

# ARK-2150L

## 3rd Generation Intel® Core™ i3/i7 with Dual Independent Display Fanless Box PC

**NEW**



susiAccess iManager



### Features

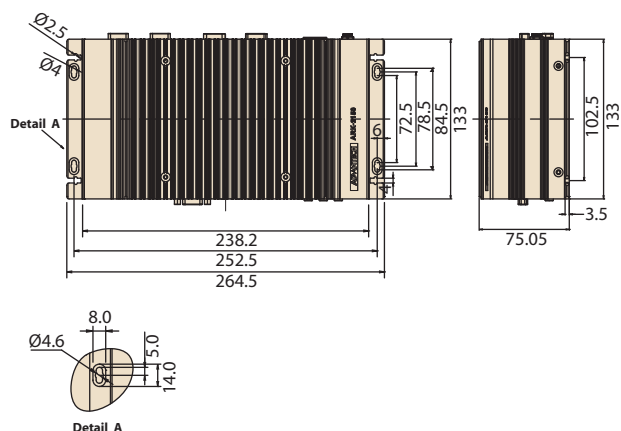
- Intel® Core i7, i3 and Celeron processors + Intel QM77 PCH
- 1 x DDR3/DDR3L, SO-DIMM support up to 8 GB
- DirectX11, OpenGL3.1, OpenCL1.1, dual independent display: VGA + HDMI/ DisplayPort\*
- Supports Intel AMT8.0,
- Supports up to 2 x GbE, 2 x USB 3.0, 4 x USB 2.0 and 4 x COMs ports
- Supports 1 x internal mSATA socket and 1 x 2.5" SATA HDD Bay
- Lockable DC jack design
- Supports iManager, SUSIAccess and Embedded Software APIs

