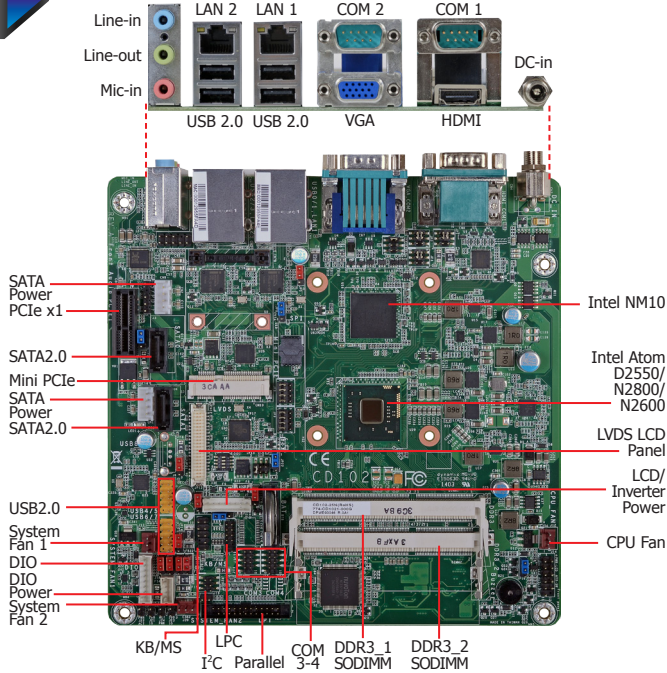




CD102 Series

Atom

Atom

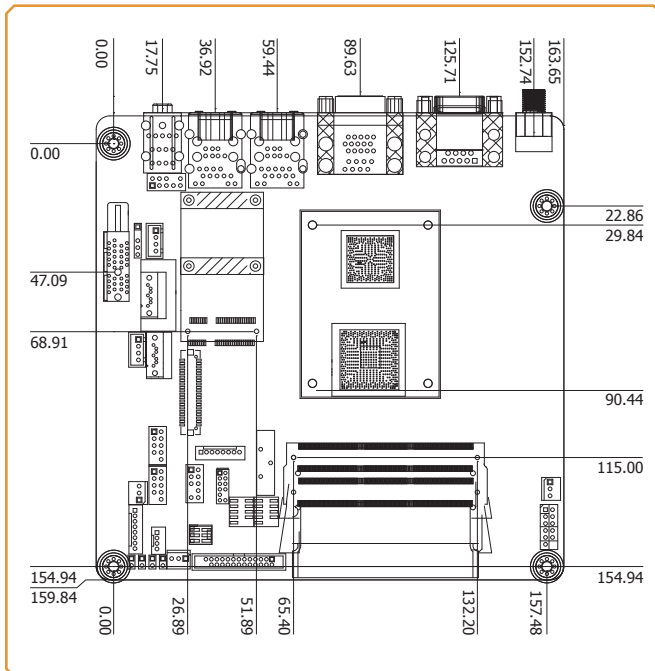


Features

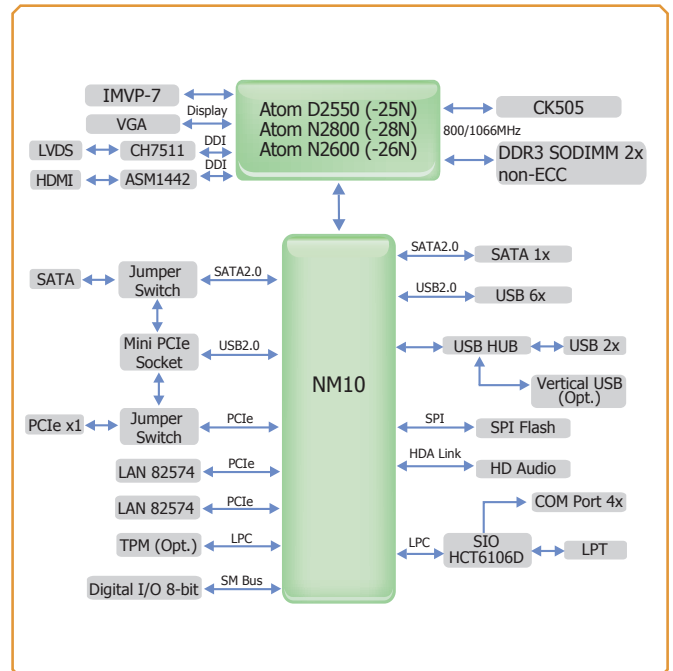
MEMORY	2 DDR3 SODIMM up to 4GB (-25N/-28N) 1 DDR3 SODIMM up to 2GB (-26N)
EXPANSION	1 PCIe x1 1 Mini PCIe
DISPLAY OUTPUTS	1 HDMI, 1 VGA, 1 LVDS
LAN	2 LAN
COM	4 COM
USB	8 USB 2.0
PARALLEL	1 Parallel
STORAGE	2 SATA 2.0
DIO	8-bit DIO



Mechanical Drawing



Block Diagram



CD102 Series

Specifications * Optional and is not supported in standard model. Please contact your sales representative for more information.

