

## EL332-IP Intel® G41 microATX Board

### PROCESSOR

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

### CHIPSET

- Intel® chipset
  - Intel® G41 Express chipset
  - Intel® ICH7R 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

- 1 PCI Express x16 slot (PCIe 1.1)
- 2 PCI Express x1 slots (PCIe 1.1)
- 1 PCI slot (PCI 2.3)

### ONBOARD GRAPHICS FEATURES

- Integrated Intel GMA X4500
  - Supports 3D, 2D and video capabilities, DX10 and OpenGL 1.5
- Display ports: DVI-I (Chrontel CH7307C) and VGA

### ONBOARD AUDIO FEATURES

- Realtek ALC262 2-channel High Definition Audio
- DACs with 100dB SNR and ADCs with 90dB SNR

### ONBOARD LAN FEATURES

- 4 Intel WG82574L PCI Express Gigabit Ethernet controllers
- Supports 10Mbps, 100Mbps and 1Gbps data transmission
- IEEE 802.3u (10/100Mbps) and IEEE 802.3ab (1Gbps) compliant

### SERIAL ATA (SATA) INTERFACE

- SATA speed up to 3Gb/s (SATA 2.0)
- 9 Serial ATA interfaces compliant with SATA 1.0 specification
  - 4 SATA ports supported by Intel ICH7R
    - \* Supports RAID 0/1/5/10
  - 4 SATA ports supported by Silicon Image Sil3114 PCI to SATA controller
    - \* PCI Local Bus Specification Rev. 2.3 compliant
    - \* APM Specification Rev. 1.0 compliant
    - \* PCI IDE Controller Specification Rev. 1.0 compliant
    - \* Supports RAID 0/1/10
  - 1 SATA port supported by Genesys Logic GL830 USB to SATA bridge controller
    - \* USB Specification Rev. 2.0 compliant
    - \* USB Storage Class Specification Rev. 1.0 compliant

### IDE

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

### TRUSTED PLATFORM MODULE (TPM) - optional

- Provides a Trusted PC for secure transactions
- Provides software license protection, enforcement and password protection

### REAR PANEL I/O PORTS

- 2 DB-9 RS232/422/485 serial ports
- 1 DB-15 VGA port
- 1 DVI-I port (DVI-D signal only)
- 4 RJ45 LAN ports
- 2 USB 2.0/1.1 ports

### I/O CONNECTORS

- 2 connectors for 4 external USB 2.0/1.1 ports
- 2 connectors for 2 external RS232/422/485 serial ports
- 1 front audio connector for line-out and mic-in jacks
- 1 LAN LED connector
- 1 PS/2 connector for keyboard/mouse ports
- 9 Serial ATA connectors
- 1 40-pin IDE connector
- 1 36-bit GPIO 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 Keyboard/Mouse
  - Wake-On-USB Keyboard/Mouse
  - Wake-On-LAN
  - RTC timer to power-on the system
- Microsoft®/Intel® APM 1.2 compliant
- AC power failure recovery

### DAMAGE FREE INTELLIGENCE

- Monitors CPU/System/AUX temperature and overheat alarm
- Monitors CPU/DIMM/3.3V/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%

### PCB

- microATX form factor
- 244mm (9.6") x 244mm (9.6")

### REAR PANEL I/O PORTS

