

C-BUNDLE-AIMBB20-1

Embedded Mini-ITX Computer, Intel® 3rd Generation Core™ i7/i5/i3 mobile processor (uFC-PGA988)



Features

- Intel® QM77 Platform
- Intel® 3rd generation Core™ i7/i5/i3 mobile processor (uFC-PGA988)
- One PCIe x 16 (Gen3) Expansion Slot
- Two Shock-resistant 2.5" drive bay
- Reserved USB, COM and WLAN antenna openings on front side
- Front LED indicators for system fault detection
- Support Triple display of 2DP, HDMI, LVDS, CRT
- Supports iManager, SUSIAccess and Embedded Software APIs
- 150W ATX Power Supply



Specifications

Processor System	CPU	Core i7-3610QE	Core i7-2710QE	Core i5-3610ME	Core i5-2510E	Core i3-3120ME	Core i3-2330E	Celeron B810	
	Core Number	4	4	2	2	2	2	2	
	Max Speed	2.3 GHz	2.1 GHz	2.7 GHz	2.5 GHz	2.4 GHz	2.2 GHz	1.6 GHz	
	L3 Cache	6M	6M	3M	3M	3M	3M	2M	
	Chipset	QM77							
	BIOS	AMI EFI 64 Mbit SPI							
Expansion Slot	Mini-PCIe	1							
	PCIe x16 (Gen3)	Half Height PCIe x16 Card							
Memory	Technology	Dual Channel DDR3 1333/1600 MHz SDRAM							
	Max. Capacity	16 GB							
	Socket	2 x 204 PIN DDR3 SODIMM							
Graphics	Controller	Integrated Gfx Gen 7, supports DirectX11, OpenGL 3.1 and OpenCL 1.1							
	Triple Display	DP+LVDS+HDMI, DP+DP+HDMI, DP+DP+LVDS, DP+CRT+HDMI (The Celeron B810 processor doesn't support triple display)							
Ethernet	Interface	10/100/1000 Mbps							
	Controller, Connector	GbE LAN1: Intel 82579LM, LAN2: Intel 82583V,RJ-45 x 2							
SATA	Max Data Transfer Rate	600 MB/s (SATA 3.0)/ 300 MB/s (SATA 2.0)							
Rear I/O	CRT	1							
	HDMI	1							
	Display Port	2							
	Ethernet	2							
	USB	4 (USB 3.0 compliant)							
	Audio	3 (Mic-in, Line-out, Line-in)							
	PS/2	2 (1 x keyboard and 1 x mouse)							
Internal I/O Interface	USB	4 (USB 2.0 compliant)							
	LVDS/inverter	1							
	SATA	Internal: 2 (STA 3.0), 2 (SATA 2.0)							
	Serial	2 (RS-232, COM2 with 5 V/12 V)							
	Mini-PCIe	1							
	CFast	1							
Watchdog Timer	Output	System reset							
	Interval	Programmable 1 ~ 255 sec/min							
Drive Bay	HDD and Slim Optical Disk Drive	2.5" HDD*2 or 2.5" HDD*1 + slim ODD*1							
Cooling	Fan	2 (7cm/39.45CFM each)							
Reserved Opening	Serial	2							
	WLAN Antenna	2							
	Expansion slot	1 (low profile)							
Power Supply	Output Rating	AC, 150W, ATX							
	Input Voltage	AC 100 ~ 240 V							
Miscellaneous	LED Indicators	Power, HDD							
	Reset Button	1							
	Power Switch	1							
Environment	Operating Temperature	0 ~ 40° C (32 ~ 104° F)							
	Non-operating Temperature	-20 ~ 60° C (-4 ~ 140° F)							
	Humidity	10 ~ 85% @ 40° C, non-condensing							
	Vibration (5 ~ 500 Hz)	1 Grms (HDD*1+ODD*1); 0.5 Grms (HDD*2)							
	Shock	10G (with 11ms duration, half sine wave)							
Physical Characteristics	Dimensions (W x H x D)	250 x 98 x 255 mm (10.04" x 3.86" x 9.84")							
	Weight	3.8 kg							

* Top drive bay supports max. 12.5mm height HDD or slim ODD; Bottom drive bay supports max. 9.5mm height HDD.

