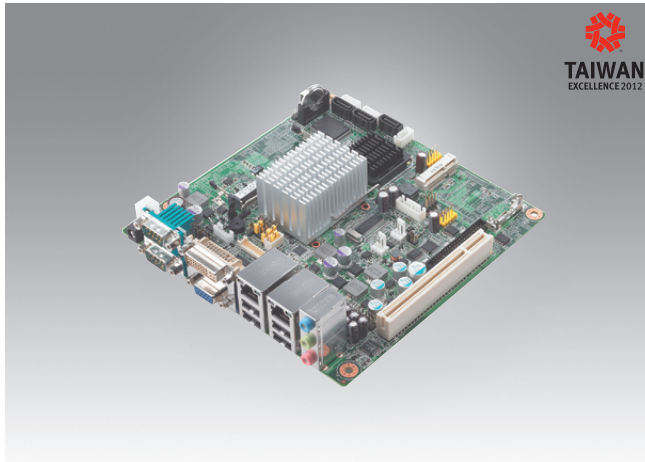


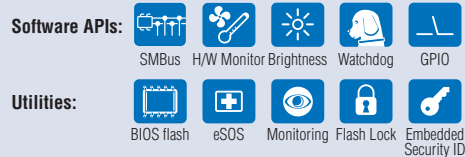
AIMB-213

Intel® Atom™ N455/D525 Mini-ITX with CRT/DVI/LVDS, 6 COM, and Dual LAN



Features

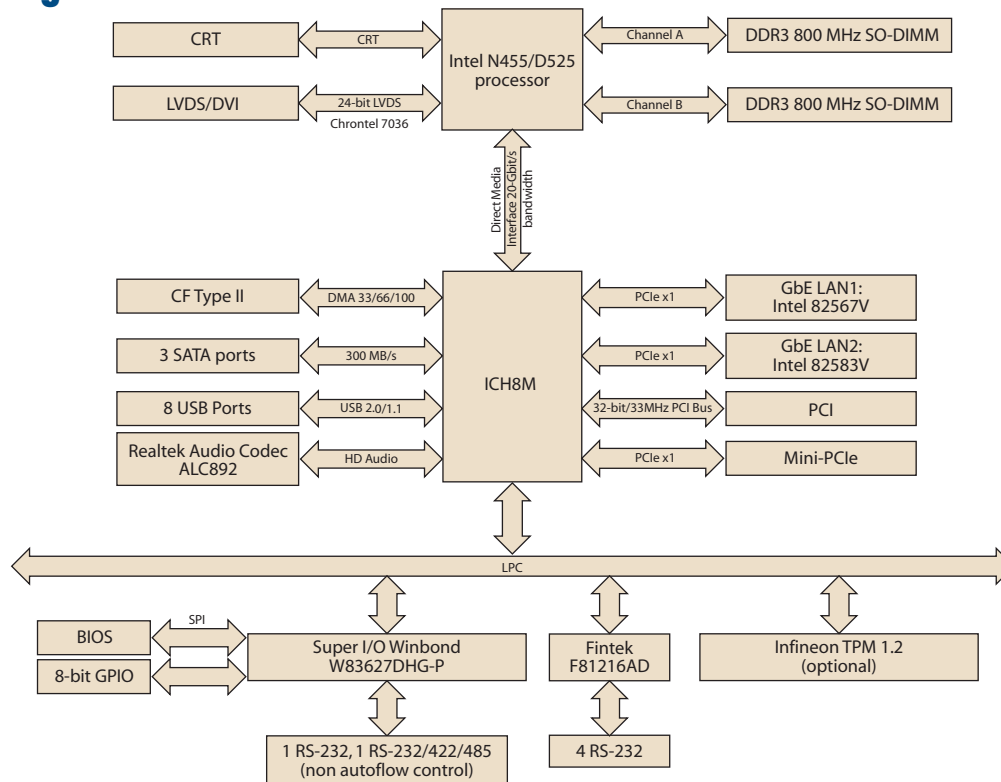
- Supports Intel® Atom™ processor N455 and D525 dual core
- Two 204-pin SO-DIMM up to 4 GB DDR3 800 MHz SDRAM
- Supports 1 PCI and 1 Mini-PCIe expansion, 6 serial ports, 8 USB, and CF
- Lower total cost of ownership with DC12V support and supports 18/24-bit LVDS
- Onboard TPM 1.2 support (optional)
- Supports embedded software APIs and Utilities



