
Datasheet

Advantech

AIMB-217

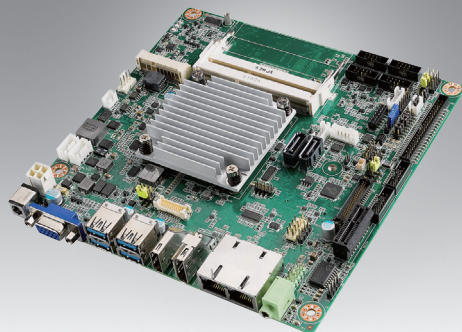
-

The information contained in this document has been carefully researched and is, to the best of our knowledge, accurate. However, we assume no liability for any product failures or damages, immediate or consequential, resulting from the use of the information provided herein. Our products are not intended for use in systems in which failures of product could result in personal injury. All trademarks mentioned herein are property of their respective owners. All specifications are subject to change without notice.

AIMB-217

Intel Pentium , Celeron & Atom x7 Mini-ITX with HDMI/DP/VGA, 6 COM, and Dual LAN

Preliminary



WISE-PaaS/RMM

Features

- Supports Intel Pentium, Celeron Quad Core & Dual Core processor
- Two 204-pin SO-DIMM up to 8 GB DDR3L 1866 MHz SDRAM
- Supports DP 1.2/HDMI 1.4b/VGA
- Supports 1 PCIe x1 and 1 M.2 (E key) + 1 MiniPCIe, 6 COMs, 4 USB 3.0, and 4 USB 2.0
- Lower total cost of ownership with DC12V support and onboard TPM1.2/2.0 (optional)
- Supports WISE-PaaS/RMM and Embedded Software APIs

Software APIs:



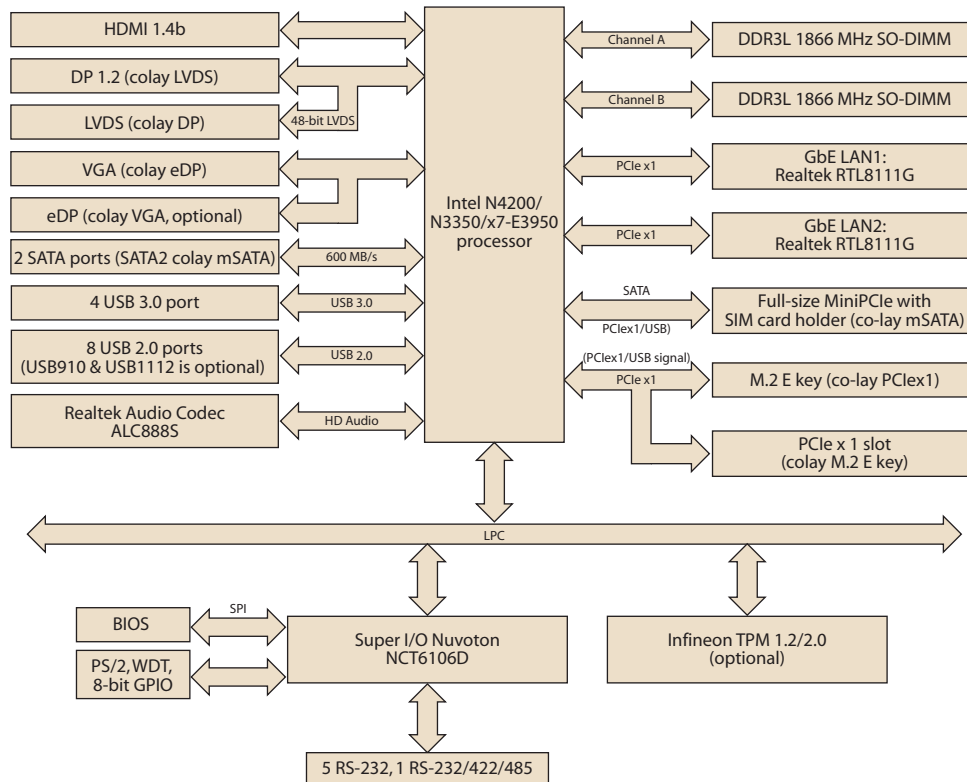
Utilities:



