

AIMB-242

Intel® Xeon, Core™ i7/i5/i3 Mini-ITX with Dual DP++/HDMI/LVDS(eDP), 2 COM, Dual LAN, PCIe x16, M.2, DDR4

NEW



WISE-PaaS/RMM

Features

- Supports Intel® Xeon, 6th Gen Core™ i mobile processor (BGA) with Intel QM170/CM236 chipset
- Two 260-pin SO-DIMM up to 32GB DDR4 2133 MHz SDRAM
- Supports triple display of Dual DP++/HDMI/LVDS(eDP)
- Supports PCIe x16 (Gen 3), 2 MiniPCIe, M.2, 8 USB3.0 & 1 USB2.0, 2 SATAIII
- Supports Intel vPro, AMT 11.0, TPM 1.2 / 2.0 (optional)
- Supports WISE PaaS/RMM and Embedded Software APIs

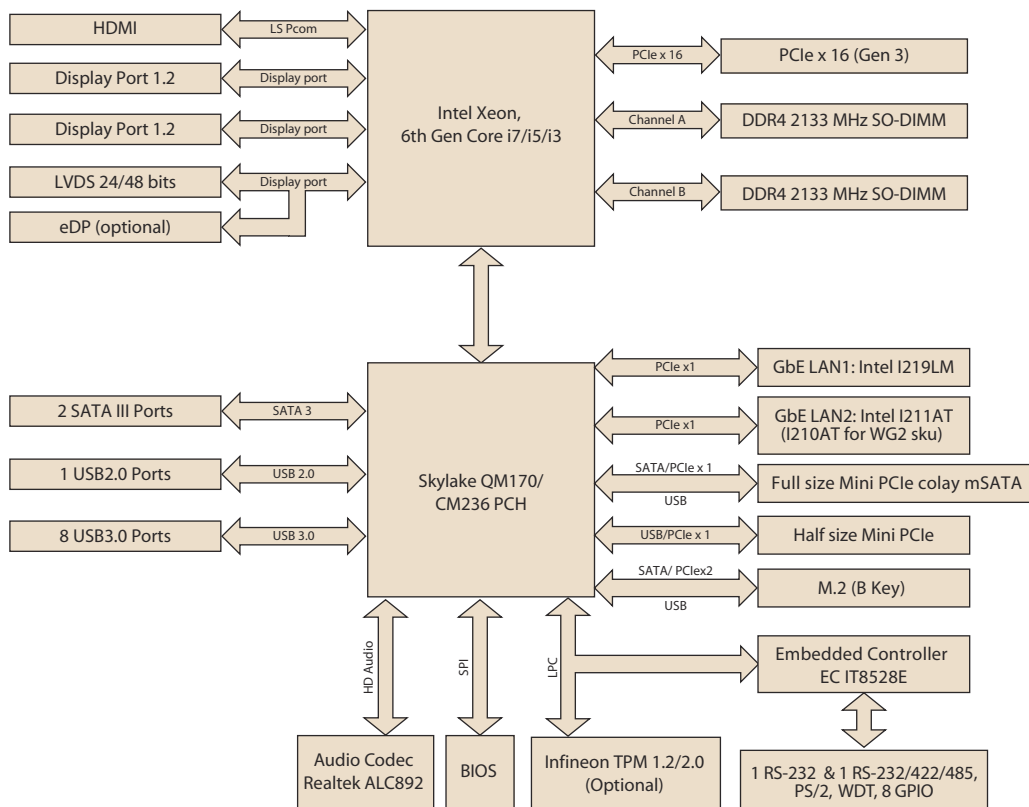
Software APIs: H/W Monitor Watchdog GPIO Brightness

