



Features

CHIPSET	Intel® NM10
CPU	Intel® Atom™ D2550 (-25N) Intel® Atom™ N2800 (-28N) Intel® Atom™ N2600 (-26N)
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 Gigabit LAN ports
COM	4 COM
USB	8 USB 2.0, 1 vertical USB (optional)
PARALLEL	1 Parallel
STORAGE	2 SATA 2.0
DIO	8-bit DIO



Vertical USB port for securing USB flash drive (optional)

Specifications

PROCESSOR

- CD102-25N:
 - Intel® Atom™ D2550, 1.86GHz, 2x 512K L2, 10W TDP, dual-core
 - Cooling: heatsink with cooling fan
- CD102-28N:
 - Intel® Atom™ N2800, 1.86GHz, 2x 512K L2, 6.5W TDP, dual-core
 - Cooling: heatsink (fanless solution)
- CD102-26N:
 - Intel® Atom™ N2600, 1.6GHz, 2x 512K L2, 3.5W TDP, dual-core
 - Cooling: heatsink (fanless solution)

CHIPSET

- Intel® NM10 Express chipset

SYSTEM MEMORY

- Supports DDR3 1066MHz (CD102-25N/CD102-28N)
- Supports DDR3 800MHz (CD102-26N)
- Supports single channel memory interface
- 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)
- 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 slot
- 1 Mini PCIe slot
- Supports USB and PCIe signals
- Supports mSATA (optional)
- Supports half size and/or full size Mini PCIe card

ONBOARD GRAPHICS FEATURES

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

ONBOARD AUDIO FEATURES

- Realtek ALC886 7.1-channel High Definition Audio

ONBOARD LAN FEATURES

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

SERIAL ATA (SATA) INTERFACE

- Supports 2 Serial ATA interfaces
- SATA port 1 provides adequate space for SATA DOM
- SATA 2.0 with data transfer rate up to 3Gb/s
- Integrated Advanced Host Controller Interface (AHCI) controller

TRUSTED PLATFORM MODULE (TPM) - optional

- 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 or 4-pin ATX 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

I/O CONNECTORS

- 2 connector for 4 external USB 2.0/1.1 ports
- 1 vertical USB 2.0/1.1 port (optional)
- 2 connectors for 2 external RS232 serial ports
- 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 LAN LED connector
- 1 PS/2 connector for keyboard/mouse port
- 1 S/PDIF connector
- 2 SATA 2.0 ports
- 2 SATA power connector
- 1 parallel connector
- 1 I°C connector
- 1 chassis intrusion connector
- 1 front panel connector
- 1 LPC 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 VCORE/VGFX/1.05V/3.3V/5VSB/3VSB/VBAT 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")

Packing List

- 1 CD102 motherboard
- 1 Serial ATA data with power cable
- 1 I/O shield
- 1 QR (Quick Reference)
- 1 DVD

Optional Items

- USB port cable
- Serial ATA data cable
- Serial ATA power cable
- COM port cable
- I/O shield
- Power adapter: TBD