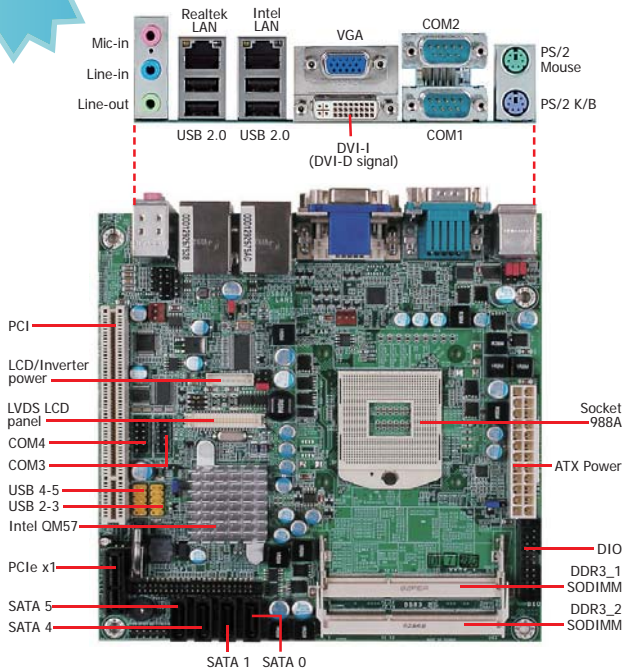


DFI® CP100-NRM Mini-ITX



Mobile

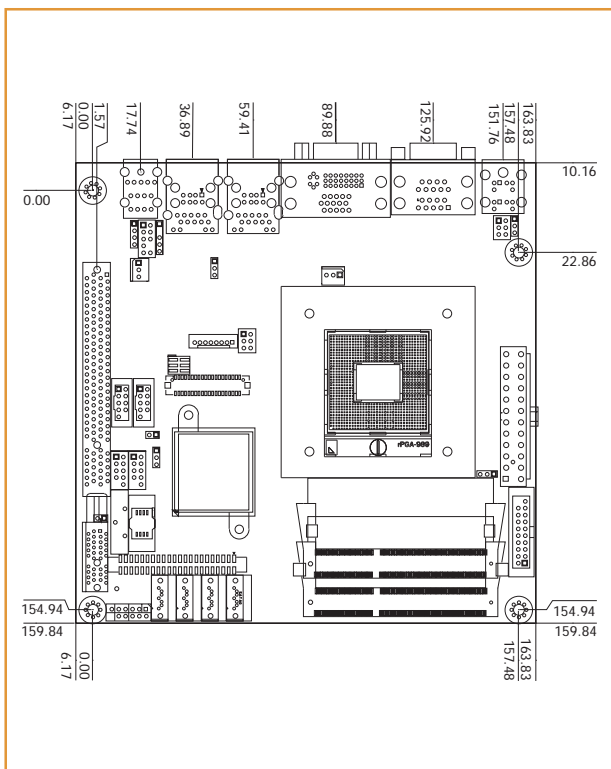


Features

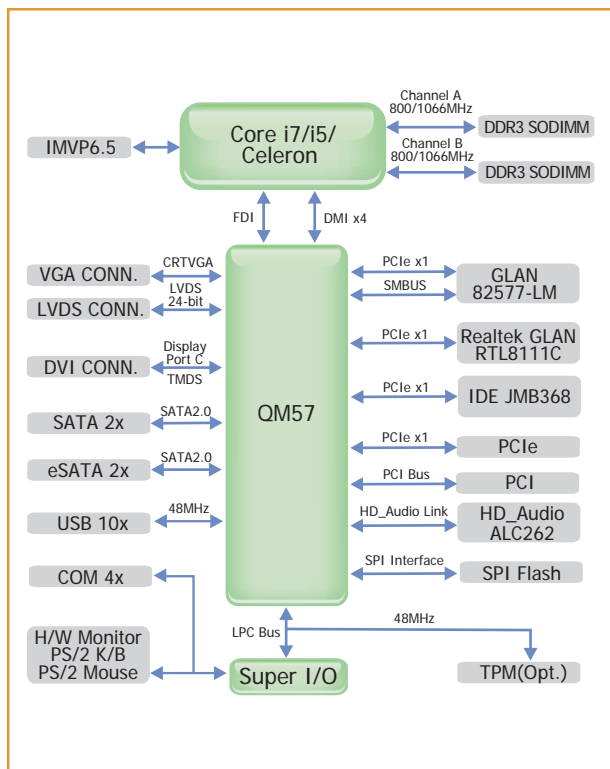
CHIPSET	Intel® QM57
CPU	Intel® Core™ i7/i5 Intel® Celeron®
MEMORY	2 DDR3 SODIMM up to 8GB
EXPANSION	1 PCIe x1, 1 PCI
DISPLAY OUTPUTS	1 DVI-I (DVI-D signal), 1 VGA, 1 LVDS
LAN	2 Gigabit LAN ports
COM	4 COM
USB	8 USB 2.0
STORAGE	4 SATA 2.0 1 IDE
DIO	8-bit DIO



Mechanical Drawing



Block Diagram



Specifications

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 Express chipset

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 x1 slot
- 1 PCI slot

ONBOARD GRAPHICS FEATURES

- Intel® HD Graphics
- Display ports: DVI-I (DVI-D signal), LVDS and VGA
- VGA display resolution up to QXGA 2048x1536
- 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

SERIAL ATA (SATA) INTERFACE

- 4 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 (RS232 and/or Power)
- 1 DB-15 VGA port
- 1 DVI-I port (DVI-D signal)
- 2 RJ45 LAN ports
- 4 USB 2.0/1.1 ports
- Mic-in, line-in and line out jacks

I/O CONNECTORS

- 2 connectors for 4 external USB 2.0/1.1 ports
- 2 connectors for 2 external serial ports
 - COM 3 supports RS232/485
- 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
- 4 Serial ATA connectors
- 1 44-pin IDE connector
- 1 24-pin ATX power connector
- 1 front panel connector
- 2 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/5V/1.05V/1.5V/12V/3.3V/3.3VSB/VBAT voltages and failure alarm
- Monitors CPU/chassis/1st fan fan speed and failure alarm
- Read back capability that displays temperature, voltage and fan speed
- Watchdog timer function

POWER CONSUMPTION

- 41.58 W with i7-620M at 2.67GHz and 2x 2GB DDR3 SODIMM

TEMPERATURE

- Operating: 0°C to 60°C
- Storage: -20°C to 85°C

HUMIDITY

- 10% to 90%

DIMENSIONS

- Mini-ITX form factor
- 170mm (6.7") x 170mm (6.7")

CERTIFICATION

- CE
- FCC Class B
- UL
- RoHS

Packing List

- 1 CP100-NRM motherboard
- 1 COM port cable (with bracket)
- 2 USB port cables
- 2 Serial ATA data cables
- 2 Serial ATA power cables
- 1 I/O shield
- 1 QR (Quick Reference)
- 1 CD

Optional Items

- USB port cable
- COM port cable
- Serial ATA data cable
- Serial ATA power cable
- IDE cable
- I/O shield