Specifications

Processor System	CPU (14nm)	N4200	N3350	x7-E3950
	Core Number	4	2	4
	Max. Speed	1.1 GHz	1.1 GHz	1.6 GHz
	BIOS	AMI 128 Mbit SPI		
Expansion Slot	M.2	E key for wireless module (Type: 2230)		
	Mini-PCIe	1 (F/S with SIM card holder)		
	PCIe	PCI Express x1 (Gen2), colay M.2 E key		
Memory	Technology	Dual channel DDR3L 1866 MHz SDRAM		
	Max. Capacity	8 GB/8 GB per SO-DIMM		
	Socket	2 x 204-pin SO-DIMM (Non-ECC)		
Graphics	Controller	Intel Gen 9 Graphics Engines and media encode/decode engine		
	VGA/eDP	1 VGA supports up to 1920 x 1200 @ 60Hz co-lay eDP. eDP is BOM optional which supports up to 4096 x 2160 @ 60 Hz		
	HDMI	1 HDMI 1.4b supports up to 3840 x 2160 @ 30 Hz		
	DP+/LVDS	1 DP 1.2 supports up to 4096 x 2160 @ 60 Hz; co-lay with LVDS supports dual channel 48-bit up to 1920 x 1200		
	Triple display	VGA (or EDP) + DP (or LVDS) + HDMI		
Ethernet	Interface	10/100/1000 Mbps		
	Controller	GbE LAN1: Realtek 8111G GbE LAN2: Realtek 8111G		
	Connector	RJ-45 x 2		
SATA	Max Data Transfer Rate	600 MB/s		
	Channel	2, SATA 2 colay mSATA		
Rear I/O	VGA	1		
	DP 1.2	1		
	HDMI 1.4b	1		
	Ethernet	2		
	USB	4 (USB 3.0)		
	Audio	1 (supports Line-out by default, converts to Mic in or Line in)		
Internal Connector	DC jack	1 (2.5 mm)		
	LVDS & Inverter	1/1		
	eDP	1 (optional)		
	USB	4 (USB 2.0)		
	Serial	6 (5 x RS-232, 1 x RS-232/422/485; COM 3 support RS-232/422/485 auto flow control; COM 6 support 5V/12V by jumper selection)		
	IDE	None		
	SATA	2		
	SATA PWR Connector	2		
	Parallel	None		
	Mini-PCIe	1 (F/S with SIM card holder), co-lay mSATA		
	M.2	1 (E key for wireless module support)		
	GPIO	8-bit		
PS/2 KB & MS	1			
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	TBD		
Environment	Temperature	Operating	Non-Operating	
		0 ~ 60° C (32 ~ 140° F) with 0.7m/s air flow (for D/N SKU) -20 ~ 70° C (-4 ~ 158° F) with 0.7m/s air flow (for Z SKU)	-40 ~ 85° C (-40 ~ 185° F)	
Physical Characteristics	Dimensions	170 x 170 mm (6.69" x 6.69")		

Block Diagram



Ordering Information

Part Number	CPU	Memory	VGA/eDP	HDMI	DP/LVDS	GbE LAN	COM	SATA III	USB3.0/2.0	MiniPCle	M.2	TPM	AMP	PClex1	Thermal Solution	Operating Temp.
AIMB-217D-S6A1E	N4200	2	1 / (1)	1	1	2	6	2	4/4	1 (F/S)	1	(1)	(2 x 6W)	1	Passive	0 ~ 60° C
AIMB-217N-S6A1E	N3350	2	1 / (1)	1	1	2	6	2	4/4	1 (F/S)	1	(1)	(2 x 6W)	1	Passive	0 ~ 60° C
AIMB-217Z-S6A1E	x7-E3950	2	1 / (1)	1	1	2	6	2	4/4	1 (F/S)	1	(1)	(2 x 6W)	1	Passive	-20 ~ 70° C

Note: Passive = fanless

* () BOM options available on MP version

Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	1
1700018785	SATA power cable	1
1700008876	1-to-4 serial ports cable kit, 35 cm	1
1700100250	1-to-1 serial port cable, 25 cm	2
1960079933T000	I/O port bracket	1
2006B21700	Startup manual	1
1960064228N001	Fanless heatsink for AIMB-217D/N	1
1960071473T011	Fanless heatsink for AIMB-217Z	1

Optional Accessories

Part Number	Description
96PSA-A60W12V1-1	Adapter AC100-240V 60W +12V/5A
96PSA-A84W12V1	Adapter AC100-240V 84W, 12V/7A
1703060191	KBMS cable 1*6P-2.5/DIN-6P(F)*2, 25 cm
1700025084-01	ATX 2*10P to 1*3P-2.0 25cm cable
1700024790-01	A Cable USB-A 4P(F)*2/2*5P-2.0 20CM F/10
1700023474-01	A Cable USB-A 4P(F)*2/2*5P-2.0 34.5CM F/10

Optional Chassis

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

Embedded OS/API

OS/API	Part No.	Description
Win 10 IoT	2070014970	img W10 16EL AIMB-217 64bit 1701 Eng

I/O View



Our company network supports you worldwide with offices in Germany, Austria, Switzerland, Great Britain and the USA. For more information please contact:

Headquarters

Germany



FORTEC Elektronik AG

Lechwiesenstr. 9
86899 Landsberg am Lech

Phone: +49 8191 91172-0
E-Mail: sales@forteca.de
Internet: www.forteca.de

Fortec Group Members

Austria



FORTEC Elektronik AG

Office Vienna

Nuschinggasse 12
1230 Wien

Phone: +43 1 8673492-0
E-Mail: office@fortec.at
Internet: www.fortec.at

Germany



Distec GmbH

Augsburger Str. 2b
82110 Germering

Phone: +49 89 894363-0
E-Mail: info@distec.de
Internet: www.distec.de

Switzerland



ALTRAC AG

Bahnhofstraße 3
5436 Würenlos

Phone: +41 44 7446111
E-Mail: info@altrac.ch
Internet: www.altrac.ch

United Kingdom



Display Technology Ltd.

5 The Oaks Business Village
Revenge Road, Lordswood
Chatham, Kent, ME5 8LF

Phone: +44 1634 672755
E-Mail: info@displaytechnology.co.uk
Internet: www.displaytechnology.co.uk

USA



Apollo Display Technologies, Corp.

87 Raynor Avenue,
Unit 1 Ronkonkoma,
NY 11779

Phone: +1 631 5804360
E-Mail: info@apolloDisplays.com
Internet: www.apolloDisplays.com