

# AIMB-218

Intel Pentium , Celeron & Atom  
Mini-ITX with HDMI/DP/eDP or LVDS,  
6 COM, and Dual LAN



## Features

- Supports Intel Pentium, Celeron, Atom, Quad Core & Dual Core processor
- Two 204-pin SO-DIMM up to 32 GB DDR4 3200 MHz SDRAM
- Supports DP++ 1.2/HDMI 1.4b/eDP (Option)/LVDS(Optional)
- Supports 1 PCIe x1 or 2 M.2 (B+E key), 6 COMs(4 COM option), 3 USB 3.2 Gen2, and 5 USB 2.0
- Lower total cost of ownership with DC12V support and onboard TPM2.0 (optional)
- Supports Device-On and Embedded Software APIs

### Software APIs:



### Utilities:

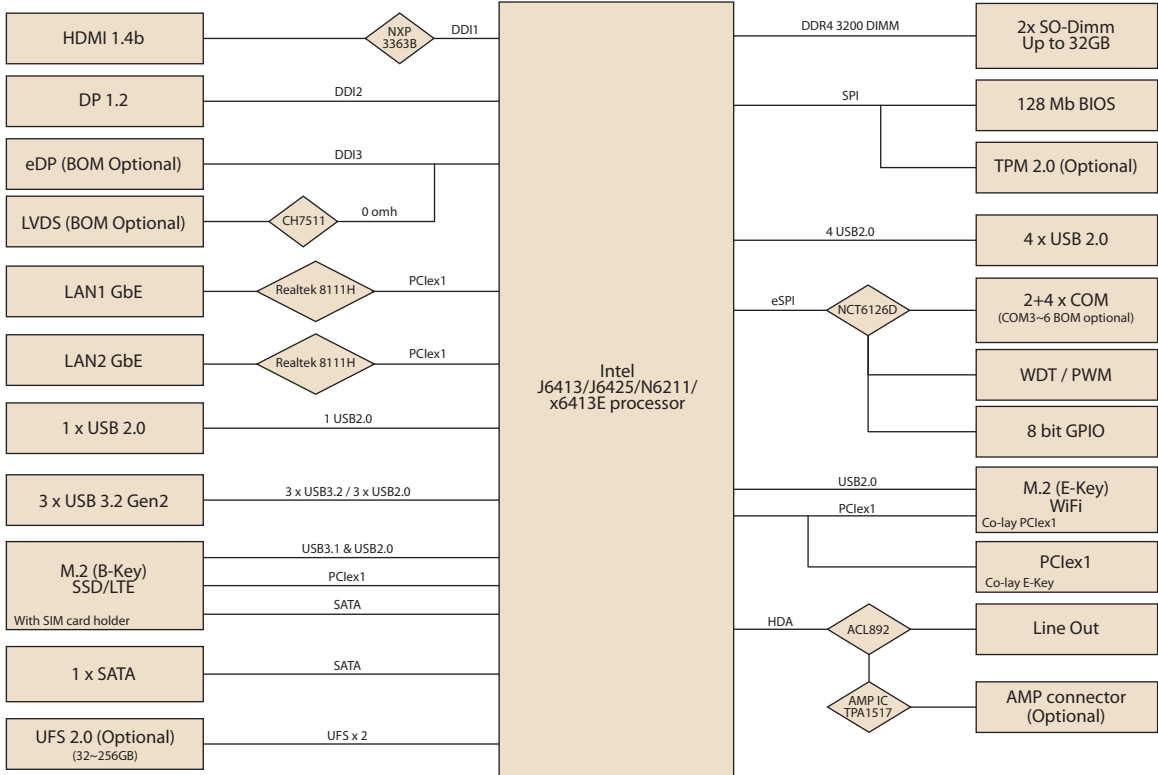


WISE-DeviceOn CE FC RoHS COMPLIANT PRODUCT

## Specifications

Processor System	CPU (10nm)	J6413	J6425	N6211	x6413E
	Core Number	4	4	2	4
	Base Frequency	1.8GHz	1.8GHz	1.2GHz	1.5GHz
	BIOS	AMI 256 Mbit SPI			
Expansion Slot	M.2	E key for wireless module (Type: 2230) B key for storage and LTE module, only support PCIe1 signal (Type: 2242/2280)			
	PCIe	PCI Express x1			
Memory	Technology	Dual channel DDR4 3200 MHz SDRAM			
	Max. Capacity	32 GB/32 GB per SO-DIMM			
	Socket	2 x 260-pin SO-DIMM (Non-ECC)			
Graphics	Controller	Intel Gen 11 Graphics Engines			
	LVDS/eDP	1 (optional) / 1 (optional)			
	HDMI	1 HDMI 1.4b			
	DP++	1 DP 1.2			
	Triple display	DP + HDMI, DP + HDMI + eDP (optional), DP + HDMI + LVDS(optional)			
Ethernet	Interface	10/100/1000 Mbps			
	Controller	GbE LAN1: Realtek 8111H GbE LAN2: Realtek 8111H			
	Connector	Max. RJ-45 x 2			
SATA	Max Data Transfer Rate	600 MB/s			
	Channel	1			
Rear I/O	DP 1.2	1			
	HDMI 1.4b	1			
	Ethernet	2			
	USB	4 (3USB 3.2 Gen2 + 1USB2)			
	Audio	1 (supports Line-out by default, converts to Mic in or Line in)			
