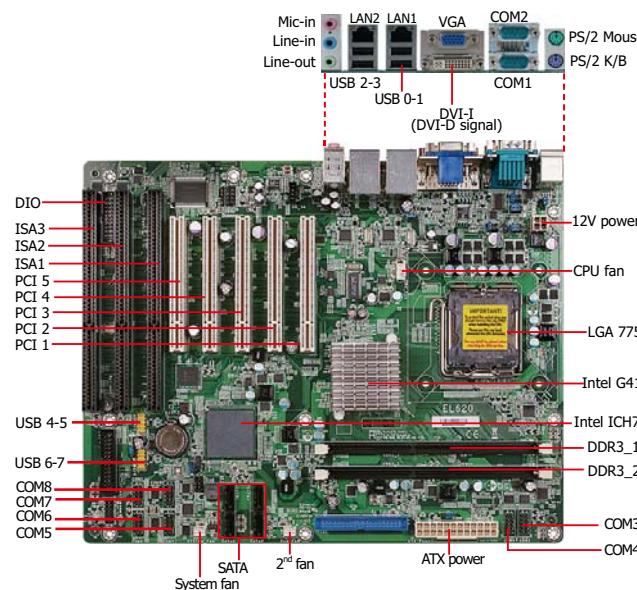




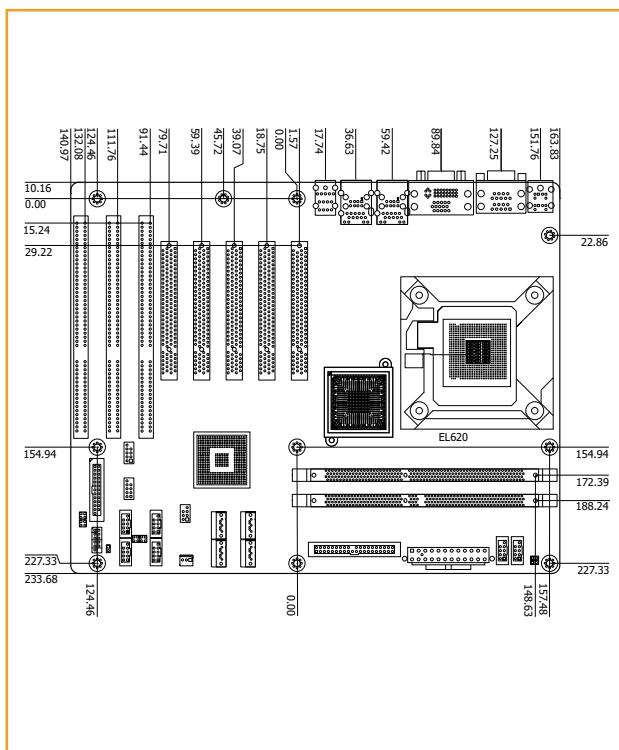
# MB-EL620-C



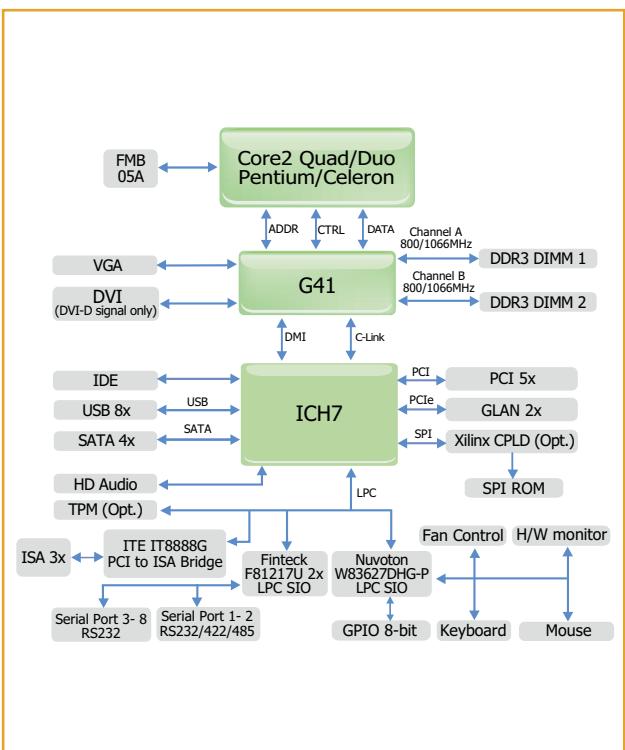
## Features

CHIPSET	<b>Intel® G41/ICH7</b>
CPU	<b>Intel® Core™2 Quad/Duo</b> <b>Intel® Pentium®</b> <b>Intel® Celeron</b>
MEMORY	<b>2 DDR3 DIMM up to 4GB</b>
EXPANSION	<b>5 PCI, 3 ISA</b>
DISPLAY OUTPUTS	<b>1 DVI-I (DVI-D signal), 1 VGA</b>
LAN	<b>2 Gigabit LAN</b>
COM	<b>8 COM</b>
USB	<b>8 USB</b>
SATA	<b>4 SATA</b>
DIO	<b>8-bit DIO</b>

