



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

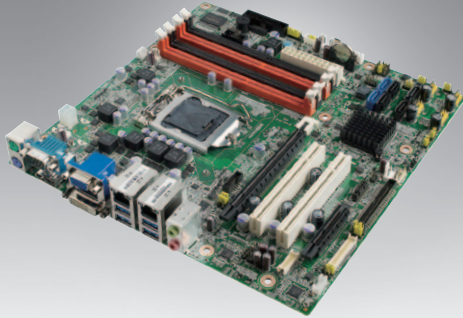
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



AIMB-584

Intel® Xeon® E3/ Core™ i7/i5/i3 LGA1150
MicroATX with CRT/DVI/eDP/LVDS/DP,
6 COM, Dual LAN, SATAIII

NEW



Specifications

	CPU	E3-1275 v3	E3-1225 v3	E3-1268L v3	i7-4790S	i7-4770S/ 4770TE	i5-4590S/ 4590T	i5-4570S/ 4570TE	i3-4360/ 4350T/4340TE	i3-4330 / i3-4330TE	Pentium G3420	Pentium G3320TE	
Processor System	Core Number	4	4	4	4	4 / 4	4 / 4	4 / 2	2 / 2	2 / 2	2	2	
	Max. Speed	3.5 GHz	3.2 GHz	2.3 GHz	3.2GHz	3.1G/ 2.3GHz	3.0G/ 2.0GHz	2.9G/ 2.7GHz	3.7G/ 3.1G/ 2.6GHz	3.5G / 2.4 GHz	3.2 GHz	2.3 GHz	
	Integrated Graphics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
	L3 Cache	8M	8M	8M	8M	8M / 8M	6M/6M	6M / 4M	4M/4M/4M	4M/4M	3M	3M	
	TDP (W)	84W	84W	45W	65W	65W / 45W	65W/35W	65W / 35W	54W/35W/35W	54W / 35W	54W	35W	
	Supports Model	WG2	WG2	WG2/QG2	QG2	QG2	QG2	QG2/WG2 (i5-4570TE only)	QG2	WG2/QG2	WG2/QG2	WG2/QG2	
	Chipset	Q87/C226											
BIOS	AMI EFI 128 Mbit SPI												
Expansion Slot	PCI	32-bit/33 MHz, 2 slots											
	PCIe x4 (Gen2)	2.0 GB/s per direction, 1 slot											
	PCIe x16 (Gen3)	16 GB/s per direction, 1 slot											
Memory	Technology	Dual Channel DDR3 1333/1600 MHz SDRAM											
	Max. Capacity	32 GB/8 GB per DIMM											
Graphics	Socket	4 x 240-pin DIMM											
	Controller	Intel HD Graphics Supports DirectX11.1, OpenGL 4.0 and OpenCL 1.2											
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed											
	LVDS	Supports dual channel 48 bit up to 1920 x 1200											
	CRT	v max resolution 2048 x 1536 at 60 Hz											
	DVI	Supports max. resolution 1920 x 1200 at 60 Hz											
	eDP	Internal pin header, supports max. resolution 3840 x 2160 @ 60 Hz											
	Display Port	Supports max resolution 3840 x 2160 @ 60 Hz											
	Triple Display	CRT+eDP (or LVDS)+DP, CRT+eDP (or LVDS)+ DVI CRT+DP+DVI, DP+DVI+eDP (or LVDS)											
	Dual Display	CRT+eDP (or LVDS), CRT+DVI, eDP (or LVDS)+ DVI DP+DVI, DP+eDP (or LVDS)											
Ethernet	Interface	10/100/1000 Mbps											
	Controller	GbE LAN1: Intel I217LM, GbE LAN2: Intel I211AT											
	Connector	RJ-45 x 2											
SATA	Max Data Transfer Rate	600 MB/s (SATA 3.0)											
	Channel	6											
Rear I/O	CRT	1											
	DVI	1											
	Display Port	1											
	Ethernet	2											
	USB	4 (4 x USB 3.0)											
	Audio	2 (Mic-in, Line-out)											
	Serial	1 (RS-232)											
	PS/2	2 (1 x keyboard and 1 x mouse)											
Internal Connector	USB	8 (USB 2.0)											
	Serial	5 (4 x RS-232, 1 x RS-232/422/485 to support auto flow control)											
	IDE	-											
	SATA	6 (SATA 3.0)											
	LVDS & Inverter	1 (default)											
	Extended Display Port (eDP)	1 (optional by removing LVDS)											
	Parallel	1											
	JTAG	1											
Watchdog Timer	Output	System reset											
	Interval	Programmable 1 – 255 sec/min											
Power Requirements		Intel Core i7-4770 3.1 GHz, 8 GB DDR3 1600 MHz x 4pcs											
	Power On	+5 V	3.3 V	12 V		5 Vsb					-12 V		
		2.22A	1.13A	5.18A		0.49A					0A		
Environment	Operating												
	Temperature	0 – 60° C (32 – 140° F), depends on CPU speed and cooler solution											
Physical Characteristics	Dimensions	244 mm x 244 mm (9.6" x 9.6")											
Power	Input Mode	ATX input (Default)											