Specifications

Processor System	CPU (45 nm)	Intel Atom N455	Intel Atom D525	
	Max. Speed	1.66 GHz (single core)	1.8 GHz (dual core)	
	L2 Cache	512 KB	1 MB	
	Chipset	ICH8M		
	BIOS	AMI 16 Mbit SPI		
Expansion Slot	PCI	32-bit/33 MHz, 1 slot		
	Mini-PCIe	1		
	PCIe	-		
Memory	Technology	Dual channel DDR3 800 MHz SDRAM		
	Max. Capacity	4 GB/2 GB per SO-DIMM		
	Socket	2 x 204-pin SO-DIMM (Non-ECC)		
Graphics	Controller	Embedded Gen3.5+ GFX Core, 200/400-MHz render clock frequency for N455/D525		
	VRAM	Shared system memory up to 224 MB SDRAM		
	VGA	Supports up to SXGA 1400 x 1050 @ 60Hz for Atom N455, up to 2048 x 1536 for Atom D525		
	LVDS	Supports 18/24-bit single channel and up to WXGA 1366 x 768 (through Chronitel 7036)		
	DVI	Supports up to UXGA 1600 x 1200 @ 60Hz by S/W		
Ethernet	Dual Display	VGA + DVI, VGA + LVDS, support extended mode and clone mode		
	Interface	10/100/1000 Mbps		
	Controller	GbE LAN1: Intel 82567V; GbE LAN2: Intel 82583V		
SATA	Connector	RJ-45 x 2		
	Max Data Transfer Rate	300 MB/s (SATA 2.0)		
EIDE	Channel	3		
	Mode	None		
SSD	Channel	None		
	CompactFlash	Supports CompactFlash Type I/II		
Rear I/O	CRT	1		
	DVI	1		
	Ethernet	2		
	USB	4 (USB 2.0)		
	Audio	3 (Mic-in, Line-out, Line-in)		
	Serial	2 (1 x RS-232, 1 x RS-232/422/485)		
	DC Jack	1 (2.5 mm)		
Internal Connector	Parallel	-		
	DIO	8-bit GPIO		
	Watchdog Timer	System reset		
	Interval	Programmable 1 ~ 255 sec/min		
	Power	Power Type	Single voltage 12V DC input; 1 x External DC jack; 1 x Internal 4-pin (2x2) power connector; Supports AT/ATX mode	
		Power Consumption	12 V @ 3.4 A (Intel D510 1.66 GHz processor/DDR2 800 MHz 2 GB, SATA HDD x1) 12 V @ 2.73 A (Intel N455 1.66 GHz processor/DDR2 800 MHz 2 GB, SATA HDD x1)	
	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")	

Block Diagram



Ordering Information

Part Number	CPU	SC/DC	GbE	COM	LVDS	TPM	Thermal Solution
AIMB-213N-S6A1E	Atom N455	Single core	2	6	1, 18/24-bit	(1)	Passive
AIMB-213D-S6A1E	Atom D525	Dual core	2	6	1, 18/24-bit	1	Active

Note: Passive = fanless; Active = with fan
 *() BOM options available on MP version.

Packing List

Part number	Description	Quantity
1700003194	SATA HDD cable	3
1700018785	SATA power cable	3
1700008876	1-to-4 serial ports cable kit, 35 cm	1
1960046526N001	CPU cooler (For Atom D525 only)	1
1960050473T000	I/O port bracket	1
2002021310	Startup manual	1
2062021300	Driver CD	1

I/O View



AIMB-213N-S6A1E
 AIMB-213D-S6A1E

Optional Accessories

Part Number	Description
1700003195	USB cable with two ports, 17.5 cm
1700002204	USB cable with two ports, 27 cm
1700008461	USB cable with four ports, 30.5 cm
1757003995	Adapter AC100-240V 60 W +12V/5A FSP
1700018699	KBMS cable 1*6P-2.5/DIN-6P(F)*2, 25 cm

Optional Chassis

Part Number	Description
AIMB-B2000-00YE	Mini-ITX chassis with optional DC Adaptor

Embedded OS/API

OS/API	Part No.	Description
Win XPE	2070010792	WES09 AIMB-213 V4.0 ENG ATI PSNL
	2070010791	WES7 E SP1 x86 AIMB-213 V5.1 ENG ATI PSNL
Win CE	2070011086	CE 7.0 Pro AIMB-213 V1.0 ENG
Software API	TBD	SUSI V3.0 SW API for AIMB-213 XP