### Specifications

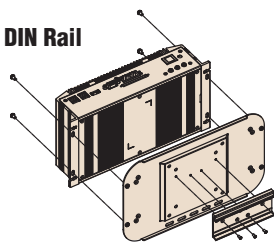
|                   |                            | ARK-2150L-S4A1E                                                                                                                                                          | ARK-2150L-S6A1E          | ARK-2150L-S7A1E                                    |
|-------------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------------------------------------|
| Processor System  | CPU                        | Intel Celeron 1047UE                                                                                                                                                     | Intel ULV Core i3 3217UE | Intel ULV Core i7 3517UE                           |
|                   | Frequency                  | Dual Core 1.4 GHz                                                                                                                                                        | Dual Core 1.6 GHz        | Dual Core 1.7 GHz<br>(Max Turbo Frequency 2.8 GHz) |
|                   | L3 Cache                   | 2 MB                                                                                                                                                                     | 3 MB                     | 4 MB                                               |
|                   | System Chipset             | Intel QM77                                                                                                                                                               |                          |                                                    |
|                   | BIOS                       | AMI EFI 64Mbit                                                                                                                                                           |                          |                                                    |
| Memory            | Technology                 | DDR3 1600MHz, DDR3L 1333 MHz                                                                                                                                             |                          |                                                    |
|                   | Max. Capacity              | 8 GB                                                                                                                                                                     |                          |                                                    |
|                   | Socket                     | 1 x 204-pin SO-DIMM                                                                                                                                                      |                          |                                                    |
| Graphics          | Chipset                    | Intel QM77 Integrated GFX Gen 7                                                                                                                                          |                          |                                                    |
|                   | Graphic Engine             | DirectX11, OpenGL 3.1, and Open CL 11<br>Hardware decode acceleration: AVC/H.264, M PEG-2, VC-1                                                                          |                          |                                                    |
|                   | VGA                        | Integrated 340.4MHz RAMDAC, Max resolution up to 2048 x 1536 @ 75Hz                                                                                                      |                          |                                                    |
|                   | HDMI/DP*                   | Supports HDMI 1.4 for HD Video playback (no hotplug support)<br>Max resolution up to 2560 x 1600 @ 60Hz on DisplayPort*, Max resolution up to 1920 x 1200 @ 60Hz on HDMI |                          |                                                    |
|                   | Dual Display               | Yes, VGA + HDMI or VGA + DisplayPort*                                                                                                                                    |                          |                                                    |
| Ethernet          | LAN1                       | 10/100/1000 Mbps Intel 82579LM GbE, support Wake On Lan                                                                                                                  |                          |                                                    |
|                   | LAN2                       | 10/100/1000 Mbps Intel 82583V GbE, support Wake On Lan                                                                                                                   |                          |                                                    |
| Audio             | Interface                  | Realtek ALC892, High Definition Audio. Line-out, Mic-in, Line-in                                                                                                         |                          |                                                    |
| I/O Interface     | Serial Ports               | 2 x RS-232 ports, 2 x RS-232/422/485 port with auto flow control                                                                                                         |                          |                                                    |
|                   | USB Interface              | 2 x USB 3.0 ports and 4 x USB 2.0 ports                                                                                                                                  |                          |                                                    |
| Other             | Digital I/O                | 8-bits programmable general purpose input/output                                                                                                                         |                          |                                                    |
|                   | Watchdog timer             | 255 levels timer interval, setup by software                                                                                                                             |                          |                                                    |
| Expansion         | Mini PCIe                  | 2 x Full-size Mini PCIe (One supports mSATA & the other with SIM holder)<br>1 x Half-size Mini PCIe                                                                      |                          |                                                    |
|                   | HDD                        | Supports one SATA 2.5" SATA HDD Bay (Compatible with 12.5mm height HDD) (Max. Data Transfer Rate 600 MB/s)                                                               |                          |                                                    |
| Storage           | SSD                        | Supports one internal mSATA socket                                                                                                                                       |                          |                                                    |
|                   | Microsoft Windows          | Windows 7, Windows 7 Embedded, XP Professional, XP Embedded                                                                                                              |                          |                                                    |
| Software Support  | Linux                      | Ubuntu 12.04                                                                                                                                                             |                          |                                                    |
|                   | Power Type                 | AT/ATX                                                                                                                                                                   |                          |                                                    |
| Power Requirement | Power Input Voltage        | 12 V <sub>DC</sub> , ± 10%                                                                                                                                               |                          |                                                    |
|                   | Minimum Power Input        | 12 V, 4 A                                                                                                                                                                |                          |                                                    |
|                   | Power Adapter              | AC to DC, DC12 V/5 A, 60 W (Optional)                                                                                                                                    |                          |                                                    |
| Power Consumption | Typical                    | 9.6 Watt (with Intel Core i7 3517UE CPU and 2 GB memory)                                                                                                                 |                          |                                                    |
|                   | Max.                       | 24.96 Watt (with Intel Core i7 3517UE CPU and 2 GB memory)                                                                                                               |                          |                                                    |
| Mechanical        | Construction               | Aluminum housing                                                                                                                                                         |                          |                                                    |
|                   | Mounting                   | Din-Rail mounting, Desk/wall-mounting, VESA mounting                                                                                                                     |                          |                                                    |
|                   | Dimensions (W x H x D)     | 264.5 x 75.1 x 133.0 mm (10.41" x 2.96" x 5.24")                                                                                                                         |                          |                                                    |
|                   | Weight                     | 2.3 kg (5.07 lb)                                                                                                                                                         |                          |                                                    |
| Environment       | Operating Temperature      | With extended temperature peripherals: -20 ~ 60° C (-4 ~ 140° F) with 0.7m/s air flow<br>With 2.5-inch hard disk 0 ~ 45° C (32 ~ 112° 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: 5 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis.                                                                                                         |                          |                                                    |
|                   | Shock During Operation     | With SSD: 50 G, IEC 60068-2-27, half sine, 11 ms duration                                                                                                                |                          |                                                    |
|                   | EMC                        | CE/FCC Class A, CCC, BSMI                                                                                                                                                |                          |                                                    |
|                   | Safety Certifications      | UL, CCC, BSMI                                                                                                                                                            |                          |                                                    |

\*DisplayPort function is supported by project (no hotplug support)

