

ARK-3530L

Intel®Xeon® E3 / Core™ i3/i5/i7 LGA1151 Modular Expansion Fanless Box PC

NEW



WISE-PaaS/DeviceOn SUSI API



Features

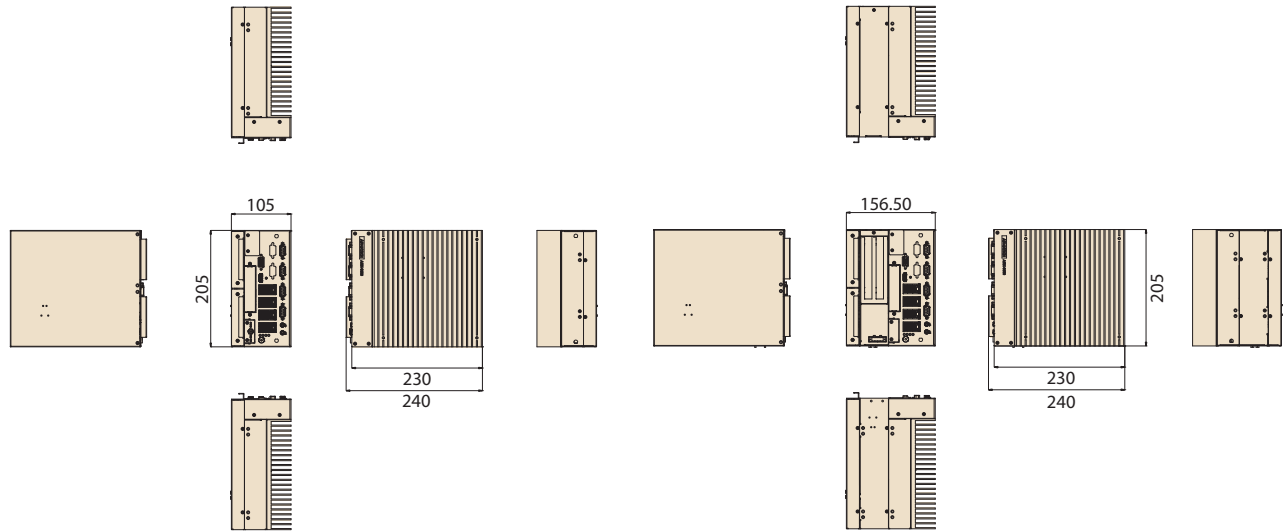
- Support Intel® Xeon® / 6th & 7th Gen. Core™ i3/i5/i7 processor
- Triple independent display: VGA + HDMI + Optional Display
- DDR4 SO-DIMM memory support up to 32 GB
- Option 9-36V power module compatible with all-in-one ordering
- Optional modular design for 2.5" hard drive bays: internal /removable (support up to 4 sets)
- Advantech iDoor module compatible
- Advantech EMIO miniPCIe module compatible with all-in-one ordering
- Advantech ARK Plus AMO-3xxx series module compatible

