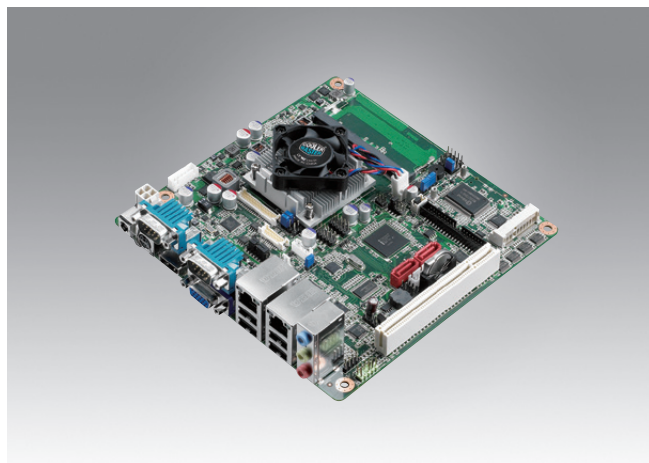


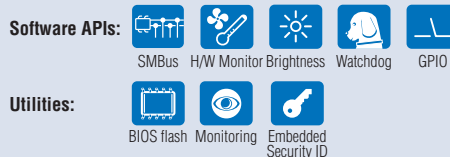
# AIMB-214

Intel® Atom™ N2600/D2550 Mini-ITX with CRT/HDMI/2 LVDS, 6 COM, and Dual LAN



## Features

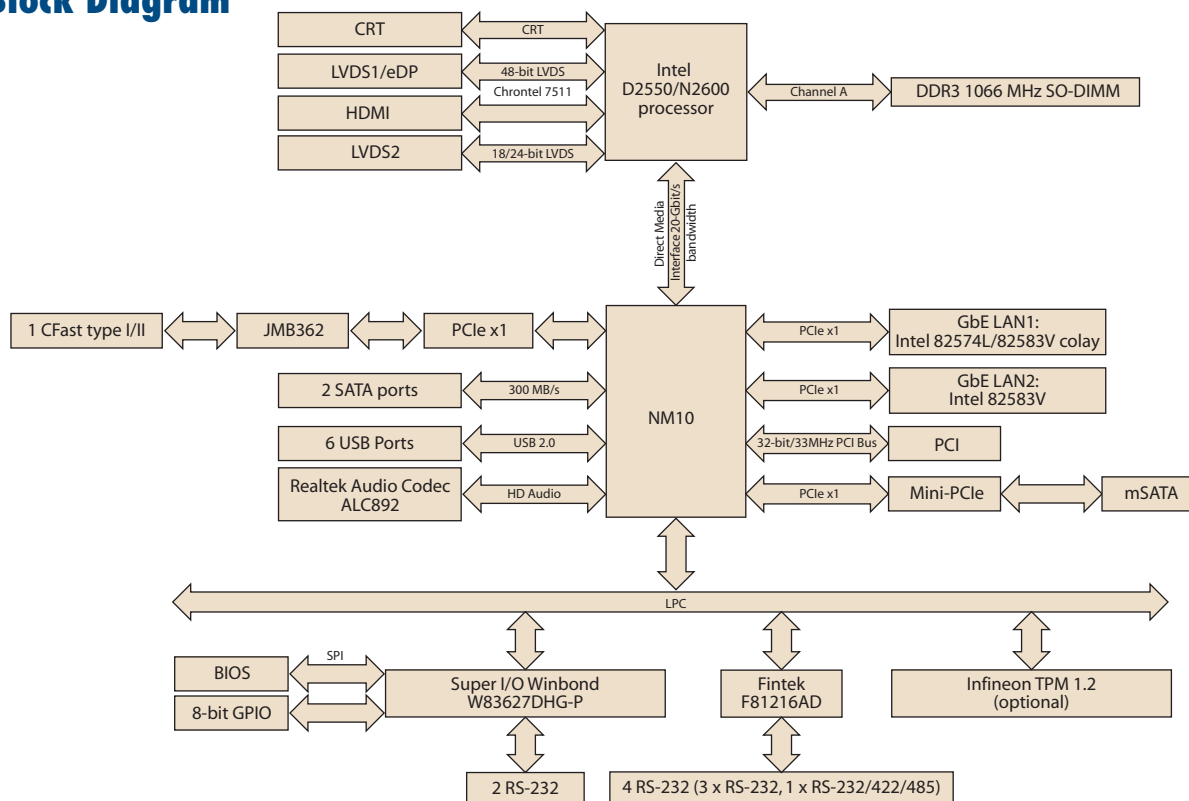
- Supports Intel® Atom™ processor N2600, and D2550 dual core
- One 204-pin SO-DIMM up to 4 GB DDR3 1066 MHz SDRAM
- Supports 1 PCI and 1 Mini-PCIe expansion, 6 serial ports, 6 USB, and CFast
- Lower total cost of ownership with DC12V support, and supports 24/48-bit LVDS
- Onboard TPM 1.2 support (optional)
- Supports SUSIAccess and Embedded Software APIs