## Dimensions

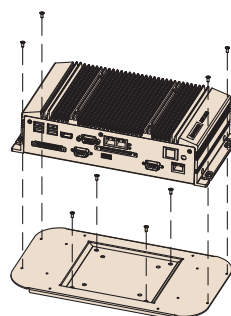


### DIN Rail

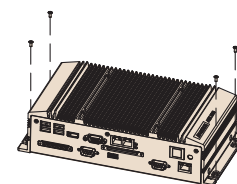


Unit: mm

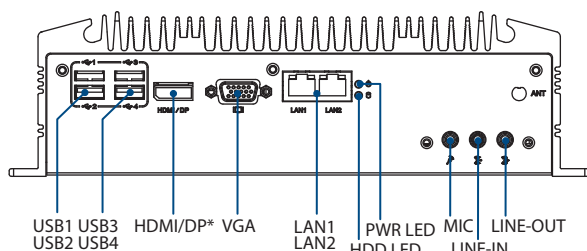
### VESA mount



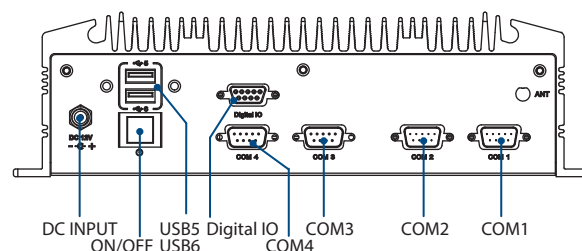
### Wall mount



## Front Panel External I/O Mechanical Layout/Drawing



## Rear Panel External I/O Mechanical Layout/Drawing



## Ordering Information

| Part No.         | CPU                             | RAM          | VGA | HDMI/DP* | GbE | USB 3.0 | USB 2.0 | RS-232 | RS-232/422/485 | DIO    | Half-size Mini PCIe | Full-size Mini PCIe | SIM | 2.5" SATAIII HDD Bay | Power Input                  | Operation Temp. | OS                                 |
|------------------|---------------------------------|--------------|-----|----------|-----|---------|---------|--------|----------------|--------|---------------------|---------------------|-----|----------------------|------------------------------|-----------------|------------------------------------|
| ARK-2150L-S4A1E  | Intel Celeron 1.4GHz 1047UE     | upto 8GB     | Yes | Yes      | 2   | 2       | 4       | 2      | 2              | 8-bits | 1                   | 2                   | 1   | 1                    | DC 12V Lockable DC Jack      | -20 ~ 60° C     | -                                  |
| ARK-2150L-S6A1E  | Intel Core i3 ULV 1.6GHz 3217UE | upto 8GB     | Yes | Yes      | 2   | 2       | 4       | 2      | 2              | 8-bits | 1                   | 2                   | 1   | 1                    | DC 12V Lockable DC Jack      | -20 ~ 60° C     | -                                  |
| ARK-2150L-S7A1E  | Intel Core i7 ULV 1.7GHz 3517UE | upto 8GB     | Yes | Yes      | 2   | 2       | 4       | 2      | 2              | 8-bits | 1                   | 2                   | 1   | 1                    | DC 12V Lockable DC Jack      | -20 ~ 60° C     | -                                  |
| ARK-2150LS-S7A1E | Intel Core i7 ULV 1.7GHz 3517UE | 4GB built in | Yes | Yes      | 2   | 2       | 4       | 2      | 2              | 8-bits | 1                   | 2                   | 1   | 500GB HDD built in   | DC 12V 1757004339-01 bundled | 0 ~ 45° C       | WES7E 64 bit built-in ENG/JP/TC/SC |

Note: Memory, storage and operating system bundled by request.  
\*DP function is supported by project.

## Packing List

| Part Number | Description                          |
|-------------|--------------------------------------|
| -           | 1 x ARK-2150 Unit                    |
| -           | 1 x Utility CD                       |
| -           | 1 x User Manual (Simplified Chinese) |
| -           | 1 x China RoHS                       |

## Optional Items

| Part Number    | Description                                |
|----------------|--------------------------------------------|
| 96PSA-A60W12W6 | AC to DC Adaptor, DC 12V/5A 60W, with lock |
| 1702002600     | Power cable 3-pin 180cm, USA type          |
| 1702031801     | Power cable 3-pin 180cm, UK type           |
| 1702002605     | Power cable 3-pin 180cm, EU type           |
| 1700000237     | Power cable 3-pin 180cm, with PSE          |
| AMK-V004E      | VESA mounting kit                          |
| AMK-R004E      | DIN-rail mounting kit                      |

## Embedded OS

| Part Number | Description                          |
|-------------|--------------------------------------|
| 2070011831  | Image WES7E SP1 x32 ENG/JP/TC/SC     |
| 2070011830  | Image WES2009 V4.2 multi 24 language |