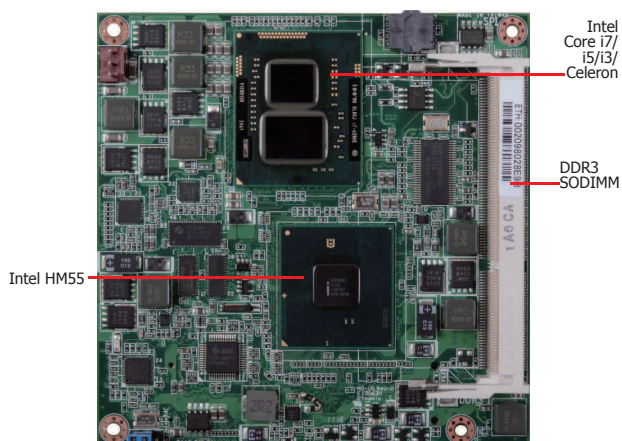


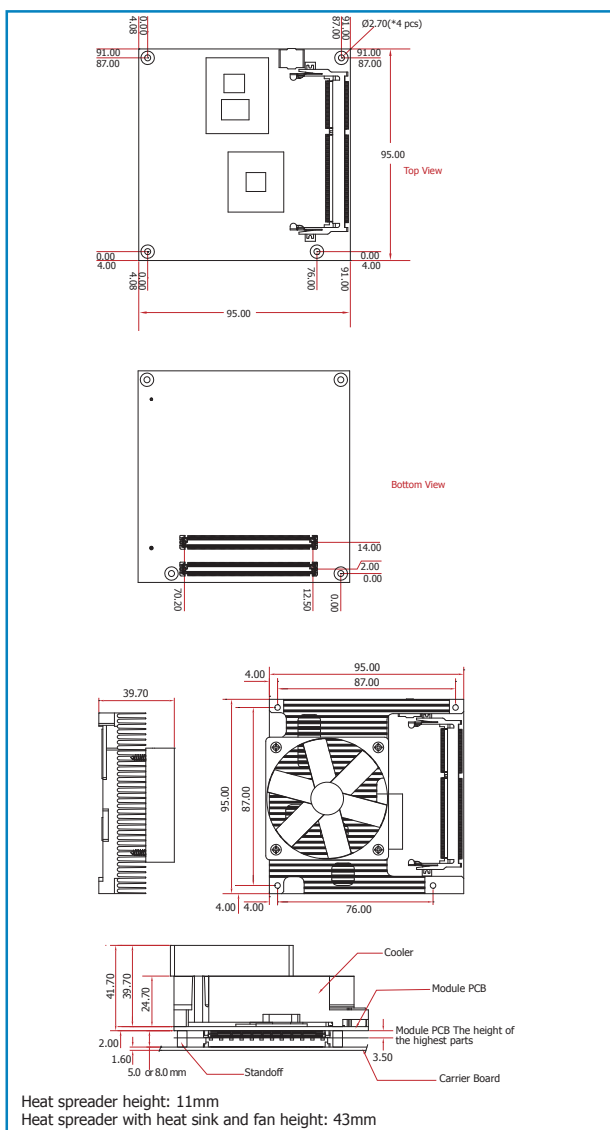
DFI® CP908-B COM Express® Compact



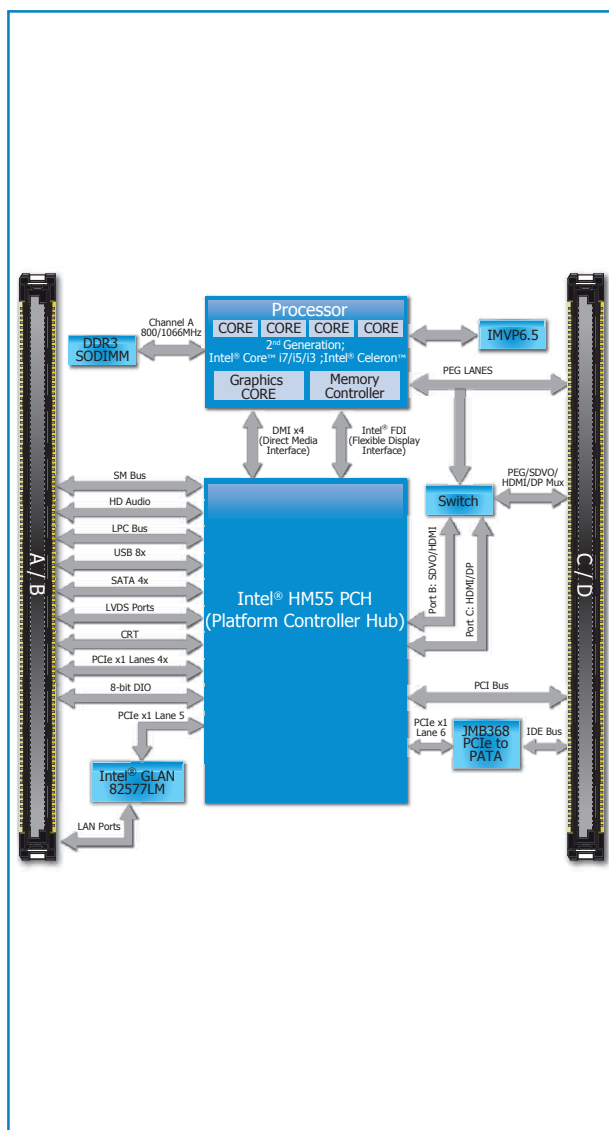
Features

CHIPSET	Intel® HM55
CPU	Intel® Core™ i7/i5/i3 Intel® Celeron®
MEMORY	1 DDR3 SODIMM up to 4GB
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 DIO
LAN	1 Gigabit LAN interface
DIMENSIONS	95mm x 95mm (3.74" x 3.74")

Mechanical Drawing



Block Diagram



CP908-B COM Express® Compact



Specifications

PROCESSOR

- Intel® Core™ i7-610E (SV) : CP908-B610E
- Intel® Core™ i7-620LE (LV) : CP908-B620L
- Intel® Core™ i7-620UE (ULV) : CP908-B620U
- Intel® Core™ i5-520E (SV) : CP908-B520E
- Intel® Core™ i3-330E (SV) : CP908-B330E
- Intel® Celeron® P4505 (SV) : CP908-B4505
- Processor package: BGA1288

CHIPSET

- Intel® HM55 PCH (Platform Controller Hub)

SYSTEM MEMORY

- One 204-pin SODIMM socket
- Supports DDR3 800/1066MHz
- Supports up to 4GB 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® DVM T)
- 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 INTERFACE

- Supports 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

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/V_{GFx}/1.5V voltages and failure alarm
- Watchdog timer function

