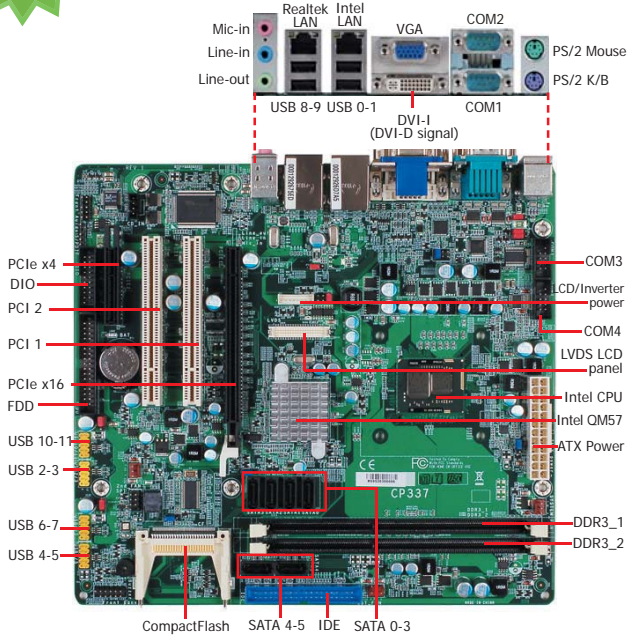


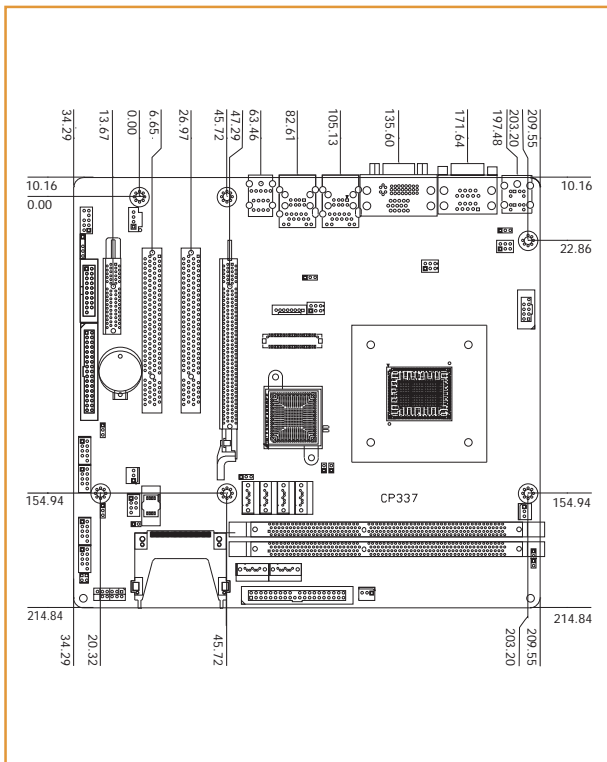
# DFI® CP337-NRM/NR microATX



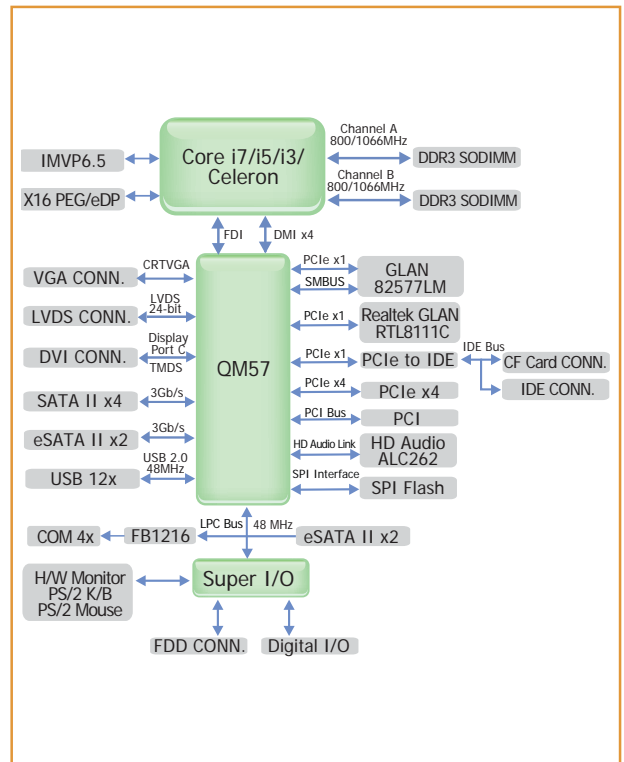
## Features

CHIPSET	Intel® QM57
CPU	Intel® Core™ i7/i5/i3 Intel® Celeron®
MEMORY	2 DDR3 DIMM up to 8G
EXPANSION	1 PCIe x16, 1 PCIe x4, 2 PCI
DISPLAY OUTPUTS	1 DVI-I (DVI-D signal), 1 VGA, 1 LVDS
LAN	2 Gigabit LAN ports
COM	4 COM
USB	12 USB 2.0
STORAGE	6 SATA 2.0 1 IDE
DIO	8-bit DIO

## Mechanical Drawing



## Block Diagram



## Specifications

### PROCESSOR

- Intel® Core™ i7-610E (SV) : CP337-NRM610E
- Intel® Core™ i7-620LE (LV) : CP337-NRM620L
- Intel® Core™ i7-620UE (ULV) : CP337-NRM620U
- Intel® Core™ i7-660UE (ULV) : CP337-NRM660U
- Intel® Core™ i5-520E (SV) : CP337-NRM520E
- Intel® Core™ i3-330E (SV) : CP337-NR330E
- Intel® Celeron P4505 (SV) : CP337-NR4505
- Intel® Celeron U3405 (ULV) : CP337-NR3405
- Processor package: BGA1288

### CHIPSET

- Intel® QM57 Express chipset

### SYSTEM MEMORY

- Two 240-pin DIMM sockets
- Supports DDR3 800/1066MHz with ECC (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, with 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® DVM)T
- 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) (-NRM only)

- 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)
- 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

- Supports 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

### POWER CONSUMPTION

- 41.60 W with i7-610E at 2.53GHz and 2x 1GB DDR3 DIMM

### TEMPERATURE

- 0°C to 60°C

### HUMIDITY

- 10% to 90%

### DIMENSIONS

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

### CERTIFICATIONS

- CE
- FCC Class B
- UL
- RoHS

## Packing List

- 1 System board
- 1 IDE cable
- 2 USB cables
- 2 Serial ATA data cables
- 2 Serial ATA power cables
- 1 I/O shield
- 1 CD
- 1 QR (Quick Reference)

## Optional Items

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