

EL109-N Intel® G41 Mini-ITX Board

PROCESSOR

- LGA 775 socket for:
 - Intel® Core™2 Quad / Intel® Core™2 Duo, TDP = 95 watts
 - Intel® Wolfdale 45nm processors
- Supports Intel Enhanced Memory 64 Technology (EMT64T)
- Supports Enhanced Intel SpeedStep Technology (EIST)
- 800/1066/1333MHz FSB

CHIPSET

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

SYSTEM MEMORY

- One DDR3 DIMM socket
- Supports single channel memory interface
- 800/1066 MHz DDR3 SDRAM
- Maximum of 2GB system memory

EXPANSION SLOTS

- 1 PCI Express x1 slot

ONBOARD GRAPHICS FEATURES

- Integrated Intel GMA X4500
 - Supports 3D, 2D and video capabilities, DX10 and OpenGL 1.5

ONBOARD AUDIO FEATURES

- Realtek ALC662 High Definition audio CODEC
- Six channel DAC supports 16/20/24-bit PCM format for 5.1 channel audio solution
- All DAC support independent 44.1k/48k/96kHz sample rate
- All ADC support independent 44.1k/48k/96kHz sample rate

ONBOARD LAN FEATURES

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

SERIAL ATA INTERFACE

- Supports 4 SATA (Serial ATA) interfaces which are compliant with SATA 1.0 specification
- SATA speed up to 3Gb/s

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
- 1 DB-15 VGA port
- 1 DVI-I port (DVI-D signal only)
- 2 RJ45 LAN ports
- 4 USB 2.0/1.1 ports
- Mic-in, line-in and line-out

I/O CONNECTORS

- 2 connectors for 4 additional external USB 2.0/1.1 ports
- 2 connectors for 2 external serial ports
- 1 front audio connector
- 4 Serial ATA connectors
- 1 20-pin ATX power connector
- 1 4-pin 12V power connector
- 1 chassis open connector
- 1 front panel connector
- 2 fan connectors

BIOS

- Award BIOS
- 8Mbit SPI BIOS

ENERGY EFFICIENT DESIGN

- Supports ACPI specification and OS Directed Power Management
- Supports ACPI STR (Suspend to RAM) function
- Wake-On-Events include:
 - Wake-On-PS/2 Keyboard/Mouse
 - Wake-On-USB Keyboard/Mouse
 - Wake-On-LAN
 - Wake-On-Ring
 - RTC timer to power-on the system
- System power management supported
- Microsoft®/Intel® APM 1.2 compliant
- Soft Power supported - ACPI v1.0a specification
- AC power failure recovery

DAMAGE FREE INTELLIGENCE

- Monitors CPU/system temperature and overheat alarm
- Monitors CPU/DIMM/3.3V/5V/12V/V5sb/VBAT voltages and failure alarm
- Monitors CPU/system 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%

PCB

- 8 layers, Mini-ITX form factor
- 17cm (6.7") x 17cm (6.7")

REAR PANEL I/O PORTS

