**CD905-B Series** COM Express® Compact

### Features

**CHIPSET**  
Intel® NM10

**CPU**  
Intel® Atom™ D2550 (-B2550)  
Intel® Atom™ N2800 (-B2800)  
Intel® Atom™ N2600 (-B2600)

**MEMORY**  
1 DDR3 SODIMM up to 4GB (-B2550/-B2800)  
1 DDR3 SODIMM up to 2GB (-B2600)

**EXPANSION**  
4 PCIe x1, 4 PCI  
1 IDE  
1 VGA, 1 LVDS  
8 USB  
2 SATA 2.0  
8-bit DIO

**LAN**  
1 Gigabit LAN interface

**DIMENSIONS**  
95mm x 95mm (3.74” x 3.74”)

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**Mechanical Drawing**

**Block Diagram**
**Specifications**

**PROCESSOR**
- CD905-B2550:
  - Intel® Atom™ D2550, 1.86GHz, 2x 512K L2, 10W TDP, dual-core
  - Cooling option: heatsink with cooling fan
- CD905-B2800:
  - Intel® Atom™ N2800, 1.86GHz, 2x 512K L2, 6.5W TDP, dual-core
  - Cooling option: heatsink (fanless solution)
- CD905-B2600:
  - Intel® Atom™ N2600, 1.6GHz, 2x 512K L2, 3.5W TDP, dual-core
  - Cooling option: heatsink (fanless solution)

**CHIPSET**
- Intel® NM10 Express chipset

**SYSTEM MEMORY**
- One 204-pin DDR3 SODIMM socket
- Supports DDR3 1066MHz (Intel® Atom™ D2550/N2800)
- Supports DDR3 800MHz (Intel® Atom™ N2600)
- Supports single channel memory interface
- Supports up to 4GB system memory (Intel® Atom™ D2550/N2800)
- Supports up to 2GB system memory (Intel® Atom™ N2600)
- DRAM device technologies: 1Gb, 2Gb and 4Gb DDR3 DRAM technologies are supported for x8 and x16 devices, unbuffered, non-ECC

**ONBOARD GRAPHICS FEATURES**
- Intel® GMA 3650 (Intel® Atom™ D2550/N2800)
- Intel® GMA 3600 (Intel® Atom™ N2600)
- Supports LVDS and VGA interfaces
- LVDS: Chronlet CH7511B, 24-bit, dual channel, display resolution up to 1920x1200
- VGA display resolution up to 1920x1200
- Supports Hardware H.264/AVC, MPEG-2 video decoder, VC-1, DirectX 9, 1080p decoder

**ONBOARD AUDIO FEATURES**
- Supports High Definition Audio interface

**ONBOARD LAN FEATURES**
- Intel® 82574 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**
- Supports 2 Serial ATA interfaces
- SATA 2.0 with data transfer rate up to 3Gb/s
- Integrated Advanced Host Controller Interface (AHCI) controller

**WATCHDOG TIMER (optional)**
- Watchdog timeout programmable via software from 1 to 256 seconds

**EXPANSION INTERFACES**
- Supports 8 USB 2.0 ports
- Supports 4 PCIe x1 interfaces
- Supports 4 PCI interfaces
- Supports 8-bit Digital I/O
- Supports 1 IDE interface

**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**
- 16Mbit SPI BIOS

**POWER CONSUMPTION**
- 24.51 W with D2550 at 1.86GHz and 1x 1GHz DDR3 SODIMM

**TEMPERATURE**
- Operating: 0°C to 60°C
- Storage: -20°C to 85°C

**HUMIDITY**
- 10% to 90%

**POWER INPUT**
- 12V, 5VSB, VCC_RTC (ATX mode)
- 12V, VCC_RTC (AT mode)

**PCB**
- Dimensions
  - COM Express® Compact
  - 95mm (3.74") x 95mm (3.74")
- Compliance
  - PICMG COM Express® R2.0, Type 2

**CERTIFICATIONS**
- CE
- FCC Class B
- Rohs

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**Packing List**

- 1 CD905-B board
- 1 Heat sink kit
- 1 DVD
- 1 QR (Quick Reference)

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**Optional Items**

- COM330-B carrier board kit
- COM630-B carrier board kit
- Cable kit for carrier board