

EPC-C300

Embedded 3.5" SBC Chassis for MIO-5250, MIO-5251, MIO-5271



Features

- 3.5" SBC chassis supports front & rear I/O interfaces
- Fanless system with wall-mount & desk mount support; mounting flange is removable
- Bottom door for access Memory, mPCIe module, mSATA, 2.5" HDD
- Flexible cutouts I/O in the rear bezel up to 4 x COM, 2 x USB, audio
- Easy assembling & maintenance of 2.5" hard disk
- Supports dedicated Advantech 3.5" SBC: MIO-5250, MIO-5251, MIO-5271



Specifications

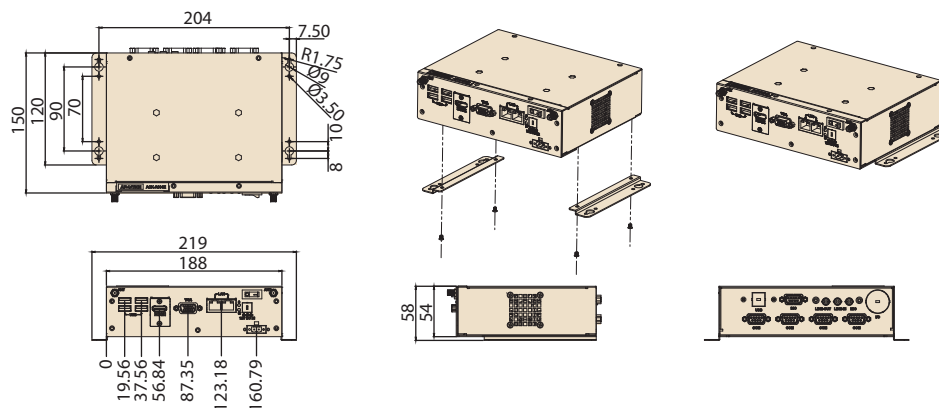
		with MIO-5250	with MIO-5251	with MIO-5271
Processor System	CPU	Intel Atom D2550/N2600	Intel Celeron J1900/ Atom E3845/ E3825	Intel Core i5-4300U/ Celeron 2980U
	Frequency	1.86 GHz/ 1.6 GHz	2.0GHz (4c) /1.91GHz (4c)/1.33GHz (2c)	1.9 GHz (2-Core)/1.6GHz (2-Core)
	Max Turbo Frequency	NA	2.42GHz / NA / NA	2.9 GHz/ NA
	L2 Cache	1MB	2MB/ 2MB/ 1MB	3MB/2MB
	BIOS	AMI EFI 16Mbit	AMI UEFI BIOS at 64Mb	AMI UEFI 128 Mbit
Memory	Technology	DDR3 1066 / 800MHz	DDR3L 1333/ 1333 / 1066MHz	DDR3L 1600/1333MHz
	Max. Capacity	up to 4 GB	up to 8 GB	up to 8 GB
	Socket	1 x 204-pin SODIMM		
Display	Controller	Integrated Intel GMA 3600 series	Intel Gen7 graphic engine	Intel HD Graphics 4400/ HD Graphics (Celeron)
	Graphic Engine	DirectX 9 and OpenGL3.0 support HW Accelerated Decode: MPEG2, H.264, VC-1	DirectX11, OpenGL3.2, OpenCL1.2 HW Decode: H.264, MPEG2, MVC, VC-1, WMV9, MJPEG and VP8. HW Encode: H.264 (MPEG2 and MVC only for J1900)	DirectX11.1, OpenGL 4.0, and OpenCL 1.2 Full AVC/VC1/MPEG2 HW Decode
	LVDS	D2550 SKU : 48-bit LVDS2: 1920 x 1200 N2600 SKU : 18/24-bit LVDS1: up to 1366 x 768	48-bit LVDS up to WUXGA 1920 x 1200 at 60Hz Supports 3.3/5/12V for VDD power, 5/12V for inverter	Dual channel 24-bit LVDS, max resolution up to 1920 x 1200 with 60Hz
	VGA	1920 X 1600	2560 x 1600 at 60Hz	Up to 1920 x 1200 with 60 Hz,
	eDP*	NA	up to 2560 x 1600 at 60Hz	
	HDMI/ DisplayPort*	Supports 1920 x 1200, Max data rate: up to 1.65 Gb/s, Supports HDMI v1.3 Up to 1080p support	HDMI 1.4a for HD video playback, 1080P at 60Hz , Displayport*, up to 2560 x 1600 at 60Hz	up to 3200 x 2000 at 60 Hz on DisplayPort, 4096 x 2304 at 24 Hz on HDMI
	Multi-Display	VGA+LVDS, VGA+HDMI, HDMI+LVDS	VGA + HDMI/Displayport*, VGA+LVDS/eDP*, HDMI/Displayport* +LVDS/eDP	VGA+HDMI/DP*, VGA+LVDS, HDMI/DP*+LVDS, VGA + HDMI/DP* + LVDS
Ethernet	Speed	Speed 10/100/1000 Mbps		
	Controller	Intel 82583V	Intel i210	GbE1: Intel i218, GbE2: Intel i210
	Connector	2 x RJ45		
Audio	Codec	Realtek ALC892, High Definition Audio (HD)	Realtek ALC888S, High Definition Audio (HD)	Realtek ALC888S, High Definition Audio (HD)
	Amplifier	Optional via MIOe		
Front I/O Openings	USB	4 (4 x USB2.0)	4 (3 x USB2.0, 1 x USB 3.0)	4 (2 x USB2.0, 2 x USB 3.0)
	RJ45	2	2	2
	VGA	1	1	1
	HDMI/DP	1 HDMI	1 HDMI/DP	1 HDMI/DP
	Antenna	2	2	2

