

PT631-IPM Intel® Q57 ATX Board

PROCESSOR

- LGA 1156 socket for:
 - Intel® Core™ i7-860 2.80GHz/8M
 - Intel® Core™ i5-750 2.66GHz/8M
 - Intel® Core™ i5-660 3.33GHz/4M
 - Intel® Core™ i3-540 3.06GHz/4M
 - Intel® Pentium® G6950 2.80GHz/3M

CHIPSET

- Intel® Q57 PCH (Platform Controller Hub)

SYSTEM MEMORY

- Four 240-pin DDR3 DIMM sockets
- Supports DDR3 1066/1333MHz
- Supports maximum memory bandwidth of 21GB/s in dual-channel mode when using DDR3 1333MHz
- Supports dual channel memory interface
- Supports up to 16GB system memory

EXPANSION SLOTS

- 1 PCI Express x16 slot (PCIe 2.0)
- 1 PCI Express x4 slot (PCIe 1.0)
- 4 PCI slots (PCI 2.3)

ONBOARD GRAPHICS FEATURES

- Intel® HD Graphics
- VGA display resolution up to 2048x1536
- Supports 3D, 2D and video capabilities

Note: Both Intel® Core™ i7-860 and Core™ i5-750 CPUs does not support integrated graphics.

ONBOARD AUDIO FEATURES

- Realtek ALC262 2-channel High Definition Audio
- Two 24-bit stereo DACs and three 20-bit stereo ADCs

ONBOARD LAN FEATURES

- 3 Intel W82574L PCI Express Gigabit Ethernet controllers
- 1 Intel W82578DM iAMT6.0 Gigabit Ethernet PHY
- Supports 10Mbps, 100Mbps and 1Gbps data transmission
- IEEE 802.3 (10/100Mbps) and IEEE 802.3ab (1Gbps) compliant

SERIAL ATA (SATA) INTERFACE

- 6 Serial ATA ports compliant with SATA 1.0 specification
- SATA speed up to 3Gb/s (SATA 2.0)
- Supports RAID 0/1/5/10

INTEL ACTIVE MANAGEMENT TECHNOLOGY (AMT)

- Supports iAMT6.0
- Out-of-band system access
- Remote troubleshooting and recovery
- Hardware-based agent presence checking
- Proactive alerting
- Remote hardware and software asset tracking

TRUSTED PLATFORM MODULE (TPM)

- 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

- 3 connectors for 6 external USB 2.0/1.1 ports
- 2 connectors for 2 external RS232/422/485 serial ports
- 1 connector for PS/2 keyboard/mouse port
- 2 16-bit Digital I/O connectors
- 1 audio connector for mic-in, line-in and line-out jacks
- 1 front audio connector for line-out and mic-in jacks
- 6 Serial ATA connectors
- 1 40-pin IDE connector
- 1 24-pin ATX power connector
- 1 8-pin 12V power connector
- 1 chassis intrusion connector
- 1 front panel connector
- 3 fan connectors

BIOS

- AMI BIOS
- 8Mbyte SPI BIOS

ENERGY EFFICIENT DESIGN

- ACPI v3.0 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
- AC power failure recovery
- Watchdog timer function

DAMAGE FREE INTELLIGENCE

- Monitors CPU/system temperature and overheat alarm
- Monitors V_{CORE}/+5V/+12V/S_M/+3.3V/V_{BAT} voltages and failure alarm
- Monitors CPU fan / system fan 1 / system fan 2 speed and failure alarm
- Read back capability that displays temperature, voltage and fan speed

TEMPERATURE

- 0°C to 60°C

HUMIDITY

- 10% to 90%

PCB

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

REAR PANEL I/O PORTS

