25" Miniboard with onboard 6 x LAN, SATA, USB 2.0 port, Audio, RS232/422/485, PCI, Min-PCI, PCI Express Mini card slots interface, CRT and LVDS
LS-573T2X	Intel® Core™ 2 Duo 5.25" Miniboard with onboard 6 x LAN, SATA, USB 2.0 port, Audio, RS232/422/485, PCI, Min-PCI, PCI Express Mini card slots interface, 2 x CRT and LVDS
LS-573TXD	Intel® Core™ 2 Duo 5.25" Miniboard with onboard 6 x LAN, SATA, USB 2.0 port, Audio, RS232/422/485, PCI, Min-PCI, PCI Express Mini card slots interface, CRT, LVDS and DVI
LS-573BIR (Hot For POS !!)	Intel® Core™ 2 Duo 5.25" Miniboard with onboard 1 x LAN , SATA, USB 2.0 port, Audio, RS232/422/485, PCI, Min-PCI, PCI Express Mini card slots interface, CRT only 4 x COM (COM1, COM2 support 5V/12V, jumper setting)