

ARK-1124U

Intel Celeron N3350 DC SoC With Dual LAN/ Four USB 3.0/M.2/TPM IoT Gateway Modular Fanless Box PC

NEW



WISE-PaaS/RMM



LISTED
E180881



Features

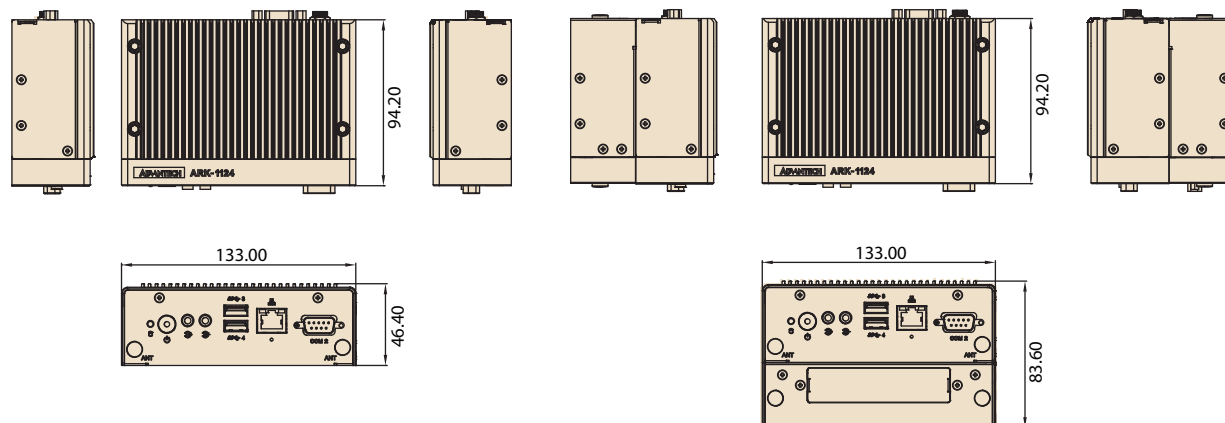
- Intel Celeron N3350 Dual Core SoC
- VGA Display/2x RS-232/422/485/4x USB 3.0
- 1 x Full-size miniPCIe with SIM holder for communication module
- 1 x M.2 E-key for WIFI module
- -20 ~ 60 °C extended operating temperature
- TPM 2.0 default built-in
- 12V lockable DC jack power input
- Optional 12~24V power module (Dual Layer)
- Advantech iDoor module compatible (Dual Layer)
- Advantech WISE-PaaS/RMM support

Specifications

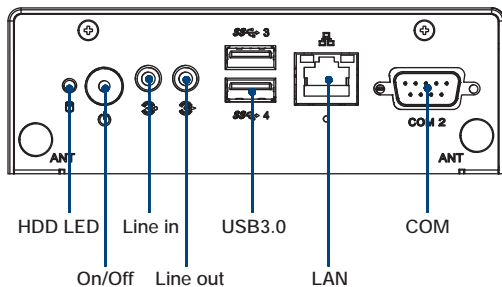
| | | ARK-1124U-S1A1E |
|-------------------|----------------------------|---|
| Processor System | CPU | Intel® Celeron® N3350 Dual Core SoC |
| | Frequency | 1.1GHz, turbo burst 2.4 GHz |
| | L2 Cache | 2 MB |
| | BIOS | AMI EFI 64 bit |
| | Technology | DDR3L 1866 MHz |
| Memory | Max. Capacity | 8 GB |
| | Socket | 1 x 204-pin SO-DIMM |
| | Chipset | Intel® HD Graphics 500 |
| Graphics | Graphic Engine | 4K Codec Decode& Encode for H.264, MPEG2, MVC, VC-1, WMV9, H.265 / HEVC, VP8, JPEG / MJPEG |
| | VGA | Up to 2048 x 1280 @ 60Hz |
| Ethernet | LAN1 | 10/100/1000 Mbps Intel i210 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,,Line-in |
| IO Interface | Serial Ports | 2 x RS-232/422/485 port with auto flow control |
| | USB Interface | 4 x USB 3.0 |
| Other | Watchdog timer | 255 levels timer interval, setup by software |
| | TPM | Infineon SLB9665XQ 2.0 |
| Expansion | Mini PCIe | 1 x full-size mPCIe for WLAN/WWAN with SIM holder |
| | M.2 | 1 x M.2 E-key for WIFI (by CTOS or T-PN) |
| | iDoor | 1, optional (2nd layer) |
| Storage | HDD/SSD | Supports 1 x SATA III Drive Bay (Compatible with 9.5mm height) |
| Software Support | Microsoft Windows | Win 10 IoT Enterprise LTSC |
| | Linux | Support by project |
| Power Requirement | Power Type | AT/ATX |
| | Power Input Voltage | 12V _{DC} (Optional 12~24V power module) |
| | Minimum Power Input | 12 V, 5 A |
| | Power Adapter | AC to DC, DC12 V/5 A, 60 W with lockable DC Jack |
| Power Consumption | Typical | 5W |
| | Max. | 33.7W |
| Mechanical | Construction | Aluminum housing |
| | Mounting | DIN-Rail/Wall/VESA Mounting Kits (Optional) |
| | Dimensions (W x H x D) | 133 x 46.4 x 94.2mm (5.24" x 1.83" x 3.71") |
| | Weight | 0.7 Kg (1.55lb) |
| Environment | Operating Temperature | With extended temperature peripherals: -20 ~ 60 °C (-4 ~ 140 °F) with 0.7m/s air flow With 2.5-inch hard disk 0 ~ 40 °C (32 ~ 104 °F) with 0.7m/s air flow |
| | Storage Temperature | -40 ~ 85 °C (-40 ~ 185 °F) |
| | 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 With HDD: 0.5Grms, 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 With HDD: 10G, IEC 60068-2-27, half sine, 11 ms duration |
| | EMC | CE/FCC Class B, CCC, BSMI |
| | Safety Certifications | UL, CB, CCC, BSMI |

