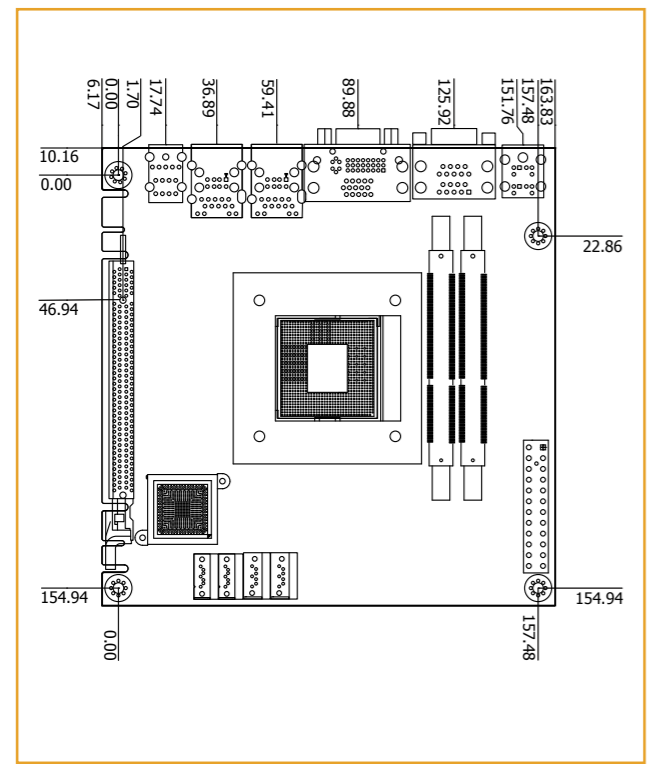
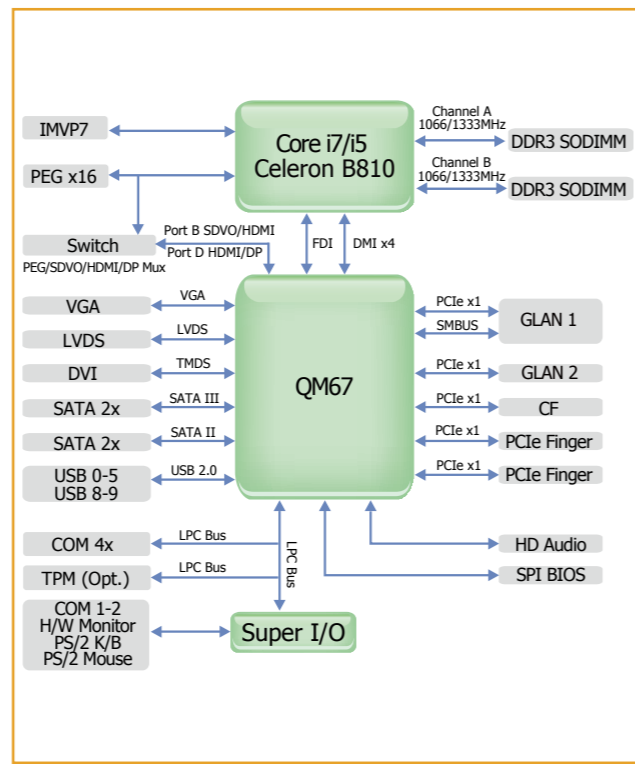


| Features | |
|-----------------|--|
| CHIPSET | Intel® QM67 PCH |
| CPU | Intel® Core™ i7/i5/i3 Intel® Celeron® |
| MEMORY | 2 DDR3 SODIMM up to 16GB |
| EXPANSION | 1 PCIe x16, 2 PCIe x1 gold fingers |
| DISPLAY OUTPUTS | 1 DVI-I (DVI-D signal), 1 LVDS, 1 VGA |
| LAN | 2 Gigabit LAN |
| COM | 6 COM |
| USB | 8 USB |
| SATA | 4 SATA: 2 SATA 3.0 and 2 SATA 2.0 |
| DIO | 8-bit DIO |