PROCESSOR

- Intel® Atom™ processors
- BGA 559 packaging technology
- 32nm process technology
- Please refer to the Ordering Information below*

CHIPSET

- Intel® NM10 Express chipset

SYSTEM MEMORY

- Two 204-pin DDR3 SODIMM sockets support up to 4GB system memory (CD102-25N/CD102-28N)
- One 204-pin DDR3 SODIMM socket supports up to 2GB system memory (CD102-26N)
- Supports DDR3 1066MHz (CD102-25N/CD102-28N)
- Supports DDR3 800MHz (CD102-26N)
- Supports single channel memory interface
- DRAM device technologies: 1Gb, 2Gb and 4Gb DDR3 DRAM technologies are supported for x8 and x16 devices, unbuffered, non-ECC

EXPANSION SLOTS

- 1 PCIe x1 Gen 2 slot (PCIe 2.0)
- 1 Mini PCIe slot
 - Supports USB and PCIe signals
 - Supports mSATA
 - Supports half size and/or full size Mini PCIe card

ONBOARD GRAPHICS FEATURES

- Intel® HD Graphics
- Supports HDMI, VGA, and LVDS interfaces
- HDMI: resolution up to 4096x2304 @ 24Hz or 2560x1600 @ 60Hz
- VGA: resolution up to 1920x1200 @ 60Hz
- LVDS: 24-bit, dual channel, resolution up to 1920x1200 @ 60Hz
- Supports Hardware H.264/AVC, MPEG-2 video decoder, VC-1, DirectX 9, 1080p decoder

ONBOARD AUDIO FEATURES

- Realtek ALC886 5.1-channel High Definition Audio

ONBOARD LAN FEATURES

- 2 Intel® 82574L Gigabit Ethernet Controllers; or 2 Intel® I210 PCI Express Gigabit Ethernet controllers*
- Integrated 10/100/1000 transceiver
- Fully compliant with IEEE 802.3, IEEE 802.3u, IEEE 802.3ab

SERIAL ATA INTERFACE

- 2 SATA 2.0 ports with data transfer rate up to 3Gb/s
 - SATA port 0 provides adequate space for SATA DOM
- Integrated Advanced Host Controller Interface (AHCI) controller

TRUSTED PLATFORM MODULE (TPM)*

- Provides a Trusted PC for secure transactions
- Provides software license protection, enforcement and password protection

REAR PANEL I/O PORTS

- 1 12V DC-in jack (default) or 4-pin power connector*
- 1 HDMI port
- 1 VGA port
- 2 DB-9 serial ports
 - 1 RS232/422/485 (RS232 and/or Power)
 - 1 RS232
- 2 RJ45 LAN ports
- 4 USB 2.0/1.1 ports
- Mic-in, Line-in, Line-out jacks

Ordering Information

Model Name		Processors	
CD102	-	25	N
		25: Intel® Atom™ D2550, Dual core, 1M Cache, 1.86GHz, 10W 28: Intel® Atom™ N2800, Dual core, 1M Cache, 1.86GHz, 6.5W 26: Intel® Atom™ N2600, Dual core, 1M Cache, 1.6GHz, 3.5W	

Packing List

- 1 CD102 motherboard
- 1 Serial ATA data with power cable: A81-002013-000G
- 1 I/O shield: A49-CD1020-000G
- 1 DVD
- 1 Heat sink with fan: A71-110012-000G (CD102-25N)
- 1 Heat sink: A71-010012-000G (CD102-28N/26N)

I/O CONNECTORS

- 2 connectors for 4 external USB 2.0/1.1 ports
- 1 vertical USB 2.0/1.1 port*
- 2 connectors for 2 external RS232 serial ports (2.0mm pitch)
- 1 LVDS LCD panel connector
- 1 LCD/inverter power connector
- 1 8-bit Digital I/O connector
- 1 Digital I/O power connector
- 1 front audio connector for line-out and mic-in jacks
- 1 LPC connector
- 4 LAN LED connectors
- 1 PS/2 connector for keyboard/mouse port
- 1 S/PDIF connector
- 2 SATA 2.0 ports
- 2 SATA power connectors
- 1 parallel connector
- 1 I²C connector
- 1 chassis intrusion connector
- 1 front panel connector
- 3 fan connectors

BIOS

- AMI BIOS
- 16Mbit SPI BIOS

ENERGY EFFICIENT DESIGN

- ACPI v3.0 specification
- System Power Management
- Wake-On-Events include:
 - Wake-On-USB KB/Mouse
 - Wake-On-LAN
 - RTC timer to power-on the system
- AC power failure recovery

DAMAGE FREE INTELLIGENCE

- Monitors CPU/system temperature and overheat alarm
- Monitors V_{CORE}/5V/12V/V_{SM} 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
 - Watchdog timeout programmable via software from 1 to 255 seconds

POWER CONSUMPTION

- TBD

OS SUPPORT

- Windows XP Professional x86 & SP3 (32-bit)
- Windows 7 Ultimate x86 & SP1 (32-bit)

TEMPERATURE

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

HUMIDITY

- 5% to 90%

DIMENSIONS

- Mini-ITX form factor
- 170mm (6.7") x 170mm (6.7")

CERTIFICATION

- CE, FCC Class B, RoHS

Power Connector

