

# ARK-1550

## Intel® 4<sup>th</sup> Generation Core i5 4300U/ Celeron 2980U SoC Slim and Panel Mountable Fanless Box PC



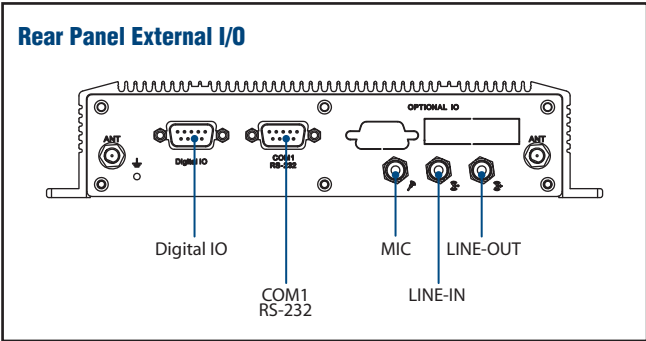
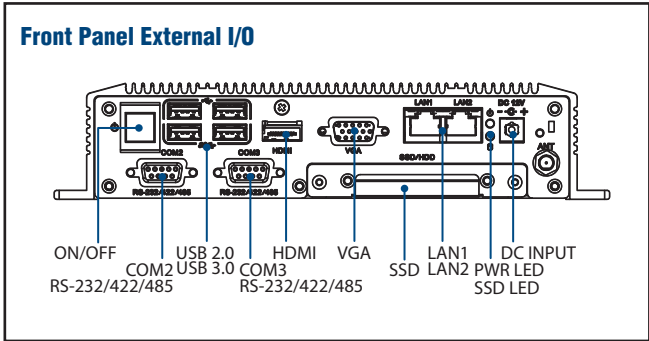
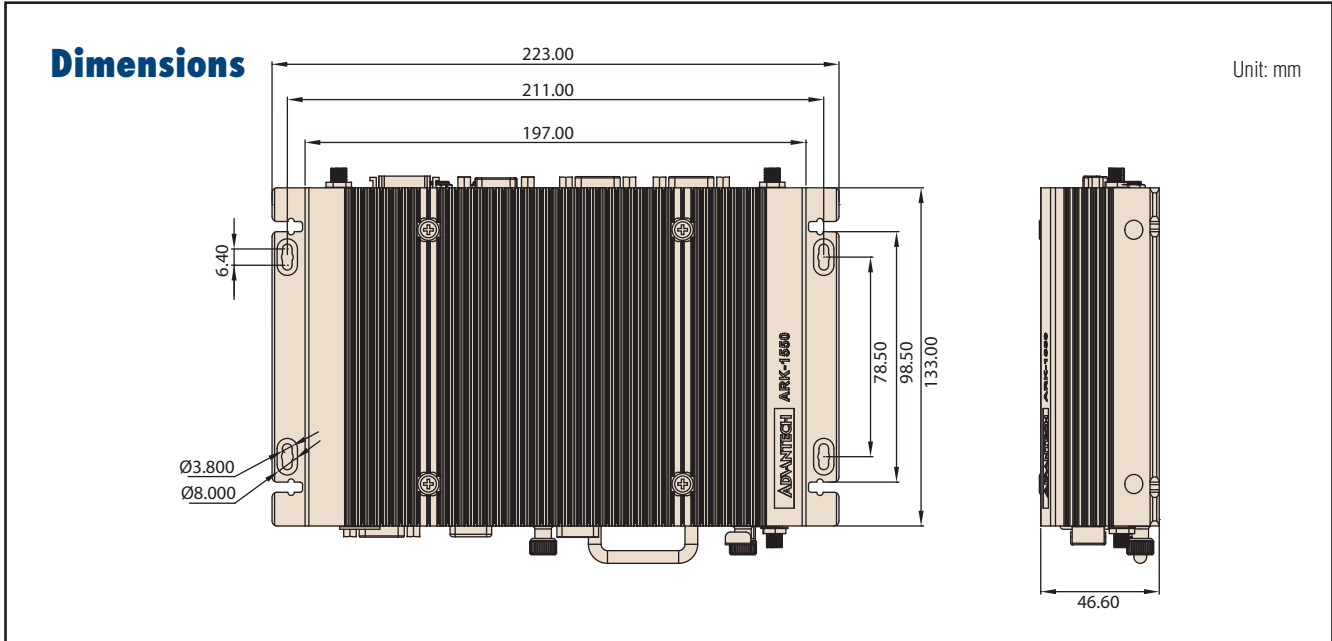
WIS-PaaS/RMM iManager CCC CE FCC RoHS COMPLIANT PRODUCT

