

LV-677

Intel Core™ Duo / Core 2 Duo Mini-ITX^{express} Motherboard

**Intel Core™ Duo processor support with Intel 945GM & ICH7M ,
DDR2 up to 3GB , Intel Gigabit Ethernet , 6 x USB 2.0 , 2 x COM , 1 x SIR ,
Realtek 5.1 channel Audio, IEEE1394 and GPIO Interface, SPDIF, 2 x SATA
PCI Express x16 slot & 2 x Mini-PCI socket**



Overview

COMMELL, the worldwide leader of Industrial Mini-ITX motherboards, introduced the Mini-ITX platform LV-677 based on Intel 945GM and ICH7M Chipset, which supports Intel Core™ Duo processor at 667 MHz FSB, It's Provides up to 25% faster data transfer rate compared to the previous generation bus speed, Dual channel DDR2 533/667 memory architecture in configurations of up to 3 GB RAM, and PCI-Express x16 slot (1x compatible), The new Intel® Graphics Media Accelerator (GMA) 950 provides incredible visual quality, versatile display options, The ICH7M integrated with Realtek 5.1-CH Audio. 18-bit Dual Channel LVDS .

The LV-677 comes with floppy, PS/2 Keyboard and Mouse, UltraATA33 EIDE, 1 x RS232 & 1 x RS232/422/485, 2 x SATA with 150MB/s transfer rate, Networking is provided by Intel 82537L Gigabit Ethernet. 6 x USB2.0 ports for 40X faster data transfer rate and backward compatible to support USB 1.1 devices, 1 x IEEE 1394 and GPIO interface. 1 x SPDIF . Additionally, LV-677 is also equipped with Mini-PCI Interface for easily using wireless card or COMMELL Mini-PCI add-on cards .

The COMMELL LV-677 is designed to meet the needs of applications that require extraordinary computing performance and reliability , which also well supports with the Windows 2000/XP, Linux operation systems.

Key Feature

- **CPU:** Intel Core™ Duo / Core 2 Duo processor (Merom) @ 533 / 677 MHz FSB.
- **Memory:** 2 x 240-pin DDR2 533/667MHz up to 3.0 GB.
- **Chipset:** Intel 945GM and ICH7M.
- **VGA Interface:** built-in Intel Graphics Media Accelerator (GMA) 950 technology.
- **LVDS interface:** Onboard 18-bit Dual channel LVDS connector.
- **Enhanced IDE:** One UltraATA33 IDE interface supports up to 2 ATAPI Devices.
- **Serial ATA:** 2 x Serial ATA interface with 150 MB/s transfer rate.
- **LAN Interface:** 1 x Intel 82573L Gigabit Ethernet .
- **Audio:** Realtek ALC880 5.1 channel Audio.
- **Solid State Disk:** IDE1 supports 44-pin DiskOnModule with +5V power supply. CompactFlash Type-II socket on the solder side .
- **IEEE 1394:** 1 x IEEE1394 port.
- **GPIO interface:** Onboard 8-bit Digital I/O interface.
- **Extended interface:** 2 x Mini-PCI socket and 1 x PCI-Express 16x slot (x1 compatible).
- **Rear I/O ports:** PS/2 Keyboard/Mouse , LPT , VGA , LAN , USB2.0 , Audio , SPDIF , IEEE 1394.

Specification

Form Factor	Mini-ITX _{express} Motherboard (170 x 170 mm)
CPU	Intel Core™ Duo / Core 2 Duo processor (Merom) processor @ 533 / 667 MHz FSB
Memory	2 x DDR2 533/667 MHz SDRAM up to 3.0 GB
Chipset	Intel 945GM & ICH7M
Real Time Clock	Chipset integrated RTC with onboard lithium battery
Watchdog Timer	Generates a system reset internal timer for 1min ~ 255 min
Power Management	ACPI 1.0 compliant, supports power saving mode
PCI Enhanced IDE	1 x Ultra ATA/33 IDE channel up to 2 ATAPI devices
VGA Interface	Intel 945GM integrated GMA(Graphic Media Accelerator) 950 Technology
Video Memory	Up to 224MB shared with system memory
Serial ATA Interface	2 x Serial ATA Interface with 150 MB/s transfer rate.
Audio Interface	Realtek ALC880 5.1 channel Audio

LAN Interface	1 x Intel 82573L Gigabit Ethernet
Solid State Disk	IDE1 supports 44-pin DiskOnModule +5V power supply CompactFlash Type-II on the rear .
GPIO Interface	Onboard programmable 8-bit digital I/O interface
Extend Interface	1 x Onboard x16 PCI-Express slot (x1 mode compatible) 2 x Min-PCI socket
External I/O Port	1x RJ45 LAN port, 1x DB15 VGA port, 1 x PS/2 Keyboard / Mouse ports, 1 x IEEE 1394 ports, 2 x USB 2.0 ports, Audio, SPDIF , DC input connector (LV-677DC version only)
Internal I/O Port	1 x RS232 & 1 x RS232/422/485, 1 x silm FDD, 1 x IrDA , 4 x USB 2.0, 1 x 8-bit GPIO, 1 x Audio, 1 x CDIN LVDS and LCD inverter connector
Power Requirement	Standard 24-pin BTX power supply for LV-677 . (20-pin ATX is compatible) 8 V ~ 21 V full range DC input for LV-677DC .
Board Dimension	170mm x 170 mm (L x W)
Operation Temperature	0 ~ 60oC (32 ~ 140oF)

Ordering Guide

LV-677	Intel Core™ Duo Mini-ITXexpress Motherboard with onboard VGA, LAN, SATA, USB 2.0 ports Audio, IEEE1394, RS232/422/485, Mini-PCI, PCI-Express, 24-pin ATX power connector
LV-677DC	Intel Core™ Duo Mini-ITXexpress Motherboard with onboard VGA, LAN, SATA, USB 2.0 ports Audio, IEEE1394, RS232/422/485, Mini-PCI, PCI-Express, 4-pin PowerDin
MP-954	Mini-PCI Card support 3 x RS232 & 1 x RS232/422/485
MP-323	Mini-PCI Card support 3 x IEEE 1394
MP-541D2	Mini-PCI Card support 2 x Gigabit LAN
MP-878D	Mini-PCI Capture card
MP-2501	Mini-PCI Wireless card
PCIE-SDVOD	PCI-Express module support DVI output
PCIE-SDVOX	PCI-Express module support Support 18/24 bit , Dual channel LVDS