Front View



Inside View

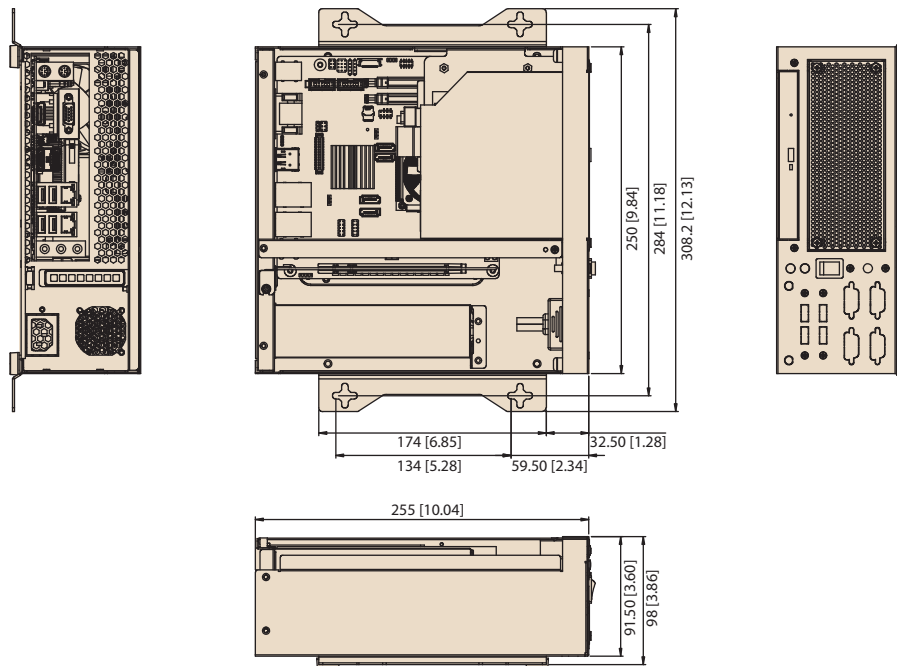


Rear View



Dimensions

Unit: mm [inch]



Ordering Information

Parts Number	Power Supply	Regulation
C-BUNDLE-AIMBB20-1	Embedded Mini-ITX Computer, Intel QM77 Platform Intel 3rd Generation Core™ i7/i5/i3 mobile processor (uFC-PGA988) with ATX 150W power supply	CE, FCC, UL

Packing List

Parts Number	Description	Quantity
1700003194	SATA HDD cable	2
1703150102	SATA power cable	2
1960051292N001	CPU cooler	1
2006027310	Startup manual of AIMB-273	1
2066027300	Driver CD of AIMB-273	1
1702002600	Power cable 3-pin 183cm, USA type	1
2066B20000	Driver CD of AIMB-B2000	1
1960014487T001	Bottom mounting bracket	2
1990012452S000	Bottom rubber foot	4
1930003238	M4 screw for bottom mounting bracket	4
1930004607	M3 screw for assembling the Hard Disk Drive	8
1990009411T000	Mylar for Hard Disk Drive	1
1960057977N000	HDD holder	1
1990015239T000	Rubber damper for HDD	4
1930000002	M3 screw for HDD holder	4
1935020330	M2 screw for ODD	4

Compatible Peripheral

CPU (CPU fan is included):

Part Number	Description
96MPI7M-2.3-6M9T	2.3G, Core i7-3610QE
96MPI5-2.7-3M9T	2.7G, Core i5-3610ME(G)
96MPI3M-2.4-3M9T	2.4G, Core i3-3120ME
96MPI7M-2.1-6M9T	2.1G, Core i7-2710QE(G)
96MPI5M-2.5-6M9T	2.5G, Core i5-2710E(G)
96MPI5M-2.2-3M9T	2.2G, Core i3-2330E(G)
96MPCM-1.6-2M9T	Celeron M 1.6G 2M 988P 2Core B810(G)

DRAM (System with 2 x 204 PIN DDR3 SODIMM socket):

Part Number	Description
96SD3-8G1333NN-TR	8G SO-DDR3-133 204 PIN
96SD3-8G1333NN-AP	8G SO-DDR3-133 204 PIN
96SD3-4G1333NN-AP	4G SO-DDR3-133 204 PIN
96SD3-2G1333NN-TR2	2G SO-DDR3-133 204 PIN

HDD (System with two 2.5" HDD Bay):

Part Number	Description
96ND500G-ST-WD7K	WD 500G 2.5" SATA 7KRPM 16M(G)
96ND500G-ST-WD7K3	WD 2.5 500G 7KRPM 9.5mm SATAIII 16MB 4K
96ND750G-ST-WD7K	WD 750G 2.5" SATA 7KRPM 16M(G)

OS (Advantech provide fully developed and test OS image):

Part Number	Description
96SW-WINXPE-US	WINDOWS XP EMBEDDED(G)
96SW-WIN7-PRO-US	WIN7 PRO 32/64 ENG W/ 2 RECOVERY DVD(G)
968QWES7ES	WINDOWS EMBEDDED STANDARD 7E 7WT-00049
968QWES7PO	Windows Embedded Standard 7P 7WT-00050

* Note: More peripheral available, please contact Advantech.

Slim ODD:

Part Number	Description
96SDVR-8X-ST-LG-B2	Slim DVD-ROM
1700011772	Power cable for slim ODD

SSD (System with one CFAST socket):

Part Number	Description
SQF-S10S2-2G-S7C	SQF CFast 520-S7 2G SLC (0-70°C)
SQF-S10S2-4G-S7C	SQF CFast 520-S7 4G SLC (0-70°C)
SQF-S10S2-8G-S7C	SQF CFast 520-S7 8G SLC (0-70°C)
SQF-S10S2-16G-S7C	SQF CFast 520-S7 16G SLC (0-70°C)
SQF-S10S2-32G-S7C	SQF CFast 520-S7 32G SLC (0-70°C)
SQF-S10M1-4G-S7C	SQF CFast 520-S7 4G MLC (0-70°C)
SQF-S10M2-8G-S7C	SQF CFast 520-S7 8G MLC (0-70°C)
SQF-S10M2-16G-S7C	SQF CFast 520-S7 16G MLC (0-70°C)
SQF-S10M2-32G-S7C	SQF CFast 520-S7 64G MLC (0-70°C)

WiFi module:

Part Number	Description
EWM-W136M01E	MINIPCI BG(G) Wifi Card a/b/g/n Atheros AR9220
EWM-G107H01E	MINIPCIe half size GPS module