BIOS

- AMI BIOS
- 32Mbit SPI BIOS

POWER CONSUMPTION

- 40.90 W with i5-520E at 2.40GHz and 1x 4GB DDR3 SODIMM

TEMPERATURE

- 0°C to 60°C

HUMIDITY

- 10% to 90%

POWER

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

REGULATORY

- EMC: CE, FCC Part 15 Class B

PCB

- Dimensions
 - COM Express® Compact
 - 95mm (3.74") x 95mm (3.74")
- Compliance
 - PICMG COM Express® R1.0 Compact form factor, Type 2

CERTIFICATION

- CE
- FCC Class B
- UL
- RoHS

Ordering Information

Model Name	Part Number	Description
CP908-B610E	770-CP9082-800K	Intel® Core™ i7-610E, 4M Cache, 2.53 GHz
CP908-B620L	770-CP9082-600K	Intel® Core™ i7-620LE, 4M Cache, 2.00 GHz
CP908-B620U	770-CP9082-700K	Intel® Core™ i7-620UE, 4M Cache, 1.06 GHz
CP908-B520E	770-CP9082-400K	Intel® Core™ i5-520E, 3M Cache, 2.40 GHz
CP908-B330E	770-CP9082-200K	Intel® Core™ i3-330E, 3M Cache, 2.13 GHz
CP908-B4505	770-CP9082-000K	Intel® Celeron® P4505, 2M Cache, 1.86 GHz

Packing List

- 1 CP908-B board
- 1 QR (Quick Reference)
- 1 CD

Optional Items

- COM630-B carrier board kit
- Heat spreader: TBD
- Heat spreader with heat sink and fan: TBD
- Heat sink with fan: A71-111005-000G (CP908-B520E/B330E/B4505)
552-959525-100G (CP908-B610E/B620L/B620U)