



# PT331-DRM

## Intel® Q57 microATX 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® chipset
  - Intel® Q57 (Ibex Peak)

### 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 (128-bit wide) memory interface
- Supports up to 16GB system memory

### EXPANSION SLOTS

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

### ONBOARD GRAPHICS FEATURES

- Intel Graphics Processing Unit
  - 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
- S/PDIF input/output interface

### ONBOARD LAN FEATURES

- One Realtek RTL8111DL PCI Express Gigabit controller
- One W82578DM PHY (AMT 6.0)
- Supports 10Mbps, 100Mbps and 1Gbps data transmission
- IEEE 802.3 (10/100Mbps) and IEEE 802.3ab (1Gbps) compliant

### SERIAL ATA INTERFACE

- Supports 6 SATA (Serial ATA) interfaces which are compliant with SATA 1.0 specification
- SATA speed up to 3Gb/s (SATA 2.0)
- Supports RAID 0, 1, 5 and 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) - optional

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

### 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

- 4 connectors for 8 additional external USB 2.0/1.1 ports
- 1 DIO connector
- 1 front audio connector
- 1 CD-in internal audio connector
- 1 S/PDIF connector
- 6 Serial ATA ports
- 1 FDD connector
- 1 24-pin ATX power connector
- 1 8-pin 12V power connector
- 1 chassis open connector
- 1 front panel connector
- 2 fan connectors

### BIOS

- AMI BIOS
- 64Mbit SPI flash memory

### 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
- System power management supported
- Soft Power supported - ACPI v3.0 specification
- AC power failure recovery

### DAMAGE FREE INTELLIGENCE

- Monitors CPU/system temperature and overheat alarm
- Monitors VCore/5V/3.3V/V\_DIMM/12V/5VSB 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

- microATX form factor
- 24.4cm (9.6") x 24.4cm (9.6")

### REAR PANEL I/O PORTS