Specifications Cont.

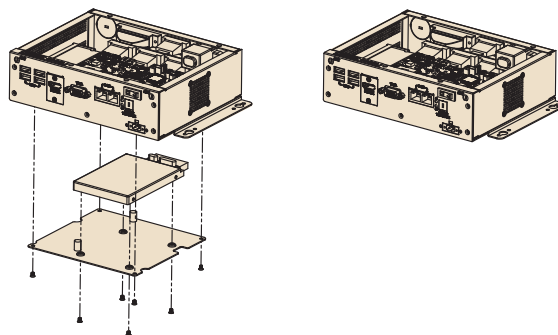
Rear I/O Openings	COM	4 (2 x RS232, 2 x RS232/422/485)	4 (2 x RS232, 2 x RS232/422/485)	4 (2 x RS232, 2 x RS232/422/485)
	USB	2	1 (opening 2 ports, but SBC only support 1 port)	-
	Audio	1 (Line out, Line-in, Mic-in)		
	DIO	1	1	1
	Circular cutouts	1		
Miscellaneous	LED Indicators	Power, HDD		
	Control	Power switch		
Power Requirement	Power Type	AT		
	Power input Voltage	12V		
	Connector type	2-Pole Phoenix DC plug in		
Environment	Operating	0 ~ 40° C (32 ~ 104° F), w/o system fan w/ 0.7m/s airflow		
	Non-operating	- 20~ 60° C (- 4~140° F)		
	Relative Humidity	40° C @ 95%, Non-Condensing, operating 60° C @ 95%, Non-Condensing, non-operating		
	Vibration During Operation	With SSD : 5Grms , IEC 60068-2-64, random , 10-500 Hz , 1hr/axis		
	Shock During Operation	With SSD : 30G , IEC 60068-2-27, half sine , 11 ms duration		
	Certification	EMC CE/FCC Class A		
Physical Characteristics	Mounting	Desk/Wall-mounting, VESA mounting(by request), Din rail mounting (by request)		
	Dimensions (W x H x D)	System dimension : 188 x 54 x 150 mm System dimension with mounting bracket : 219 x 58 x 150 mm		
	Weight	1.11kg (2.44 lb) w/o SBC board		

