



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



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

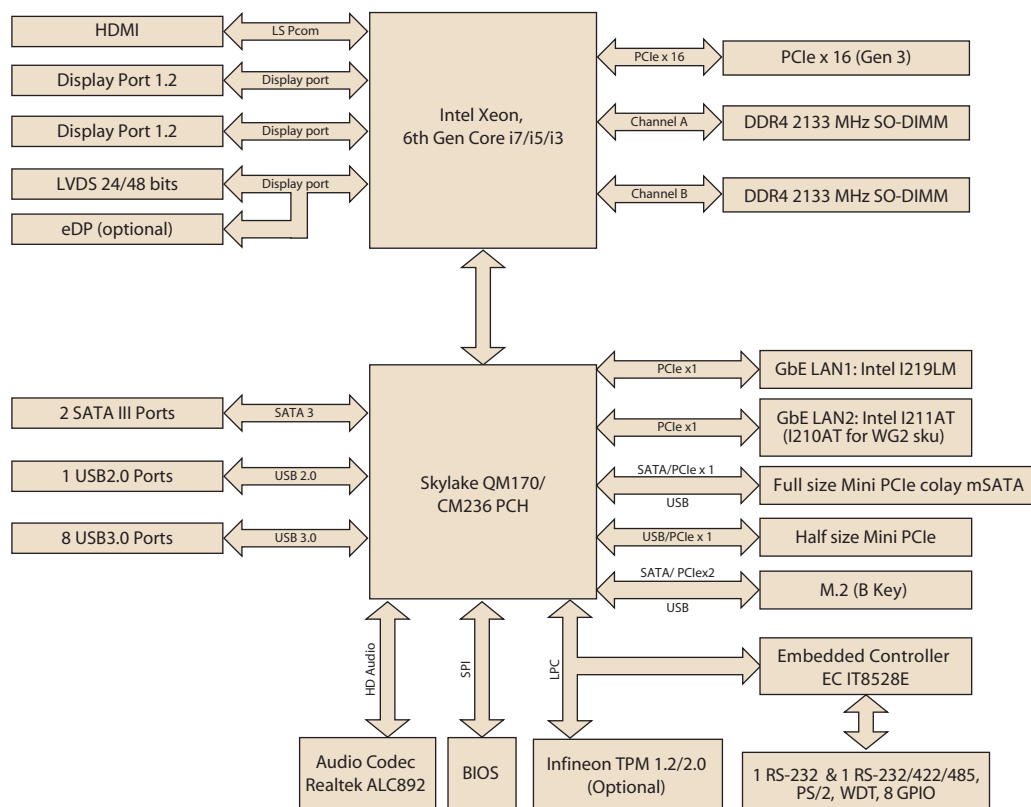
Software APIs: H/W Monitor Watchdog GPIO Brightness

Utilities: BIOS flash Monitoring

Specifications

		i7-6820EQ	i7-6822EQ	i5-6440EQ	E3-1515M v5
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	MiniPCle	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	