Mechanical Drawing



Block Diagram



Specifications

- PROCESSOR**
- Socket G2 988B for:
 - Intel® Core™ i7-2710QE (2.1GHz, 45W, PGA)
 - Intel® Core™ i5-2510E (2.5GHz, 35W, PGA)
 - Intel® Core™ i3-2330E (2.2GHz, 35W, PGA)
 - Intel® Celeron® B810
 - New microarchitecture on 32nm process technology
 - Intel® Advanced Vector Extensions (Intel® AVX) Instructions
 - Intel® Turbo Boost Technology
- CHIPSET**
- Intel® QM67 PCH (Platform Controller Hub)
- SYSTEM MEMORY**
- Two 204-pin DDR3 SODIMM sockets
 - Supports DDR3 1066/1333MHz
 - Supports dual channel memory interface
 - Supports up to 16GB system memory
 - DRAM device technologies: 1Gb, 2Gb and 4Gb DDR3 DRAM technologies are supported for x8 and x16 devices, unbuffered, non-ECC
- ONBOARD GRAPHICS FEATURES**
- Intel® HD Graphics
 - Display ports: DVI-I (ASMedia 1442), LVDS and VGA
 - LVDS: Single Channel - 18/24-bit; Dual Channel: 36/48-bit
 - Supports 6 Graphics Execution Units (EUs)
 - Intel® Clear Video Technology
 - DirectX Video Acceleration (DXVA) support for accelerating video processing
- 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® 82579LM with iAMT7.0 Gigabit Ethernet Phy
 - Realtek RTL8111DL 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**
- 4 Serial ATA ports
 - 2 SATA 2.0 ports with data transfer rate up to 3Gb/s
 - 2 SATA 3.0 ports with data transfer rate up to 6Gb/s
 - Integrated Advanced Host Controller Interface (AHCI) controller
 - Supports RAID 0/1/5/10
- COMPACTFLASH 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 iAMT7.0
 - Out-of-band system access
 - Remote troubleshooting and recovery
 - Hardware-based agent presence checking
 - Proactive alerting
 - Remote hardware and software asset tracking
- EXPANSION SLOTS**
- 1 PCI Express Gen 2 x16 slot (PCIe 2.0)
 - Switchable with SDVO/HDMI/DP
 - 2 PCI Express x1 gold fingers for customized expansion (PCI or Mini PCIe) via a riser card
 - 1 CompactFlash socket

- 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
 - Supports RS232/422/485
 - Pins 1 and 9 of RS232 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**
- 2 connectors for 4 external USB 2.0/1.1 ports
 - 4 connectors for 4 external RS232 serial ports
 - 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 ports
 - 1 24-pin ATX power connector
 - 1 chassis intrusion connector
 - 1 front panel connector
 - 2 fan connectors
- TRUSTED PLATFORM MODULE (TPM)**
- Provides a Trusted PC for secure transactions
 - Provides software license protection, enforcement and password protection
- BIOS**
- AMI BIOS
 - 64Mbit SPI BIOS
- ENERGY EFFICIENT DESIGN**
- Supports ErP Lot6 power saving (optional)
 - Supports ACPI
 - System Power Management
 - Wake-On-Events include:
 - Wake-On-PS/2 KB/Mouse
 - Wake-On-USB KB/Mouse
 - Wake-On-LAN
 - 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/VBAT 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%
- DIMENSIONS**
- Mini-ITX form factor
 - 170mm (6.7") x 170mm (6.7")

Packing List

- 1 HR100-CRM motherboard
- 2 Serial ATA data cables
- 2 Serial ATA power cables
- 2 USB cables
- 1 Bracket mounted with a COM port cable
- 1 I/O shield
- 1 DVD
- 1 QR (Quick Reference)

Optional Items

- USB port cable
- COM port cable
- Serial ATA power cable
- Serial ATA data cable