

HR900-B

Basic COM Express Module

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
- Supports LVDS and VGA interfaces
- 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

- Supports High Definition Audio interface

ONBOARD LAN FEATURES

- Intel 82579LM Gigabit Ethernet PHY
- Integrated 10/100/1000 transceiver
- Fully compliant with IEEE 802.3, IEEE 802.3u, IEEE 802.3ab
- Supports wire management

SERIAL ATA (SATA) INTERFACE

- Supports 4 Serial ATA interfaces
- 2 SATA 2.0 with data transfer rate up to 3Gb/s
- 2 SATA 3.0 with data transfer rate up to 6Gb/s
- Integrated Advanced Host Controller Interface (AHCI) controller

IDE INTERFACE

- Supports up to two IDE devices
- DMA mode: Ultra ATA up to 100MB/s
- PIO mode: up to 16MB/s

EXPANSION INTERFACES

- Supports 8 USB ports (USB 1.1/2.0 host controllers)
- Supports 4 PCI slots (PCI 2.3 interface)
- Supports PCIe x16 / SDVO / HDMI / Display Port switchable interface
 - Uses QM67's DDI (Digital Display Interface) Port B for SDVO / HDMI and DDI Port C for Display Port / HDMI)
 - VBIOS default setting at Port C only; VBIOS settings modified upon request
- Supports 1 PCIe x16 Gen2 interface
- Supports 5 PCIe x1 interfaces
- Supports LPC interface
- Supports IDE interface
- Supports 8-bit Digital I/O

DAMAGE FREE INTELLIGENCE

- Monitors CPU temperature and overheat alarm
- Monitors CPU fan speed and failure alarm
- Monitors V_{core}/V_{GFx}/1.5V voltages and failure alarm
- Watchdog timer function

BIOS

- 64Mbit SPI BIOS

TEMPERATURE

- 0°C to 60°C

HUMIDITY

- 10% to 90%

POWER

- Input: 12V, 5VSB, VCC_RTC

REGULATORY

- EMC: CE, FCC Part 15 Class B

PCB

- Dimensions
 - Basic COM Express form factor
 - 95mm (3.74") x 125mm (4.9")
- Compliance
 - PICMG COM Express R1.0 basic form factor, Type 2