### Features

- Intel® Dual Core Celeron 2980U 1.6 GHz / Core i5 4300U 1.9 GHz SoC
- One Swappable 2.5" SATA HDD Bay and mSATA slot
- Triple Independent Displays by VGA + HDMI + LVDS (LVDS option)
- Optional VESA / DIN Rail Mounting kits
- Supports 2 x Intel GbE and 1 x GPIO
- Built-in 1 x full size MiniPCIe
- Lockable DC jack design
- Supports iManager, SUSIAccess and Embedded Software APIs
- Support Intel Turbo Boost Technology 2.0 in Core i5 4300U

### Specifications

|                   |                            | ARK-1550-S6A1E  | ARK-1550-S9A1E                                     |
|-------------------|----------------------------|---|--|
| Processor System  | CPU                        | Intel Celeron 2980U Dual Core   | Intel i5-4300U Dual Core                           |
|                   | Frequency                  | 1.6 GHz   | 1.9 GHz (Up to 2.9 GHz w/ Turbo Boost 2.0 enabled) |
|                   | L3 Cache                   | 2 MB  | 3 MB   |
|                   | BIOS                       | AMI EFI 128 Mbit  |  |
| Memory            | Technology                 | DDR3L 1333 MHz  | DDR3L 1600 MHz                                     |
|                   | Max. Capacity              | 8 GB  |  |
|                   | Socket                     | 1 x 204-pin SO-DIMM   |  |
| Graphics          | Chipset                    | Intel HD Graphics   | Intel GT2-4400 Graphics                            |
|                   | Graphic Engine             | DirectX11.1, OpenGL 4.0, and OpenCL 1.2<br>Full AVC/VC1/MPEG2 HW Decode   |  |
|                   | VGA                        | Up to 1920 x 1200 at 60 Hz  |  |
|                   | HDMI                       | Lockable HDMI connector, up to 4096 x 2304 at 24 Hz (Lockable HDMI cable optional)  |  |
| Audio             | LVDS (Option)              | Dual channel 24-bit LVDS, max resolution up to 1920 x 1200 with 60Hz (Support by T-Part or CTOS)  |  |
|                   | Main System                | Realtek ALC888S, High Definition Audio (HD), Line-in, Line out, Mic-in  |  |
| Ethernet          | LAN #1                     | 10/100/1000 Mbps Intel I218 GbE, support Wake on LAN  |  |
|                   | LAN #2                     | 10/100/1000 Mbps Intel I210 GbE, support Wake on LAN  |  |
| I/O Interface     | Serial Ports               | 1 x RS-232 & 2 x RS-232/422/485 (BIOS selectable)   |  |
|                   | USB Interface              | 2 x USB 2.0 & 2 x USB3.0  |  |
|                   | GPIO                       | 8 bit GPIO  |  |
| Other             | Watchdog timer             | 255-level timer interval, setup by software   |  |
| Expansion         | Mini PCIe                  | 1 x Full-size Mini PCIe, support mSATA storage or WWAN module   |  |
| Storage           | 2.5" Drive Bay             | 1 x Swappable 2.5" SATA drive bay (Max Height 9.5 mm)   |  |
|                   | mSATA                      | Lverage MiniPCIe #1 slot  |  |
| Software Support  | Microsoft Windows          | Windows 10, Windows 8, Windows 7, WES8, WES7  |  |
|                   | Linux                      | Support (by Project)  |  |
| Power Requirement | Power Type                 | ATX/AT  |  |
|                   | Power Input Voltage        | 12 V <sub>DC</sub>  |  |
|                   | Minimum Power Input        | 12V, 5A   |  |
|                   | Power Adaptor              | AD to DC, DC 12V/5A, 60W (Optional)   |  |
| Power Consumption | Typical                    | 5.64W   | 10.56W   |
|                   | Max.                       | 15.12W  | 28.2W  |
| Mechanical        | Construction               | Aluminum housing  |  |
|                   | Mounting                   | Desk/Wall Mounting (Standard), VESA & DIN-Rail Mounting Kit (Optional)  |  |
|                   | Dimensions (W x H x D)     | 223 x 46.6 x 133.0 mm (8.69" x 1.81" x 5.18")   |  |
| Environment       | Operating Temperature      | With extended temperature SSD/mSATA/RAM :-20 ~ 55° C with 0.7m/s air flow<br>With standard temperature HDD/SSD/mSATA/RAM peripherals:0 ~ 40° C 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 mSATA/SSD: 3 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis   |  |
|                   | Shock During Operation     | With mSATA/SSD: 30G, IEC 60068-2-27, half sine, 11 ms duration  |  |
| Regulation        | EMC                        | CE/FCC Class A, CCC, BSMI   |  |
|                   | Safety                     | UL, CCC, BSMI, CB   |  |



