**Features**

**CHIPSET**  
Intel® HM55

**CPU**  
Intel® Core™ i7/i5  
Intel® Celeron® P4500

**MEMORY**  
2 DDR3 SODIMM up to 8GB

**EXPANSION**  
4 PCIe x1, 4 PCI  
1 LPC, 1 SMBus, 1 IDE  
1 VGA, 1 LVDS  
Multiplex digital display with PCIe x16 (SDVO/HDMI/Display Port)  
8 USB  
4 SATA 2.0  
8-bit DI O

**LAN**  
1 Gigabit LAN interface

**DIMENSIONS**  
95mm x 125mm (3.74" x 4.9")

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**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® HM55 PCH (Platform Controller Hub)

**SYSTEM MEMORY**
- Two 204-pin SODIMM sockets
- Supports DDR3 800/1066MHz
- 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

**ONBOARD GRAPHICS FEATURES**
- Intel® HD Graphics
- Supports LVDS and VGA interfaces
- 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**
- Supports High Definition Audio interface

**ONBOARD LAN FEATURES**
- Intel® 82577LM Gigabit Ethernet PHY
- Integrated 10/100/1000 transceiver
- Fully compliant with IEEE 802.3, IEEE 802.3u, IEEE 802.3ab

**SERIAL ATA (SATA) INTERFACE**
- Supports 4 Serial ATA interfaces compliant with SATA 1.0a specification
- SATA speed up to 3Gb/s (SATA 2.0)
- 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 up to 4 PCI slots (PCI 2.3 interface)
- Supports PCIe x16 / SDVO / HDMI / Display Port switchable interface
- Supports 4 PCIe x1 interfaces
- Supports LPC interface
- Supports SMBus 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 Vcore/VGFX/1.5V voltages and failure alarm
- Watchdog timer function

**BIOS**
- 32Mbit SPI BIOS

**POWER CONSUMPTION**
- 49.71 W with i7-620M at 2.66GHz and 2x 1GHz DDR3 SODIMM

**TEMPERATURE**
- 0°C to 60°C

**HUMIDITY**
- 10% to 90%

**POWER**
- Input: 12V, 5VSB (optional), VCC_RTC

**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

**CERTIFICATIONS**
- CE
- FCC Class B
- UL
- RoHS

**Packing List**
- 1 CP900-B board
- 1 Heat sink kit
- 1 CD
- 1 QR (Quick Reference)

**Optional Items**
- COM630-B carrier board kit
- Cable kit for carrier board

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