



Features

- Dual-core Intel® Atom™ Processor with Intel® NM10 Express Chipset
- Up to 4 GB DDR3 SDRAM at 800/1066 MHz
- Three free PCIe x1 lanes
- VGA and Single/Dual Channel 18/24-bit LVDS
- SATA 3 Gb/s, IDE (PATA), GbE, USB 2.0
- Supports Smart Embedded Management Agent (SEMA) functions

Specifications

Core System

CPU	N2600: Dual-core Intel® Atom™ processor 1.66 GHz at 3.5 W N2800: Dual-core Intel® Atom™ processor 1.86 GHz at 6.5 W D2550: Dual-core Intel® Atom™ processor 1.86 GHz at 10 W
Memory	Single SODIMM socket supports up to 4 GB of non-ECC 800/1066 MHz DDR3 memory (N2600 supports max. 2 GB)
Chipset	Intel® NM10 Platform Controller Hub
L2 Cache	1 MB
Hardware Monitor	Supply voltages and CPU temperature
Debug Interface	XDP SFF-26 extension for ICE debug
Embedded Features	Board Info & Statistics, ACPI 3.0, Smart Battery Management support, Watchdog with programmable timer ranges
Expansion Busses	4 PCI Express x1: 0/1/2 are free, 3 is occupied by GbE 32-bit PCI: PCI rev. 2.3 at 33MHz, supporting 4 bus masters LPC bus, SMBus (system), I²C (user)

Video

GPU Core	Integrated PowerVR SGX 545 graphics core and render core frequency at 640 MHz (D2550 & N2800) and 400 MHz (N2600)
Integrated Video Feature Support	Intel® Dynamic Video Memory Technology 4.0 support DirectX 9 compliant Pixel Shader v2.0 400 MHz render clock frequency Intel® Clear Video Technology MPEG2 Hardware Acceleration, ProcAmp
VGA Interface	Analog RGB display, resolution up to 2048x1536@ 60 Hz
LVDS Interface	Single/Dual channel 18/24-bit LVDS

Audio

Chipset	Integrated in Intel® NM10 Platform Controller Hub
Audio Codec	On carrier (ALC886)

Ethernet

Chipset	Intel® i210 Gigabit Ethernet Controller
Interface	10/100/1000 Mbps Ethernet

SEMA BMC

Voltage and Current Monitoring, Flat Panel Control, I²C bus 100/200/400, Failsafe Dual BIOS, Module Logistics, Runtime information, User Flash Area, Power Control, and ECO mode support

I/O Interfaces

Chipset	Intel® NM10 Platform Controller Hub
USB	Supports up to eight ports USB 2.0
SATA	One ports SATA 3 Gb/s (optional 2ports without PATA support)
IDE (PATA)	SATA to PATA bridge on SATA channel 1, Master only

Super I/O

BIOS support for legacy free or legacy with two types of Super I/O (Winbond W83627HG and W83627DHG-PT)

TPM (optional)

Chipset	Atmel AT97SC3204T
Type	TPM 1.2

Power

Input Power	5~20V only (AT mode)5~20V and 5 Vsb +/- 5% (ATX mode)
Power States	Supports S0, S1, S3, S4, S5
Power Consumption	9W with N2600 and 4GB memory typical
Smart Battery Support	Yes