Specifications

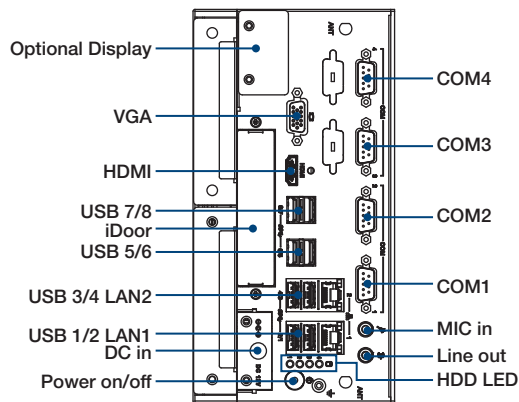
| | | | | | |
|-------------------------------------|-----------------------------|--|-----------------|---------|----------|
| Processor System | CPU | E3-1235L V5 | i7-7700/i7-6700 | i5-7500 | i3-7101E |
| | Frequency | 2.0GHz | 3.6GHz/3.4GHz | 3.4GHz | 3.9GHz |
| | L3 Cache | 8MB | 8MB | 6MB | 3MB |
| | TDP | 25W | 65W | 65W | 54W |
| | Chipset | C236 | | | |
| | BIOS | AMI EFI 127Mbit | | | |
| Memory | Technology | DDR4 2133 MHz | | | |
| | Max. Capacity | 32 GB | | | |
| | Socket | 2 x 260-pin SO-DIMM | | | |
| Graphics | Chipset | Intel® HD Graphics 630 | | | |
| | Graphic Engine | Direct x 12, OpenGL 4.4 HW Encode: H.265/HEVC, H.264/MPEG-4 AVC, MPEG-2, JPEG/MJPEG and VP8. HW Decode: H.265/HEVC, H.264/MPEG-4 AVC, MPEG-2, VC-1/WMV9, JPEG/MJPEG, VP8 and VP9 | | | |
| | VGA | 1920x1200@ 60Hz | | | |
| | HDMI | 1 HDMI port, HDMI 2.0 for HD video playback, 3840x2160@30Hz | | | |
| | Optional 3rd Display module | DVI-D / DP / HDMI Display Port | | | |
| Ethernet | LAN1 | 10/100/1000 Mbps Intel I219-LM GbE, support Wake On Lan | | | |
| | LAN2 | 10/100/1000 Mbps Intel I210 GbE, support Wake On Lan | | | |
| Audio | Interface | Realtek ALC888S, High Definition Audio, Line-out, Mic-in | | | |
| Others | Watch dog Timer | 255-level timer interval, setup by software | | | |
| | TPM | TPM 2.0 (Optional by project support) | | | |
| I/O Interface | Serial Port | 4 x RS-232/422/485 port with auto flow control; COM 1 support 5V/12V power supply (by jumper) | | | |
| | USB | 8 x USB 3.0 ports | | | |
| | P/S2 | 1 Port support by cable and bracket (Optional) | | | |
| | Optional I/O | 16bit DIQ or 2 x RS-232 ports | | | |
| Expansions | Mini PCIe | 2 x Full-size Mini PCIe (2 x support mSATA, 1 x support SIM optional AMK-A0028E) | | | |
| | M.2 | 1 x E key for WiFi | | | |
| | i Door | 1 set (Optional) | | | |
| | ARK Plus | AMO-3505E 2 slot Riser card for 2 x PCI, AMO-3506E 2 slot Riser card for 2 x PCIe8 | | | |
| Storage | HDD | 2 x 2.5" SATAIII HDD Bay with Max Height 15mm (Support Up to 4 x 2.5" SATAIII HDD Bay by Project) | | | |
| | mSATA | 2 x mSATA socket (Share with Mini PCIe) | | | |
| Software Support | Microsoft Windows | Windows 10 (Windows 7 for 6th Gen CPU only) | | | |
| | Linux | By Project Support | | | |
| Power Requirements | Power Type | AT/ATX | | | |
| | Power Input Voltage | 12V (9-36V as optional) | | | |
| | Power Adapter | AC to DC, 150W (Optional) | | | |
| Power Consumption (CPU/Memory Only) | Typical | 25.68W | | | |
| | Max. | 88.92W | | | |
| Mechanical | Construction | Aluminum housing | | | |
| | Mounting | Desk mounting | | | |
| | Dimensions (W x H x D) | 105 x 205 x 230 mm (4.13" x 8.07" x 9.06") | | | |
| | Weight | 5.1Kg | | | |
| Environment | Operating Temperature | 25W/35W/65W(only 6th Gen) Processor with extended temp peripherals: -20 ~ 60° C with 0.7m/s air flow Under 73W processor with HDD: 0 ~ 40° C with 0.7m/s air flow | | | |
| | Storage Temperature | -40 ~ 85° C | | | |
| | Relative Humidity | 95% @ 40° C (non-condensing) | | | |
| | Vibration During Operation | With SSD: 3 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis. | | | |
| | Shock During Operation | With SSD: 30 G, IEC 60068-2-27, half sine, 11 ms duration | | | |
| | EMC | CE/FCC Class B, CCC, BSMI | | | |
| | Safety | CB, UL, CCC, BSMI | | | |

Dimensions

Unit: mm



Front Panel External I/O Mechanical Layout/Drawing



Ordering Information

| Part No. | CPU | DDR4 | GbE | VGA | HDMI | Option 3rd display module | RS-232/422/485 | USB 3.0 | MiniPCIe | SIM | M.2 | DC Input | Expansion |
|----------------|---------------------|------------|-----|-----|------|---------------------------|----------------|---------|----------|-----|-----|----------|-----------|
| ARK-3530L-00A1 | LGA1151 Socket Type | Up to 32GB | 2 | 1 | 1 | 1 | 4 | 8 | 2 | 1 | 1 | 12V | Optional |

Note: CPU/Memory/Storage and operating system bundled by request.