Features

- Supports Intel® Xeon®/ Core™ i7/i5/i3 processor with Q87/C226 chipset
- Four DIMM sockets support up to 32 GB DDR3 1333/1600 MHz SDRAM
- Supports CRT, DVI, LVDS, DP, eDP (optional) display
- Supports Intel AMT 9.0 and Intel vPro competent
- Supports PCIe Gen3, USB 3.0, Software RAID 0,1,5,10, TPM 1.2 (Optional)
- Supports 6 x SATAIII and dual GbE LAN
- Supports SUSIAccess and Embedded Software APIs

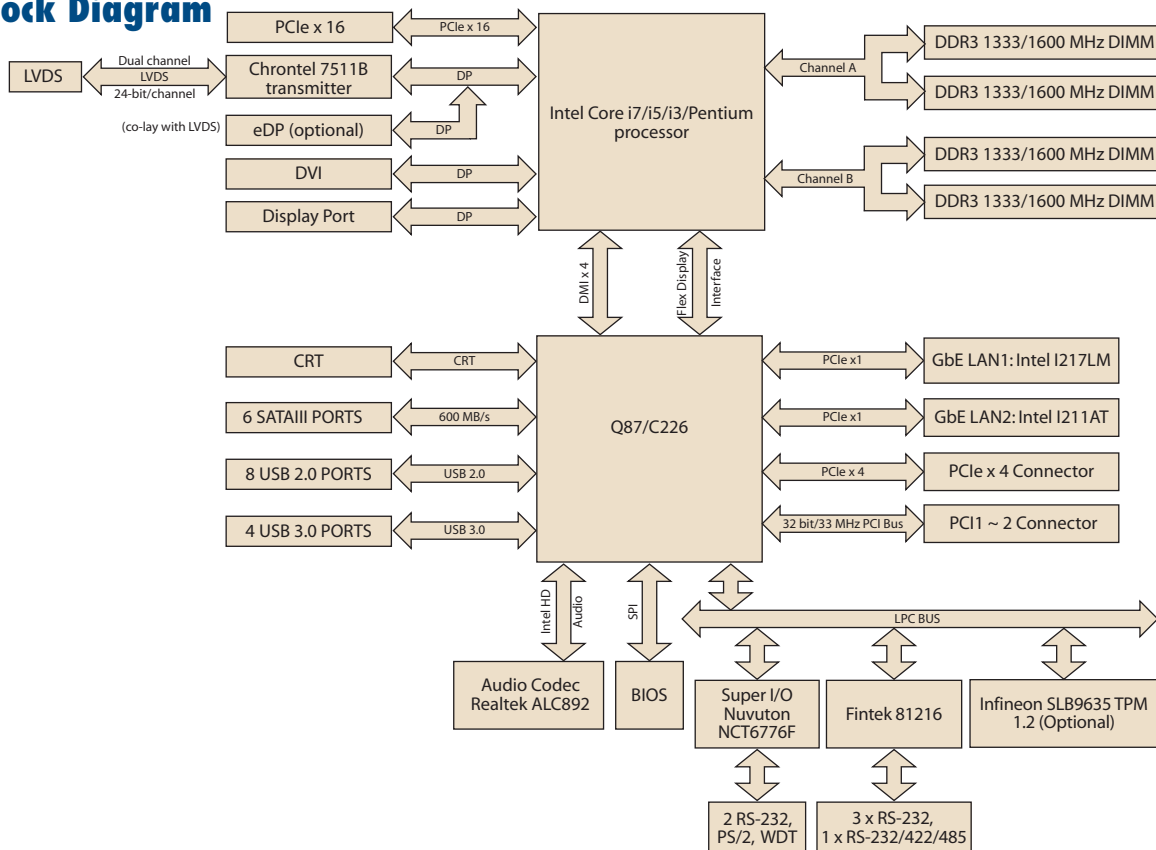
Software APIs:



Utilities:



Block Diagram



Ordering Information

Part Number	Chipset	Memory	USB 3.0/2.0	CRT	DP	DVI	LVDS/eDP	SATAIII	COM	TPM	GbE LAN
AIMB-584QG2-00A1E	Q87	Non-ECC	4/8	Yes	1	1	1(1)	6	6	(1)	2
AIMB-584WG2-00A1E	C226	ECC/Non-ECC	4/8	Yes	1	1	1(1)	6	6	(1)	2

*() BOM options available on MP version.

Riser Card

Part Number	Description
AIMB-RP10P-01A1E	1U riser card with 1 PCI expansion
AIMB-RP30P-03A1E	2U riser card with 3 PCI expansion
AIMB-RP3PF-21A1E	2U riser card for 1 PCIe x 16 abd 2 PCI expansion
AIMB-RF10F-01A1E	1U riser card with 1 PCIe x 16 expansion
AIMB-RP3P8-12A1E	2U riser card with 2 PCIe x 8 & 1 PCI slots expansion (For WG2 Sku)

Note: AIMB-RP3P8-12A1E is not compatible with ACP-2010MB/2320MB chassis unless change special bracket to 1950014302N001.

Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	2
1703150102	SATA power cable	2
1960056089T000	I/O port bracket	1
2002058400	Startup manual	1
2062058400	Driver CD	1

I/O View



AIMB-584QG2-00A1E
AIMB-584WG2-00A1E

Optional Accessories

Part Number	Description
1700002204	Dual port USB cable (27 cm) with bracket
1960047669N001	LGA1156 CPU cooler for 4U and wallmount chassis, for CPU TDP <= 84W, 4.72" (W) x 4.72" (L) x 3.03" (H)
1960047831N001	LGA1156 CPU cooler for 2U and backplane version of chassis, for CPU TDP <= 65W, 3.27" (W) x 3.27" (L) x 2.17" (H)
1960053207N001	LGA1155 CPU cooler for 2U and wallmount chassis, for CPU TDP <= 45W, D=3.66"(W) x 3.66"(L) x 1.81"(H)
1700018699	KBMS cable 1*6P-2.5/DIN-6P(F)*2, 25 cm
1700000447	1-to-4 serial ports cable kit, 45cm
1701400181	1-to-4 serial ports cable kit, 18cm
1950014302N001	Special bracket for riser card AIMB-RP3P8-12A1E

Note: Purchasing AIMB-584's proprietary CPU cooler from Advantech is a must, other brand's CPU cooler are NOT compatible with AIMB-584. The complete thermal solution is composed of CPU cooler and system fans for the CPU TDP as above.

Embedded OS/API

OS/API	Part No.	Description
WES7	2070012174	Image WES7E AIMB-584QG2 32bit V5.1.6 Eng/Chs/Jpn
WES7	2070012168	IMAGE WES7E AIMB-584QG2 64bit V5.6.6 Eng/Chs/Jpn
WE8	2070012169	IMAGE WE8 Std AIMB-584QG2 32bit V6.0.0 Eng
Software API		SUSI 3.0 SW API for AIMB-584 WIN 7