## Specifications

Processor System	CPU (32nm)	Intel Atom N2600	Intel Atom D2550
	Max. Speed	1.6 GHz (Dual core)	1.86 GHz (Dual core)
	L2 Cache	1MB	1MB
	Chipset	NM10	NM10
	BIOS	AMI 16Mbit SPI	AMI 16Mbit SPI
Expansion Slot	PCI	32-bit/33 MHz, 1 slot	
	Mini-PCIe	1	
	PCIe	-	
Memory	Technology	Single channel DDR3 1066 MHz SDRAM	
	Max. Capacity	4 GB	
	Socket	1 x 204-pin SO-DIMM (Non-ECC)	
Graphics	Controller	Embedded Gen3.5+ GFX Core, 400/640 MHz render clock frequency for N2600/D2550	
	VRAM	Shared system memory up to 224 MB SDRAM	
	VGA	Supports up to SXGA 1920 x 1200 @ 60 MHz	
	LVDS	Supports Dual Channel 48-bit: Max. resolution up to 2560 x 1600 (D2550); 1600 x 1200 (N2600). co-lay eDP port (optional)	
	HDMI	Supports up to 1920 x 1200 @ 60 MHz	
Ethernet	Dual Display	VGA+HDMI, VGA+LVDS, VGA+eDP (optional), Supports extended mode and clone mode	
	Interface	10/100/1000 Mbps	
SATA	Controller	GbE LAN1: Intel 82574L/82583V co-lay GbE LAN2: Intel 82583V	
	Connector	RJ-45 x 2	
EIDE	Max Data Transfer Rate	300 MB/s (SATA 2.0)	
	Channel	2	
SSD	Mode	None	
	Channel	None	
Rear I/O	CFast CompactFlash	Supports CFast Type I/II	
	CRT	1	
	HDMI	1	
	Ethernet	2	
	USB	4 (USB 2.0)	
	Audio	3 (Mic-in, Line-out, Line-in)	
	Serial	2 (1 of RS-232, 1 of RS-232/422/485)	
	KB/MS	1	
	DC jack	1 (2.5 mm)	
Internal Connector	LVDS & Inverter	2	
	eDP	1 (optional, by removing LVDS1)	
	USB	2 (USB 2.0)	
	Serial	4 (RS-232), only COM6 supply 5V/12V	
	IDE	None	
	SATA	2 (SATA 2.0)	
	SATA PWR Connector	2	
	CFast	1	
	Parallel	None	
DIO	8-bit GPIO		
Watchdog Timer	Output	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	
	Typical Power Consumption	Windows IDOL: 17.8 W (Intel N2600 1.6 GHz processor/DDR3 1333 MHz 4 GB)	
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-214E-S6A1E	D2550	Dual core	2	6	2, LVDS1: 48-bit LVDS; LVDS2: 24-bit LVDS	1	Active
AIMB-214U-S6A1E	N2600	Dual core	2	6	2, LVDS1: 48-bit LVDS; LVDS2: 24-bit LVDS	(1)	Passive
AIMB-214L-S6A1E	D2550	Dual Core	1	2	1, LVDS2: 24-bit LVDS	None	Passive

Note: Passive = fanless; Active = with fan

\*( ) BOM options available on MP version.

## Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	2
1700018785	SATA power cable	2
1700008876	1-to-4 serial ports cable kit, 35 cm	1
1960046526N001	CPU cooler (For Atom D2550 only)	1
1960058596T000	I/O port bracket	1
2002021410	Startup manual	1
2062021401	Driver CD	1

## Optional Accessories

Part Number	Description
1700003195	USB cable with two ports, 17.5 cm
1700002204	USB cable with two ports, 27 cm
1757003995	Adapter AC100-240V 60W +12V/5A
1700018699	KBMS cable 1*6P-2.5/DIN-6P(F)*2, 25 cm
1960057364N001	AIMB-214E D2550 Fanless heatsink

## Optional Chassis

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

## I/O View



AIMB-214E-S6A1E  
AIMB-214U-S6A1E

## Embedded OS/API

OS/API	Part No.	Description
WES7	2070010955	WES7E SP1 x32 AIMB-214 V5.1 ENG API
Software API	TBD	SUSI V3.0 SW API for AIMB-214 WIN7