Utilities: BIOS flash Monitoring

Specifications

Processor System	CPU	i7-6820EQ	i7-6822EQ	i5-6440EQ	E3-1515M v5
	Core Number	4	4	4	4
	Max Speed	2.8 GHz	2.0 GHz	2.7 GHz	2.8 GHz
	Intel® Smart Cache	8 M	8 M	6 M	8 M
	TDP	45 W	25 W	45 W	45 W
	Chipset	QM170	QM170	QM170	CM236
Expansion Slot	BIOS	AMI EFI 128 Mbit SPI			
	M.2	1, B key for SSD and 3G supported (Type: 2242, 2280mm)			
	Mini-PCIe	2			
Memory	PCle x16 (Gen3)	16 GB/s per direction, 1 slot			
	Technology	Dual Channel DDR4 2133 MHz SDRAM			
	Max. Capacity	32GB (up to 16GB per SO-DIMM) ECC memory support for AIMB-242WG2			
	Socket	2 x 260 PIN DDR4 SO-DIMM			
Graphics	Controller	Supports OpenGL 5.x, DirectX11, OpenCL 2.X			
	VRAM	Shared system memory, 2 GB and above, total system memory shared 1 GB maximum video memory			
	LVDS	Supports dual channel 48-bit up to 1920 x 1200			
	HDMI	Yes, supports max. resolution 4096 x 2160 @ 60 Hz (HDMI 2.0)			
	eDP	Yes, with internal pin header, supports max. resolution 4096 x 2304 @ 60 Hz			
	Display Port 1.2	Yes, supports max. resolution 4096 x 2304 @ 60 Hz			
Ethernet	Triple Display	DP+DP+LVDS(or eDP), DP+DP+HDMI, DP+HDMI+LVDS(or eDP)			
	Interface	10/100/1000 Mbps			
	Controller	GbE LAN1: Intel i219LM; LAN2: Intel i211AT for AIMB-242QG2; Intel i210AT for AIMB-242WG2			
SATA	Connector	RJ-45 x 2			
	Max Data Transfer Rate	600 MB/s (SATA 3.0)			
Rear I/O	Channel	2			
	HDMI	1 (HDMI 2.0)			
	Display Port 1.2	2			
	Ethernet	2			
	USB	8 (USB3.0)			
	Audio	3 (Mic-in, Line-out, Line-in)			
	Serial	1 (RS-232, supports 5V/12V)			
Internal Connector	USB	1 (USB2.0)			
	LVDS/inverter	1			
	Serial	1 (RS-232/422/485)			
	IDE	-			
	SATA	2 (SATA 3.0)			
	Mini-PCIe	2 (F/S x 1 with mSATA support & H/S x 1)			
	M.2	1 (B Key for SSD and 3G supported)			
Watchdog Timer	IrDA	-			
	GPIO	8-bit			
Power Requirements	Output	System reset			
	Interval	Programmable 1 ~ 255 sec/min			
Environment	Typical Power Consumption	TBD			
	Temperature	Operating AIMB-242QG2: 0 ~ 60° C (32 ~ 140° F), with 0.7m/s air flow, depends on CPU speed and cooler solution AIMB-242WG2: 0 ~ 50° C (32 ~ 122° F), with 0.7m/s air flow, depends on CPU speed and cooler solution		Non-Operating -40 ~ 85° C (-40 ~ 185° F)	
Physical Characteristics	Dimensions	170 mm x 170 mm (6.69" x 6.69")			

Block Diagram



Ordering Information

P/N	CPU	Chipset	DP	LVDS/ eDP	HDMI 2.0	GbE LAN	COM	M.2 (B key)	SATA	USB 3.0/ 2.0	MiniPCIe	TPM	AMP	PClex16
AIMB-242QG2-H7A1E	i7-6820EQ	QM170	2	1 / (1)	1	2	2	1	2	8/1	2 (1 x F/S; 1 x H/S)	(1)	(1)	1
AIMB-242QG2-M7A1E	i7-6822EQ	QM170	2	1 / (1)	1	2	2	1	2	8/1	2 (1 x F/S; 1 x H/S)	(1)	(1)	1
AIMB-242QG2-H5A1E	i5-6440EQ	QM170	2	1 / (1)	1	2	2	1	2	8/1	2 (1 x F/S; 1 x H/S)	(1)	(1)	1
AIMB-242WG2-HEA1E	E3-1515Mv5	CM236	2	1 / (1)	1	2	2	1	2	8/1	2 (1 x F/S; 1 x H/S)	(1)	(1)	1

*) BOM options available on MP version.

Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	1
1700022363-01	Serial port cable	1
1960077251T000	I/O port bracket	1
2006024210	Startup manual	1
1960054541N031	CPU cooler for 45W Core i (0 ~ 60° C)	1
1960080732N001	CPU cooler for CPU TDP 45W Xeon (0 ~ 50° C)	1
1960061914N021	CPU cooler for CPU TDP 25W (0 ~ 60° C)	1

Optional Chassis

Part Number	Description
AIMB-B2000-15ZE	Mini-ITX chassis with 150W ATX power supply

Optional Accessories

Part Number	Description
1700025452-01	USB 2.0 cable with one port
1703060191	KB/MS cable 1*6P-2.0/M-DIN 6P(F)*2, 19cm

Embedded OS/API

OS/API	Part No.	Description
WES7	TBD	
WE8.1	2070014680	img WE8.1 IndPro AIMB-242 x64 V1.0 10MUJ
Win10 IoT	TBD	