



Features

- Onboard Intel® Atom™ D510 Dual-Core 1.66GHz CPU (Optional: D410/ N450)
- Intel® ICH8-M Chipset
- One 200-pin SODIMM Socket Supports Up to 1GB DDR2 667 SDRAM
- Dual View, Dual-channel LVDS, VGA
- 5.1-CH HD Audio
- 2 Intel® 82583V Gigabit Ethernet
- 1 CF, 1 Mini PCIe Card
- 2 SATA, 6 COM, 6 USB, 16-bit GPIO

Atom™	Intel® ICH8-M	5.1-CH Audio	2 GbE	Mini PCIe
CF	2 SATA	6 COM	6 USB	16 GPIO

Specifications

System

• CPU	Intel® Atom™ D510 Dual-Core 1.66GHz CPU or D410/ N450 1.66GHz CPU (Optional)
• FSB	533/ 667 MHz
• BIOS	Award 16Mbit Flash BIOS
• System Chipset	Intel® ICH8-M
• I/O Chip	ITE 8712F-KX
• System Memory	One 200-pin SODIMM Supports Up to 1GB DDR2 667 SDRAM
• SSD	One CompactFlash Type I/II Socket
• Watch Dog Timer	Reset: 1 ~ 255min. and 1sec. or 1min./step
• Expansion	1 x Mini PCIe Card

I/O

• MIO	1 x EIDE (Ultra DMA 100), 2 x SATA, 4 x RS-232, 2 x RS-422/ 485, 1 x KB & Mouse (Optional)
• USB	6 x USB 2.0
• DIO	16-bit General Purpose I/O for DI and DO

Display

• Chipset	Intel® Pineview Integrated, GMA3150 @ 400MHz (PNV D510/ D410) Intel® Pineview Integrated, GMA500 @ 200MHz (PNV N450)
• Resolution	VGA Mode : Up to 2048 x 1536 @ 60Hz (PNV D510/D410) VGA Mode : Up to 1400 x 1050 @ 60Hz (PNV N450)
• Multiple Display	CRT + LVDS
• LCD Interface	Dual-channel 24-bit LVDS Via Daughter Board

Audio

• Chipset	Intel® ICH8-M
• AC97 Codec	Realtek ALC883 Supports 5.1-CH Audio
• Audio Interface	Mic-in, Line-in, Line-out

Ethernet

• LAN	Dual Intel® 82583V Gigabit Ethernet
• Ethernet Interface	1000 Base-Tx Gigabit Ethernet Compatible

Mechanical & Environmental

• Power Requirement	+12V ~ +28V
• Power Type	Single Power AT/ ATX
• Operating Temperature	0 ~ 60°C (32 ~ 140°F)
• Operating Humidity	0% ~ 90% Relative Humidity, Non-condensing
• Size (L x W)	5.7" x 4" (146mm x 101mm)
• Weight	0.44lbs (0.2kg)

Ordering Information

- **ECM-PNV -510**
Intel® Atom™ D510 Dual-Core 3.5" Micro Module with Intel® ICH8-M Chipset
- **ACC-CF-xx**
CompactFlash Card Series (xx = Capacity, Capacity Option: 128, 256, 512MB, 1, 2, 4, 8GB)
- **ACC-MEM-xx**
Memory Series (xx = Capacity, Capacity Option: 256, 512MB, 1, 2GB)