## Mechanical Drawing



## Block Diagram



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## Specifications

### PROCESSOR

- LGA 775 socket supports:
  - Intel® Core™2 Quad Q9400 Rev. A80 or later
  - Intel® Core™2 Duo E8400/E7400/E6400/E4300
  - Intel® Pentium® E6500/E5300/E2160
  - Intel® Celeron® E3400/E1500/440
- Intel® Enhanced Memory 64 Technology (EM64T)
- Enhanced Intel® SpeedStep Technology (EIST)
- 1333/1066/800MHz FSB

### CHIPSET

- Intel® chipset
  - Intel® G41 Express chipset
  - Intel® ICH7 I/O Controller Hub

### SYSTEM MEMORY

- Two 240-pin DDR3 DIMM sockets
- Supports DDR3 800/1066MHz DIMM
- Maximum memory bandwidth of 17GB/s in dual-channel mode when using DDR3 1066MHz
- Supports dual channel memory interface
- Supports up to 4GB system memory
- Supports unbuffered x8 and x16 DIMMs

### EXPANSION SLOTS

- 5 PCI slots (PCI 2.3)
  - 3 ISA slots
- Note: 1 PCI and 1 ISA are shared slots.

### ONBOARD GRAPHICS FEATURES

- Integrated Intel® GMA X4500
  - 3D, 2D and video capabilities, DX10 and OpenGL 2.1
- Display ports: DVI-I (Chrontel CH7307C) and VGA

### ONBOARD AUDIO FEATURES

- Realtek ALC262 2-channel High Definition Audio
- High performance DACs with 100dB SNR
- ADCs with 90dB SNR
- Two stereo DACs support 24-bit PCM format for stereo audio playback
- Three stereo ADCs support 20-bit PCM format for multiple input streaming
- S/PDIF audio interface

### ONBOARD LAN FEATURES

- 2 Realtek RTL8111DL PCI Express Gigabit Ethernet controllers
- 10Mbps, 100Mbps and 1Gbps data transmission
- IEEE 802.3u (10/100Mbps) and IEEE 802.3ab (1Gbps) compliant

### SERIAL ATA (SATA) INTERFACE

- 4 Serial ATA ports compliant with SATA 1.0a specification
- SATA speed up to 3Gb/s (SATA 2.0)

### IDE

- Supports up to two IDE devices
- Ultra ATA 100/66/33

### SUPER I/O

- Winbond W83627DHG-P: supports 8-bit Digital I/O and printer port
- Fintek F81217U: supports COM1 to COM4
- Fintek F81217U: supports COM5 to COM8

### ISA INTERFACE

- ITE IT8888G: PCI to ISA slot bridge
  - 3 ISA slots
  - Does not support ISA Master devices and ISA DMA devices

### REAR PANEL I/O PORTS

- 1 mini-DIN-6 PS/2 mouse port
- 1 mini-DIN-6 PS/2 keyboard port
- 2 DB-9 serial ports
  - Supports RS232/422/485
  - Pins 1 and 9 of RS232 functions as RS232 signal or power (selectable via jumper)
- 1 DB-15 VGA port
- 1 DVI-I port (DVI-D signal)
- 2 RJ45 LAN ports
- 4 USB 2.0/1.1 ports
- Mic-in, line-in and line out jacks

### I/O CONNECTORS

- 2 connectors for 4 external USB 2.0/1.1 ports
- 6 connectors for 6 external RS232 serial ports
- 1 8-bit Digital I/O connector
- 1 front audio connector for line-out and mic-in jacks
- 1 CD-in connector
- 1 S/PDIF connector
- 4 Serial ATA connectors
- 1 40-pin IDE connector
- 1 25-pin parallel connector
- 1 24-pin ATX power connector
- 1 4-pin 12V power connector
- 1 chassis intrusion connector
- 1 front panel connector
- 3 fan connectors

### BIOS

- AMI BIOS
- 8Mbit SPI BIOS

### ENERGY EFFICIENT DESIGN

- ACPI v3.0b specification
- System Power Management
- Wake-On-Events include:
  - Wake-On-PS/2 KB/Mouse
  - Wake-On-USB KB/Mouse
  - Wake-On-LAN
- Microsoft®/Intel® APM 1.2 compliant
- AC power failure recovery

### DAMAGE FREE INTELLIGENCE

- Monitors CPU/System/NB temperature and overheat alarm
- Monitors CPU/DIMM/NB/5V/12V/1.1V/VBAT voltages and failure alarm
- Monitors CPU/System/2nd fan speed and failure alarm
- Read back capability that displays temperature, voltage and fan speed
- Watchdog timer function

### TEMPERATURE

- 0°C to 60°C

### HUMIDITY

- 10% to 90%

### DIMENSIONS

- ATX form factor
- 305mm (12") x 244mm (9.6")

## Packing List

- 1 EL620-C motherboard
- 1 USB cable
- 2 Serial ATA data cables
- 1 Serial ATA power cable
- 1 Bracket mounted with a COM port
- 1 I/O shield
- 1 Drivers/Utilities Disk
- 1 QR (Quick Reference)

## Optional Items

- USB port cable
- COM port cable
- Serial ATA data cables
- Serial ATA power cable

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