Packing List

| Part Number | Description |
|-------------|----------------------------------|
| - | ARK-3530L Unit |
| - | User Manual (Simplified Chinese) |
| - | China RoHS |

Embedded OS

| Part Number | Description |
|----------------|---|
| 20706WX6HS0006 | WIN10 IoT LTSB 64bit for Xeon and Core i7 |
| 20706WX6VS0012 | WIN10 IoT LTSB 64bit for Core i3/i5 and Celeron |

ARK-3530 Default SKU Option Items

Optional Item for Default SKU

| Part Number | Description |
|-------------------|------------------------------------|
| XARK-DPS-150AB-15 | AC-to-DC Adapter, DC12V 150W |
| 96PSA-A150W12W7 | AC-to-DC Adapter, DC12V 150W |
| 1700028547-01 | 16bit DIO Cable |
| 1700028548-01 | COM5/6 Cable |
| 1702002600 | Power cable 3-pin 183cm, USA type |
| 1702002605 | Power cable 3-pin 183cm, EU type |
| 1702031801 | Power cable 3-pin 183cm, UK type |
| 1700000237 | Power cable, 3-Pin 183cm, PSE type |

Optional MOS modules for iDoor Expansion

| Part Number | Description |
|-----------------|---|
| MOS-2230-Z1201E | CANBus module, 2-Ch, USB I/F |
| MOS-2220-X1101E | Parallel LPT module, 1-Ch, USB I/F. |
| MOS-2220-Z1101E | High Speed Com USB module, 2-Ch, PCIe I/F |
| MOS-2120-Z1101E | Giga LAN Ethernet module, 1-Ch, PCIe I/F. |
| MOS-1120Y-0202E | Isolated RS-232, 2-Ch, DB9, PCIe I/F |
| MOS-1121Y-0202E | Isolated RS-422/485, 2-Ch, DB9, PCIe I/F |
| MOS-1120Y-1402E | Non-Isolated RS-232, DB37, 4-Ch, PCIe I/F |
| MOS-1121Y-1402E | Non-Isolated RS-422/485, DB37, 4-Ch, PCIe I/F |
| MOS-1130Y-0201E | Isolated CANBus, 2-Ch, DB9, PCIe I/F |
| MOS-1110Y-0101E | Isolated 16 DI/8 DO, 1-Ch, DB37, PCIe I/F |
| MOS-2110Z-1201E | USB module, 2-Ch, PCIe I/F |
| MOS-2120-Z1201 | Dual Intel I210 GbE LAN iDoor, 2-Ch, PCIe I/F |

*Please noted ARK-3530L can support only 1 iDoor.

Optional 9-36V DC Power Module

| Part Number | Description |
|-------------------|--|
| AMO-P010E | 9-36V DC input power module for ARK-3530L |
| 96PSA-A150W19P4-1 | AC-to-DC Adapter, DC19V 150W, 0 ~ 40° C (for AMO-P010E) |
| 96PSA-A220W24P4-1 | AC to DC adapter, DC 24V 220W, -20 ~ 60° C (For AMO-P010E) |
| 1702002600 | Power cable 3-pin 183cm, USA type |
| 1702002605 | Power cable 3-pin 183cm, EU type |
| 1702031801 | Power cable 3-pin 183cm, UK type |

ARK-3530L Optional HDD expansion Kit (Support up to 2 sets)

| Part Number | Description |
|-------------|--|
| AMK-A0028E | 1 x internal HDD Kit (Max Height 15mm) |

* Choose either AMO-P010E or AMK-A0028E

Optional Display Module

| Part Number | Description |
|-------------|--------------|
| AMO-D001E | DVI-D module |
| AMO-D002E | DP module |
| AMO-D003E | HDMI module |

ARK Plus Extended Modules

AMO-3505E

2 Slots Riser Card Expansion Module: 2 x PCI

Specifications

| General | |
|---------------------|---|
| Add on card support | 2 Slot for 2xPCI Max Card size: 110 mm(H) x 180 mm (L) Max Power consumption: 10W for each slot |
| HDD/SSD | NA |
| Mechanical | |
| System Dimension | 155 x 205 x 230 mm |

Ordering Information

| P/N | Description |
|-----------|---------------------------|
| AMO-3505E | 2 Slot Riser Card (2xPCI) |

AMO-3506E

2 Slots Riser Card Expansion Module: 2 x PCIe8

Specifications

| General | |
|---------------------|---|
| Add on card support | 2 Slot for 2 x PCIe8 Max Card size: 110 mm(H) x 180 mm (L) Max Power consumption: 10W for each slot |
| HDD/SSD | NA |
| Mechanical | |
| System Dimension | 155 x 205 x 230 mm |

Ordering Information

| P/N | Description |
|-----------|-------------------------------|
| AMO-3506E | 2 Slot Riser Card (2 x PCIe8) |