## Ordering Information

| Part Number    | Intel CPU                  | RAM       | VGA | HDMI | GbE | USB 2.0 | USB 3.0 | GPIO | RS-232 | RS-232/422/485 | Audio                         | MiniPCIe          | 2.5" HDD bay | mSATA | Operating Temperature |
|----------------|----------------------------|-----------|-----|------|-----|---------|---------|------|--------|----------------|-------------------------------|-------------------|--------------|-------|-----------------------|
| ARK-1550-S6A1E | Intel Celeron 2980U 1.6GHz | Up to 8GB | 1   | 1    | 2   | 2       | 2       | 1    | 1      | 2              | Line in<br>Line out<br>Mic in | 1 Full size w/SIM | 1            | 1     | -20 ~ 55° C           |
| ARK-1550-S9A1E | Intel Core i5 4300U 1.9GHz |           |     |      |     |         |         |      |        |                |                               |                   |              |       |                       |

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

## Packing List

| Part Number | Description                          |
|-------------|--------------------------------------|
| -           | 1 x ARK-1550 Unit                    |
| -           | 1 x User Manual (Simplified Chinese) |
| -           | 1 x Power bracket                    |

## Embedded OS

| Part Number | Description                                      |
|-------------|--|
| 2070012825  | WE7E 64bit with EN/JP/TC/SC (OS size around 11G) |
| 2070012882  | WE8S 64bit with EN/JP/TC/SC (OS size around 13G) |
| 2070014895  | Win10 IoT Ent (Value) 64bit Eng                  |

## Optional Items

| Part Number      | Description  |
|------------------|--|
| 96PSA-A60W12R1-1 | AC-to-DC Adapter, DC 12V/5A 60W, with DC Jack Plug, 0 ~ 40° C for Home and Office Use  |
| 96PSA-A84W12V1   | AC-to-DC Adapter, DC 12V/7A 84W, with DC Jack Plug, 0 ~ 70° C for Wide Temperature Use |
| 1702002600       | Power cable 3-pin 183 cm, USA type   |
| 1702002605       | Power cable 3-pin 183 cm, Europe type  |
| 1702031801       | Power cable 3-pin 183 cm, UK type  |
| 1700000237       | Power cable 3-pin 183 cm, PSE type   |
| AMK-V004E        | VESA mounting kit  |
| AMK-R004E        | DIN-rail mounting kit  |
| AMO-I014E        | LVDS Module w/ cables. (Support by T-Part or CTOS)                                     |
| 1700023855-01    | 1M lockable HDMI cable   |
| 1700023856-01    | 3M lockable HDMI cable   |