ETX-CV

ETX® Module with Dual Core Intel® Atom™ Processor and Intel® NM10 Express Chipset



Features

- Dual-Core Intel® Atom™ Processor D2550/ N2x00
- Intel® NM10 Express Chipset
- Up to 4GB Single Channel DDR3 SDRAM at 1066MHz
- Dual channel 24-bit LVDS
- 2 SATA 3 Gb/s, 2 IDE (PATA), LAN, 4 USB 2.0

Specifications

Core System

CPU	**BGA type**
	Dual-Core Intel® Atom™ Processor N2600 1.66GHz (1MB L2 cache, 3.5W)
	Dual-Core Intel® Atom™ Processor N2800 1.83GHz (1MB L2 cache, 6.5W)
	Dual-Core Intel® Atom™ Processor D2550 1.86GHz (1MB L2 cache, 10W)
Memory	Single SODIMM socket supporting non-ECC DDR3 at 800/1066 MHz on N2800 and D2550 (max. 4 GB), at 800 MHz on N2600 (max. 2GB)
Chipset	Intel® NM10
BIOS	AMI APTIO UEFI in 16 Mbit SPI flash
Hardware Monitor	Supply voltages and CPU temperature
Watchdog Timer	Programmable timer range to generate RESET
Expansion Busses	PCI 32-bit: PCI ver 2.3 at 33MHz, support 4 bus masters
	ISA 16-bit (through PCI/ISA bridge), no DMA support
	SMBus (system), I²C (user)

Video

GPU Core	Integrated in CPU, supports dual independent displays
VGA Interface	Analog VGA support by 400 MHz RAMDAC, resolutions up to 1920x1200 (WUXGA)
LVDS Interface	Single or dual-channel x 18/24 bpp
DisplayPort	Connector on the module

Audio

Chipset	Integrated on Intel® NM10
Audio Codec	Realtek ALC 262 HDA compatible

LAN

Chipset	Integrated MAC in NM10 with Realtek RTL8105E
Interface	10/100 Mbps Ethernet

Multi I/O

IDE (PATA)	Dual channel IDE with UDMA 33
SATA	Two channels SATA 3 Gb/s with connectors on module
USB	Supports up to four ports USB 2.0

Super I/O

Chipset	W83627DHG-PT
Serial	Two high speed RS-232C ports (COM1/COM2)
IrDA	Supports SIR IrDA 1.1 compliant
Parallel	SPP, EPP and ECP mode (pin out share with FDD)
FDD	One drive (pin out shared with LPT)
Keyboard & Mouse	One PS/2 keyboard and one PS/2 mouse

TPM

Chipset	Infineon SLB9635TT1.2 (optional)
Type	TPM 1.2

Power Specifications

Input Power	AT mode (5V only) and ATX mode (5V and 5 Vsb)
Power States	Supports S0, S1, S3, S4, S5
Power Consumption	TBD

