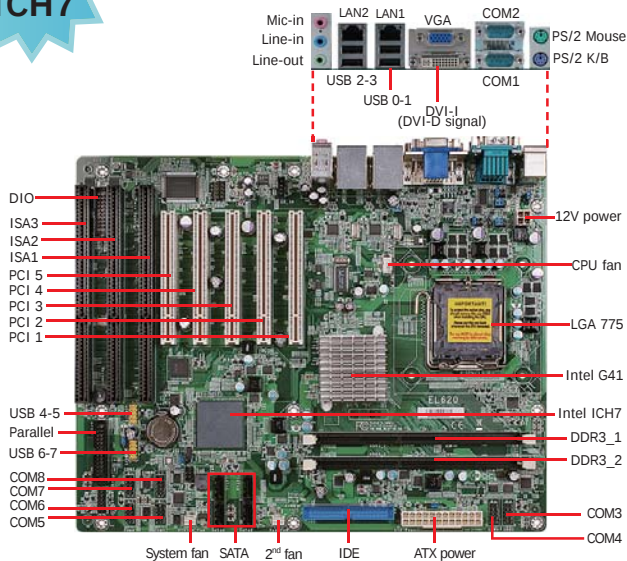


**G41/
ICH7**

Desktop

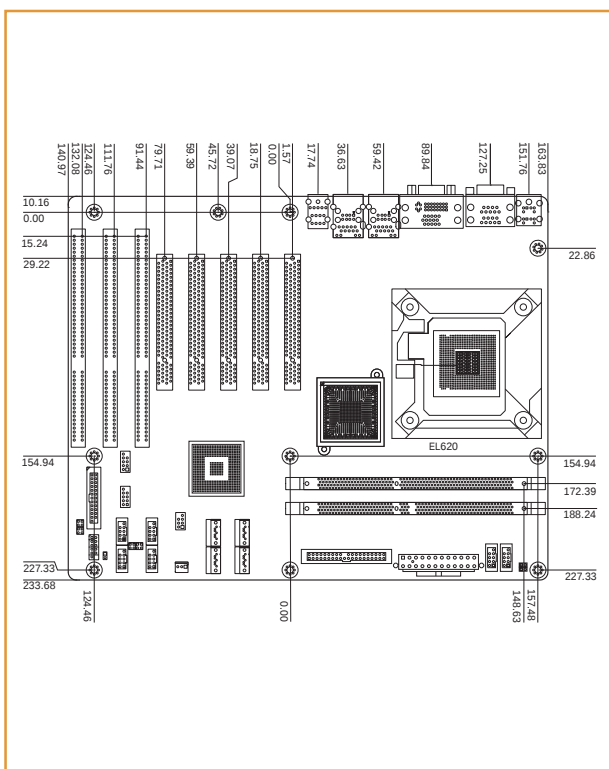


Features

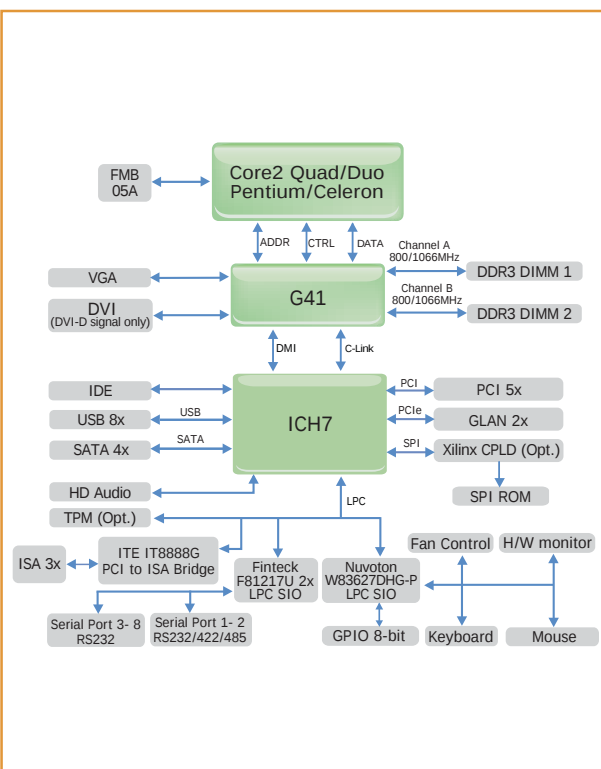
CHIPSET	Intel® G41 / ICH7
CPU	Intel® Core™ 2 Quad / Duo Intel® Pentium® Intel® Celeron®
MEMORY	2 DDR3 DIMM up to 4GB
EXPANSION	5 PCI, 3 ISA
DISPLAY OUTPUTS	1 DVI-I (DVI-D signal), 1 VGA
LAN	2 Gigabit LAN ports
COM	8 COM
USB	8 USB 2.0
PARALLEL	1 Parallel
STORAGE	4 SATA 2.0 1 IDE
DIO	8-bit DIO

3 ISA

Mechanical Drawing



Block Diagram



Specifications

PROCESSOR

- LGA 775 socket supports:
 - Intel® Core™2 Quad Q9400
 - 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

BIOS

- AMI BIOS
 - 8Mbit SPI BIOS

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

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

POWER CONSUMPTION

- 120.85 W with Intel® Core™2 Quad Q9400 at 2.66GHz and 1x 2GB DDR3 DIMM

TEMPERATURE

- 0°C to 60°C

HUMIDITY

- 10% to 90%

DIMENSIONS

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

CERTIFICATION

- CE
- FCC Class B
- UL
- RoHS

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 cable
- Serial ATA power cable
- I/O shield