

CP330-NRM Intel® QM57 microATX Board

PROCESSOR

- Socket G rPGA 988A for:
 - Intel® Core™ i7-620M (SV)
 - Intel® Core™ i5-520M (SV)
 - Intel® Celeron® P4500 (SV)
- Supports IMVP6.5 up to 35W CPU

CHIPSET

- Intel® QM57 PCH (Platform Controller Hub)

SYSTEM MEMORY

- Two 204-pin SODIMM sockets
- Supports DDR3 800/1066MHz (PC3-6400/PC3-8500)
- Supports dual channel memory interface
- Supports up to 8GB system memory
- DRAM device technologies: 1Gb and 2Gb DDR3 DRAM technologies are supported for x8 and x16 devices, unbuffered, non-ECC

EXPANSION SLOTS

- 1 PCI Express x16 slot
- 1 PCI Express x4 slot
- 2 PCI slots
- 1 CompactFlash socket

ONBOARD GRAPHICS FEATURES

- Intel® HD Graphics
- Display ports: DVI-I (Chrontel CH7318), LVDS and VGA
- LVDS: Single Channel - 18/24-bit; Dual Channel - 36/48-bit
- Intel® Clear Video technology
- Intel® Dynamic Video Memory Technology (Intel® DVMT)
- Intel® Smart 2D Display Technology (Intel® S2DDT)

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

- Intel 82577LM with iAMT6.0 Gigabit Ethernet Phy
- Realtek RTL8111C PCI Express Gigabit Ethernet controller
- Integrated 10/100/1000 transceiver
- Fully compliant with IEEE 802.3, IEEE 802.3u, IEEE 802.3ab
- Supports wire management

SERIAL ATA (SATA) INTERFACE

- 6 Serial ATA ports compliant with SATA 1.0a specification
- SATA speed up to 3Gb/s (SATA 2.0)
- Integrated Advanced Host Controller Interface (AHCI) controller
- Supports RAID 0/1/5/10

IDE INTERFACE

- JMicron JMB368 PCI Express to PATA host controller
- DMA mode: Ultra ATA up to 100MB/s
- PIO mode: up to 16MB/s

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 RS232 serial ports
 - Pins 1 and 9 of COM 2 functions as RS232 signal or power (selectable via jumper)
- 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 jacks

I/O CONNECTORS

- 4 connectors for 8 external USB 2.0/1.1 ports
- 2 connectors for 2 external serial ports
 - COM 3 supports RS232/422/485
- 1 LVDS LCD panel connector
- 1 LCD/inverter power connector
- 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
- 6 Serial ATA connectors
- 1 34-pin FDD connector
- 1 40-pin IDE connector
- 1 24-pin ATX power connector
- 1 front panel connector
- 3 fan connectors

BIOS

- AMI BIOS
- 64Mbit SPI BIOS

ENERGY EFFICIENT DESIGN

- ACPI v2.0 specification
- System Power Management
- Wake-On-Events include:
 - Wake-On-PS/2 KB/Mouse
 - Wake-On-USB KB/Mouse
 - Wake-On-LAN
 - Wake-On-Ring
 - RTC timer to power-on the system
- CPU stopped clock control
- AC power failure recovery

DAMAGE FREE INTELLIGENCE

- Monitors CPU/system temperature and overheat alarm
- Monitors Vcore/12V/1.5V/1.05V/5V/3VSB voltages and failure alarm
- Monitors CPU/chassis/2nd fan 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 224mm (8.82")

REAR PANEL I/O PORTS