Dimensions

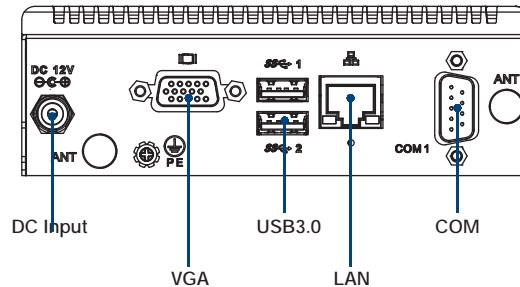
Unit: mm



Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Ordering Information

| Part No. | CPU | RAM | VGA | GbE | USB 3.0 | RS-232/422/485 | Audio | Full-size MiniPCIe | SIM | M.2 | 2.5" SATA III HDD Bay | Power Input | Operating Temp. |
|-----------------|---------------------------------|-----------|-----|-----|---------|----------------|------------------|--------------------|-----|-----|-----------------------|--------------------|-----------------|
| ARK-1124U-S1A1E | Intel Celeron N3350 1.1 GHz Soc | Up to 8GB | 1 | 2 | 4 | 2 | Lin-out, Line-in | 1 | 1 | 1 | 1 | 12 V _{DC} | -20 ~ 60 °C |

Note: Memory, storage and operating system bundled by request.

Packing List

| Part Number | Description |
|----------------|---|
| - | 1 x ARK-1124U Unit |
| - | 1 x User Manual (Simplified Chinese) |
| 96PSA-A60W12W6 | 1 x A/D 100-240V 60W 12V C14 LOCKABLE DC PLUG |
| - | LAN clip |
| - | Wrench for top cover |

Optional Item for Default SKU

| Part Number | Description |
|-------------|---------------------------------------|
| 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 |
| AMK-W001E | ARK-112X series Wall mounting kit |
| AMK-V003E | ARK-112X series VESA mounting kit |
| AMK-R001E | ARK-112X series DIN-rail mounting kit |

Optional Embedded OS

| Part Number | Description |
|-------------|------------------------------------|
| 2070015302 | Win10 IoT Ent LTSB 2016 64bit, ENG |

ARK Plus Extended Modules

ARK-1124 Dual Layer Expansion Option Items

Expansion Kit Selection



AMO-1101 and iDoor



AMO-1101 and AMO-P011

Ordering Information

Optional ARK Plus Mechanical Kit

| P/N | Description |
|----------|--|
| AMO-1101 | Mechanical kit for 2nd layer expansion |

Optional iDoor Expansion

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

Optional 12-24V DC Power module

| Part Number | Description |
|------------------|---|
| AMO-P011 | 12-24V DC input power module Operating temp. -20~60 °C |
| 96PSA-A60W12P2-1 | AC to DC ADP, 12V/5A 60W (for AMO-P011) |
| 1702002600 | Power cord 3-pin 183cm, USA type |
| 1702002605 | Power cord 3-pin 183cm, EU type |
| 1702031801 | Power cord 3-pin 183cm, UK type |
| 1700000237 | Power cable 3-pin 183cm, PSE type |

* For iDoor module expansion, please order AMO-1101 and iDoor P/N

* For Wide range power module expansion, please order AMO-1101 and AMO-P011

* For iDoor and wide range power module expansion, please order AMO-1101, iDoor P/N and AMO-P011

* Dual layer mounting kit is same as single layer