

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

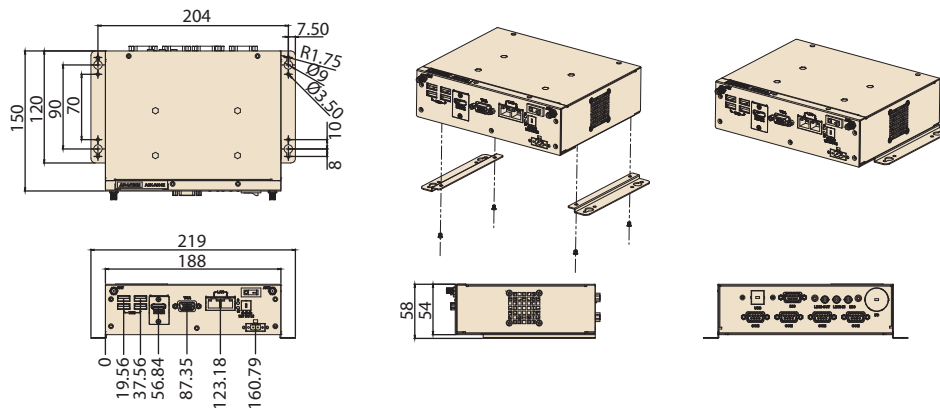
| | | with MIO-5250 | with MIO-5251 | with MIO-5271 |
|--------------------|-------------------------------|--|---|---|
| Processor System | CPU | Intel Atom D2550/N2600 | Intel Celeron J1900/ Atom E3845/ E3825 | Intel Core i5-4300U/ Celeron 2980U |
| | Frequency | 1.86 GHz/ 1.6 GHz | 2.0GHz (4c) /1.91GHz (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 |
| Memory | BIOS | AMI EFI 16Mbit | AMI UEFI BIOS at 64Mb | AMI UEFI 128 Mbit |
| | 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 |
| Display | Socket | 1 x 204-pin SODIMM | | |
| | 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 eDP* | 1920 X 1600 NA | 2560 x 1600 at 60Hz up to 2560 x 1600 at 60Hz | Up to 1920 x 1200 with 60 Hz, |
| | 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.

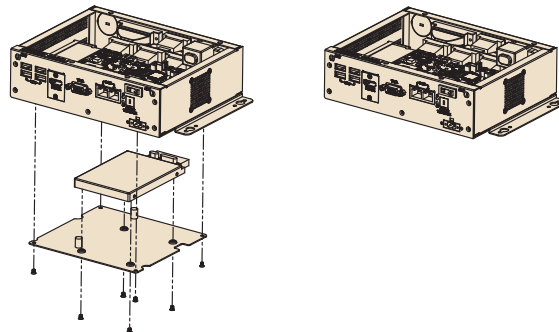
| | | | | |
|--------------------------|----------------------------|--|--|----------------------------------|
| Rear I/O Openings | COM | 4 (2 x RS232, 2 x RS232/422/485) | 4 (2 x RS232, 2 x RS232/422/485) | 4 (2 x RS232, 2 x RS232/422/485) |
| | USB | 2 | 1 (opening 2 ports, but SBC only support 1 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

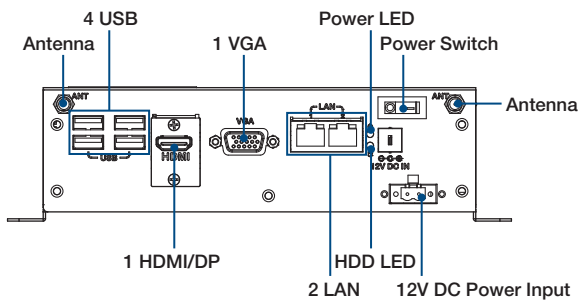
| Part Number | Description | Qty |
|----------------|-------------------------------------|-----|
| ACK-A004E | Chassis | 1 |
| | Startup manual | 1 |
| 1910000041 | Post , M3x6 ,for M/B | 2 |
| 1930001241 | Screw M3x5 ,for USB cable | 2 |
| 1930004607 | Screw M3x4 ,for HDD | 4 |
| 1935030500 | Screw 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