Dimensions

Unit: mm



Installation



Ordering Information

Part number	Recommended 3.5" SBC	Power Supply	Power cable	Regulation
ACK-A004E-01A1E	MIO-5251	1757003996 / 96PSA-A60W12P2-1	Required , refer to optional accessories	CE , FCC
ACK-A004E-02A1E	MIO-5250	1757003996 / 96PSA-A60W12P2-1	Required , refer to optional accessories	CE , FCC
ACK-A004E-03A1E	MIO-5271	1757003996 / 96PSA-A60W12P2-1	Required , refer to optional accessories	CE , FCC

Power Supply Options

Part Number	Watt	Input	Output	Operating Temperature	Dimensions	Safety	MBTF
1757003996	60	AC 100 ~ 240V	DC 12V @ 5 A	0 ~ 40° C (32 ~ 104° F)	110 x 31.5 x 62	CE/FCC/CCC/UL/CB/BSMI/ KC/PSE/GT/GOST R	100,000 hours @ 25° C
96PSA-A60W12P2-1	60	AC 100 ~ 240V	DC 12V @ 5 A	0 ~ 40° C (32 ~ 104° F)	110 x 31.5 x 62	CE/FCC/CCC/UL/CB/BSNI/ KC/PSE	100,000 hours @ 25° C

Packing List

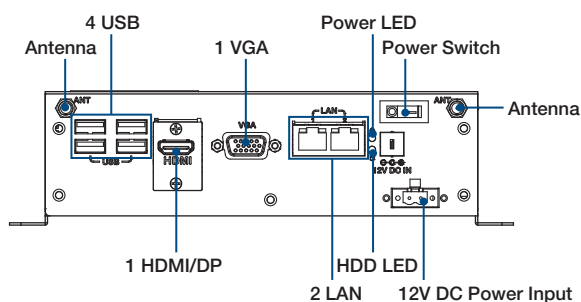
Part Number	Description	Qty
ACK-A004E	Chassis	1
	Startup manual	1
1910000041	Post , M3x6 ,for M/B	2
1930001241	Screw M3x5 ,for USB cable	2
1930004607	Screw M3x4 ,for HDD	4
1935030500	Screw M3x5 , for M/B	2
1935032000	Screw M3x20 , for M/B	4
1930005414	S/S 10.5L D=5 H=1.75 for Audio Jack	2
193A200001	POST F=#4-40x4L for COM	10
2000017637	Heat sensitive paper 30LX12WX0.1Hmm	1
1990020580S000	Nylon snap rivet , for HDD screw	4
1990020672S000	Plugs MBWK-2	1
1990022958S000	Cable tie	3
2100000535	Dehydrate (5g)	1

Optional Accessories

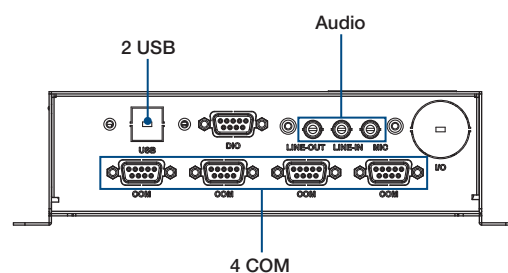
Part Number	Description
96PSA-A60W12P2-1	DC power 12V/5A 60W, 0 ~ 40° C, w/ Phoneix Jack type power connector
1757003995	DC power 12V/5A 60W, 0 ~ 40° C, w/ DC Jack type power connector
1700009001	A Cable JACK/1*2P-5.0 4.5CM C=R B (Phoneix Jack to DC Jack)
1702002600-01	Power cable 3-pin 183 cm , USA type
1700018704	Power cable 3-pin 183 cm , UK type
1700018705	Power cable 3-pin 183 cm , Europe type
1700000237-01	Power cable 3-pin 183 cm , PSE

Note: 1. DC power and power cable are required for system operation
2. DC power w/ DC Jack type and A Cable JACK need to bundle together

Front View



Rear View



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Advantech:](#)

[ACK-A004E-01A1E](#) [ACK-A004E-02A1E](#) [ACK-A004E-03A1E](#)