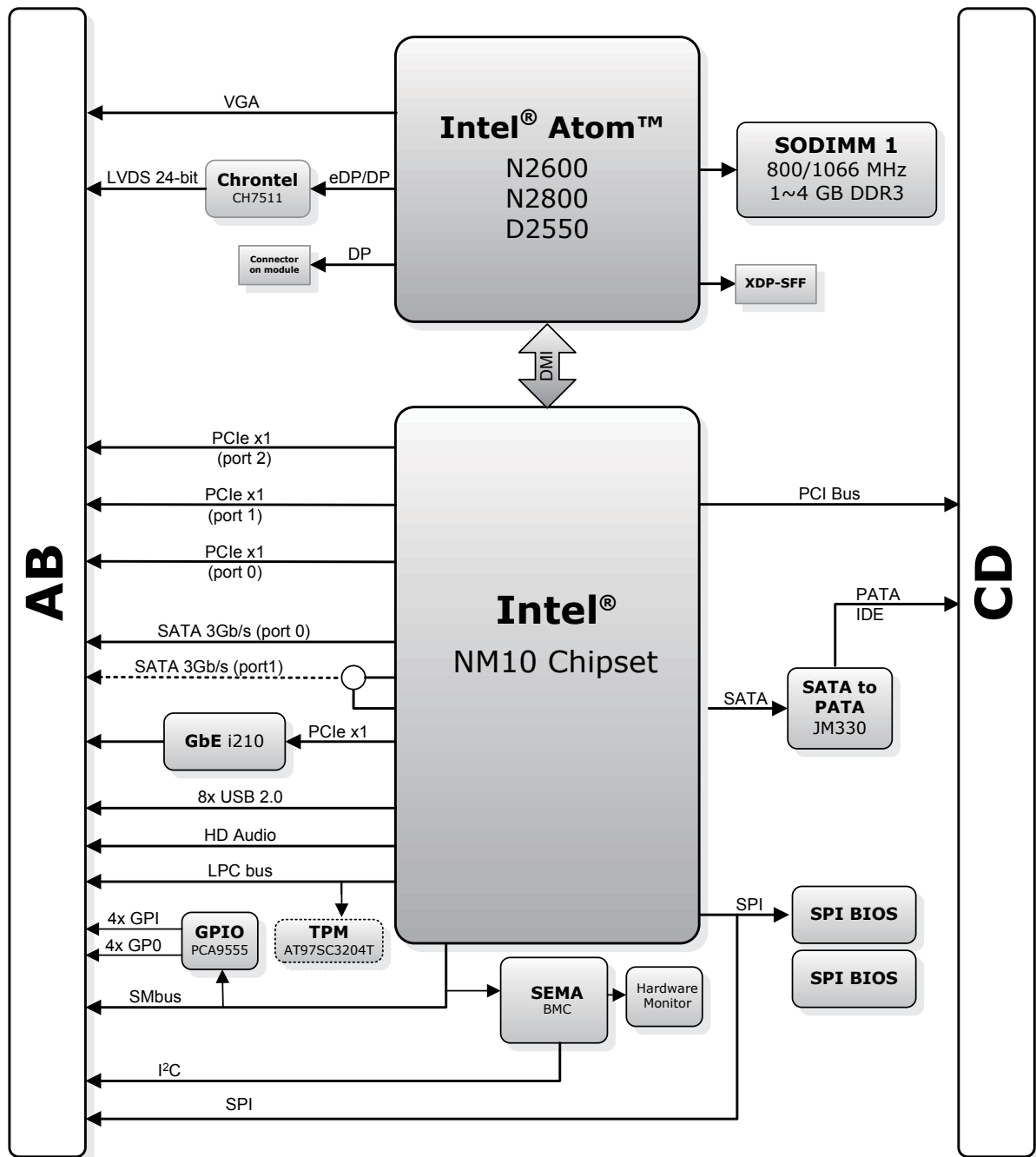
Mechanical and Environmental

Form Factor	Compact size: 95 mm x 95 mm
Operating Temperature	Standard: 0°C to +60°C
Storage Temperature	-20°C to +80°C
Humidity	90% at +60°C
Shock	15G peak-to-peak, 11ms duration, non-operating
Vibration	Non-operating: 1.88 Grms, 5-500 Hz, each axis Operating: 0.5 Grms, 5-500 Hz, each axis
Compatibility	COM Express® Type 2, COM.0 R2.1 Compact form factor 95 mm x 95 mm
Certification	CE, FCC, HALT

Operating Systems

Standard Support	Windows XP(e), Windows 7, Linux
Extended Support (BSP)	Windows XPe, WES 7 support package, Linux 3.2.x BSP, VxWorks 6.x BSP, AIDI Library for Windows and Linux

Functional Diagram



Ordering Information

Modules

Model Number	Description/Configuration
Express-CVC-D2550	COM Express® Compact Size Type 2 Module, Express-CVC with Dual Core Intel® Atom™ Processor D2550 1.86Gz
Express-CVC-N2600	COM Express® Compact Size Type 2 Module, Express-CVC with Dual Core Intel® Atom™ Processor N2600 1.66Gz
Express-CVC-N2800	COM Express® Compact Size Type 2 Module, Express-CVC with Dual Core Intel® Atom™ Processor N2800 1.83Gz

Accessories

Model Number	Description/Configuration
Heat Spreaders	
HTS-CVC-B	Heatspreader for Express-CVC with threaded standoffs
HTS-CVC-BT	Heatspreader for Express-CVC with through hole for top mounting
Passive Heatsinks	
THS-CVC-B	Low profile heatsink for Express-CVC with threaded standoffs
THS-CVC-BT	Low profile heatsink for Express-CVC with through hole for top mounting
Active Heatsink	
THSF-CVC-B	Heatsink with Fan for Express-CVC with threaded standoffs

Note: All specifications are subject to change without further notice.