

# AIMB-212

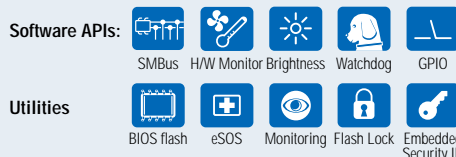
Intel® Atom™ N450/D510 Mini-ITX  
with VGA/LVDS, 6 COM, and Dual LAN

NEW



## Features

- Supports Intel® Atom™ processor N450 and D510 dual core
- One 200-pin SODIMM up to 2 GB DDR2 667 MHz SDRAM
- Supports 1 PCI and 1 Mini-PCIe expansion, 6 serial ports, 8 USB, and CF
- Lower total cost of ownership with DC12V support
- Supports embedded software APIs and Utilities

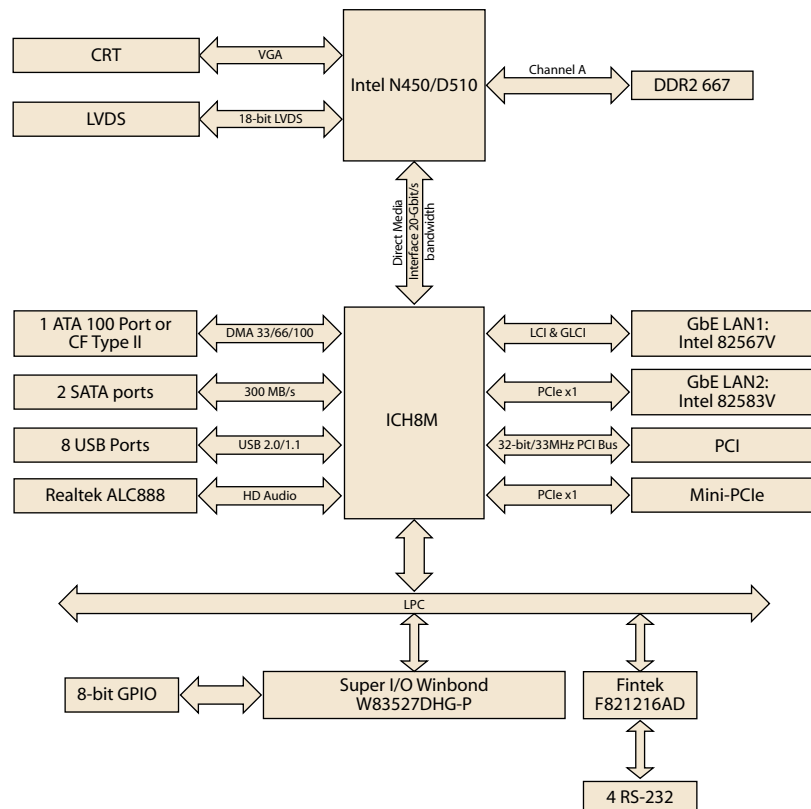


Note: eSOS need ODM BIOS by request

## Specifications

Processor System	CPU (45 nm)	Intel Atom N450	Intel Atom D510
	Max. Speed	1.66 GHz (single core)	1.66 GHz (dual core)
	L2 Cache	512 KB	1 MB
	Chipset	ICH8M	
	BIOS	AMI 16 Mbit PSI	
Expansion Slot	PCI	32-bit/33 MHz, 1 slot	
	Mini-PCIe	1	
	PCIe	-	
Memory	Technology	Single channel DDR2 667 MHz not compatible with DDR2533 MHz	
	Max. Capacity	2 GB	
	Socket	1 x 200-pin SODIMM	
Graphics	Controller	Embedded Gen3.5+ GFX Core, 200/400-MHz render clock frequency for N450/D510	
	VRAM	Shared system memory up to 224 MB SDRAM	
	VGA	Supports up to SXGA 1400 x 1050 @ 60Hz for Atom N450, up to 2048 x 1536 for Atom D510	
	LVDS	Supports 18-bit single channel and up to WXGA 1366 x 768	
	TV-out	None	
Ethernet	Dual Display	CRT + LVDS, support extended mode and clone mode	
	Interface	10/100/1000 Mbps	
	Controller	GbE LAN1: Intel 82567V; GbE LAN2: Intel 82583V	
	Connector	RJ-45 x 2	
SATA	Max Data Transfer Rate	300 MB/s	
	Channel	2	
EIDE	Mode	None	
	Channel	None	
SSD	CompactFlash	Supports CompactFlash Type I/II	
Rear I/O	VGA	1	
	Ethernet	2	
	USB	4 (USB 2.0 compliant)	
	Audio	3 (Mic-in, Line-out, Line-in)	
	Serial	3 (2 of RS-232, 1 of RS-232/422/485)	
	Parallel	-	
	DC jack	1 (2.5 mm)	
Internal Connector	LVDS & Inverter	1	
	USB	4 (USB 2.0 compliant)	
	Serial	3 (RS-232)	
	IDE	None	
	SATA	2	
	SATA PWR connector	2	
	CompactFlash	1	
	Parallel	None	
Watchdog Timer	DIO	8-bit GPIO	
	Output	System reset	
Power Requirements	Interval	Programmable 1 ~ 255 sec/min	
	Typical	DC 12V Input (Tolerance ±10%)	
Environment	Operating	Non-Operating	
	Temperature	0 ~ 60° C (32 ~ 140° F)	-40 ~ 85° C (-40 ~ 185° F)
Physical Characteristics	Dimensions	170 mm x 170 mm (6.69" x 6.69")	

## Board Diagram



## Ordering Information

Part Number	CPU	SC/DC	GbE	COM	LVDS
AIMB-212N-S6A1E	Atom N450	Single core	2	6	1, 18-bit
AIMB-212D-S6A1E	Atom D510	Dual core	2	6	1, 18-bit

## Packing List

Part number	Description	Quantity
1700003194	SATA HDD cable	2
1700017461	SATA power cable	2
1700001788	Serial port cable	3
1960046526N001	CPU cooler (For Atom D510 only)	1
1960046435T000	I/O port bracket	1
2002021210	Startup manual	1
2062021200	Driver CD	1

## Optional Accessories

Part Number	Description
1700003195	USB cable with four ports, 17.5 cm
1700002204	USB cable with four ports, 27 cm
1700008461	USB cable with four ports, 30.5 cm
1757003082	Adapter AC100-240V 60W +12V/5A

## Embedded OS/API

Embedded OS/API	Part No.	Description
Win XPE	2070009030	XPE WES2009 AIMB-210 V4.0 ENG
	2070009031	XPE WES2009 AIMB-210 V4.0 24MUI
Software API	205E212000	SUSI 3.0 SW API for AIMB-212 B:20091115 XP

## Bracket View