	DC jack	1 (2.5 mm)			
Internal Connector	LVDS & Inverter	1 (optional)			
	eDP	1 (optional)			
	USB	4 USB2.0			
	Serial	6 (COM1 support 5V/12V selection; COM2 support RS-232/422/485, set by Jumper; COM3-COM6 support RS-232 (COM3-6 BOM option))			
	SATA	1			
	SATA PWR Connector	1			
	M.2	2 (B key for storage and LTE module, only support PCIe1 signal; 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/J/L 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	LVDS/eDP	HDMI	DP	GbE LAN	COM	SATA III	USB3.2/2.0	M.2	TPM	AMP	PClex1	Thermal Solution	Operating Temp.
**AIMB-218L-S0A1E	N6211	2	(1)/(1)	1	1	1	2	1	3/5	2	(1)	(2 x 6W)	1	Passive	0 ~ 60 °C
AIMB-218D-S0A1E	J6425	2	1/(1)	1	1	2	6(High Speed)	1	3/5	2	1	2 x 6W	1	Passive	0 ~ 60 °C
AIMB-218J-S0A1E	J6413	2	(1)/(1)	1	1	2	2(+4)	1	3/5	2	(1)	(2 x 6W)	1	Passive	0 ~ 60 °C
AIMB-218Z-S0A1E	x6413E	2	1/(1)	1	1	2	6(High Speed)	1	3/5	2	1	2 x 6W	1	Passive	-20 ~ 70 °C

Note: Passive = fanless  
 \* ( ) BOM options available on MP version  
 \*\* Bulk packing(wo/Cables, Startup manual, M.2 Screw)

### Packing List

Part Number	Description	Quantity
1700003194-21	SATA HDD cable	1
1700018785-01	SATA power cable	1
1701200220-01	COM cable	1
TBD	I/O port bracket	1
TBD	Startup manual	1
TBD	Fanless heatsink for AIMB-218	1

### Optional Accessories

Part Number	Description
96PSA-A60W12V1-1	Adapter AC100-240V 60W +12V/5A
96PSA-A84W12V1	Adaptor AC100-240V 84W, 12V/7A
1700023082-11	ATX 2*10P to 1*3P-2.0 15cm cable

### Optional Chassis

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

### Embedded OS/API

OS/API	Part No.	Description
TBD	TBD	TBD

### I/O View