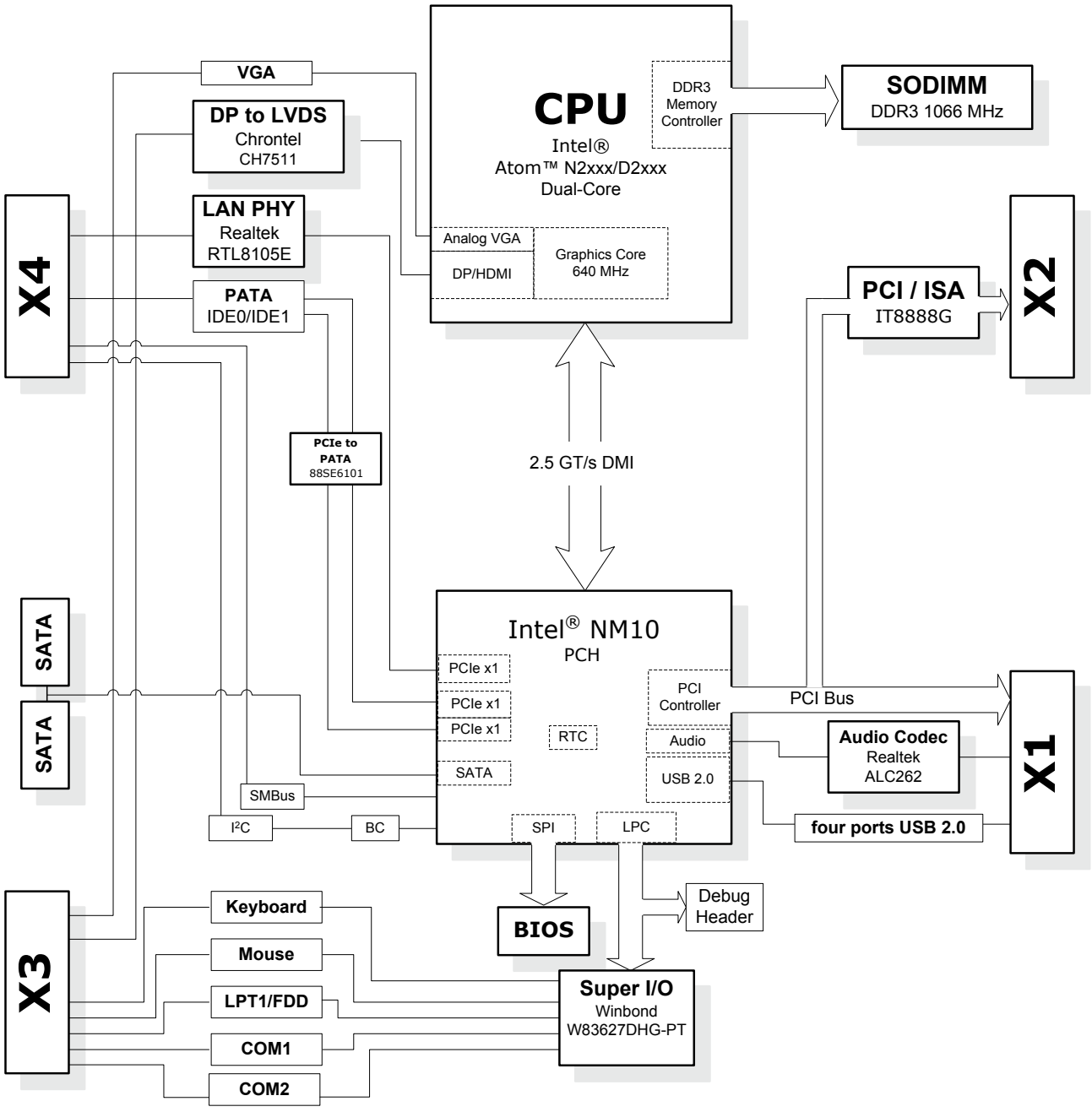
Mechanical and Environmental

Operating Temp	0°C to 60°C
Storage Temp	-20°C to 80°C
Humidity	90% at 60°C
Shock	15G peak-to-peak, 11ms duration, non-operation
Vibration	Non-operation:1.88Grms, 5-500Hz, each axis
Operation	0.5Grms, 5-500Hz, each axis
Compatibility	ETX® rev. 3.02, size 95mm x 114mm
Certification	CE, FCC

Operating Systems

Standard Support	Windows® XP(e) / Windows® 7
	Linux®
Extended Support(BSP)	Embedded XP/2009, WinCE 7.0
	Linux 2.6.x BSP
	VxWorks 6.x (on request)
	AIDI I²C Library for Windows and Linux

Functional Diagram



Ordering Information

Modules

Model Number	Description/Configuration
ETX-CV-N2600	ETX® Module with low power Dual Core Intel® Atom™ Processor N2600 1.66GHz with NM10 Chipset
ETX-CV-N2800	ETX® Module with low power Dual Core Intel® Atom™ Processor N2800 1.83GHz with NM10 Chipset
ETX-CV-D2550	ETX® Module with Dual Core Intel® Atom™ Processor D2550 1.86GHz with NM10 Chipset

Accessories

Model Number	Description/Configuration
Passive Heatsinks	
THSH-CV-B	High Profile Heatsink for ETX-CV with threaded standoffs
Heat Spreaders	
HTS-CV-B	Heatspreader for ETX-CV with threaded standoffs for bottom mounting
HTS-CV-BT	Heatspreader for ETX-CV with through-hole standoffs for top mounting
Heatsink with Active Cooling	
THSF-CV-B	High Performance Heatsink with Fan for ETX-CV with threaded standoffs

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