

# ARK-1120L

**Intel® Atom™ N455 4 USB 2.0, Audio and Competitive Pricing Fanless Box PC**



susIAccess



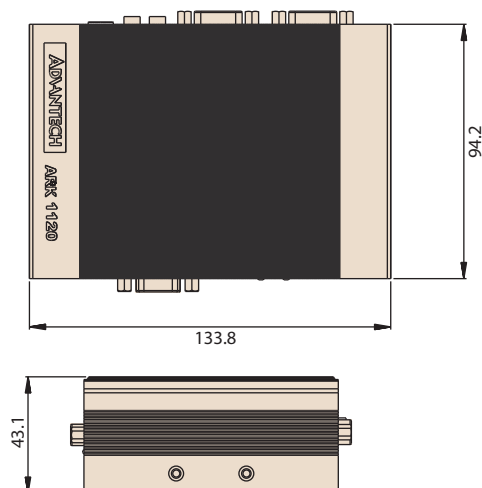
## Features

- Intel® Atom™ processor N455 1.66 GHz + ICH8M
- Low power consumption, < 10W
- Palm-size design: 133.8(W) x 43.1(H) x 94.2(D) mm
- DDR3 memory support , up to 2GB
- Supports 2.5" SATA HDD Bay
- One half-size mini-PCIe slot. Ex: Wi-Fi add-on card
- 2 x RS-232, 4 x USB ports and Audio line-in, line out
- Optional VESA/DIN-rail/Wall mount
- Lockable DC jack design
- Supports SUSIAccess and Embedded Software APIs

## Specifications

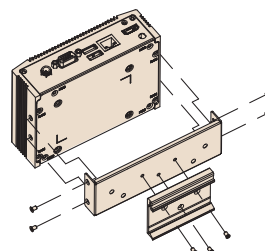
| ARK-1120L-N5A1E                  |                            |                                                                                                            |
|----------------------------------|----------------------------|------------------------------------------------------------------------------------------------------------|
| Processor System                 | CPU                        | Intel Atom processor N455                                                                                  |
|                                  | Frequency                  | 1.66 GHz                                                                                                   |
|                                  | L2 Cache                   | 512KB                                                                                                      |
|                                  | System Chipset             | Intel ICH8-M                                                                                               |
|                                  | BIOS                       | AMI 16 Mbit Flash BIOS                                                                                     |
| Memory                           | Technology                 | DDR3 up to 667 MHz                                                                                         |
|                                  | Max. Capacity              | 2 GB                                                                                                       |
|                                  | Socket                     | 1 x 204 pin SO-DIMM                                                                                        |
| Graphics                         | Chipset                    | Intel ICH8-M                                                                                               |
|                                  | Interface                  | CRT interface, up to 1600 x 1200 (SXGA)                                                                    |
| Ethernet                         | LAN                        | 1 x 10/100/1000 Mbps Intel 82567V GbE, Support Wake on LAN                                                 |
| Audio                            | Interface                  | Realtek ALC892, Line-out, Line-in                                                                          |
| I/O Interface                    | Serial Ports               | 2 x RS-232                                                                                                 |
|                                  | USB Interface              | 4 x USB ports, USB 2.0 Compliant                                                                           |
| Other                            | Watchdog timer             | 255-level timer interval, setup by software                                                                |
| Expansion                        | Mini PCIe                  | 1 x half-size Mini PCIe                                                                                    |
| Storage                          | HDD                        | Support one SATA 2.5" HDD Bay (support 9.5mm height only)                                                  |
|                                  | SSD                        | Supports CompactFlash socket for type I/II CompactFlash disk (only available for T-Parts and CTOS service) |
| Software Support                 | Microsoft Windows          | Windows 7, XP Professional, XP Embedded, WinCE 6.0                                                         |
|                                  | Linux                      | Ubuntu v10.04.1                                                                                            |
| Power Requirement                | Power Type                 | ATX                                                                                                        |
|                                  | Power Input Voltage        | 12 V <sub>DC</sub>                                                                                         |
|                                  | Minimum Power Input        | 12 V, 1.5 A                                                                                                |
|                                  | Power Adaptor              | AC to DC, DC12 V/3 A, 36 W (Support DC Locker Design)                                                      |
| Power Consumption                | Typical                    | 9.12 W                                                                                                     |
|                                  | Max                        | 10.80 W                                                                                                    |
| Mechanical                       | Construction               | Aluminum housing                                                                                           |
|                                  | Mounting                   | Support DIN Rail / VESA / Wall mounts (Optional)                                                           |
|                                  | Dimensions (W x H x D)     | 133.8 x 43.1 x 94.2 mm (5.27" x 1.70" x 3.71")                                                             |
|                                  | Weight                     | 0.7 kg (1.55 lb)                                                                                           |
| Environmental and Certifications | Operating Temperature      | 0 ~ 40° C (32 ~ 104° F) with 0.7m/s air flow and extend temperature HDD                                    |
|                                  | Storage Temperature        | -40 ~ 85° C (-40 ~ 185° F)                                                                                 |
|                                  | Relative Humidity          | 95% @ 40° C (non-condensing)                                                                               |
|                                  | Vibration During Operation | With CompactFlash disk: 3Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1hr/axis.                               |
|                                  | Shock During Operation     | With CompactFlash disk: 30Grms, IEC 60068-2-27, half sine, 11 ms duration                                  |
|                                  | EMC                        | CE/FCC Class A, CCC, BSMI                                                                                  |
|                                  | Safety Certifications      | UL, CCC, BSMI, CB                                                                                          |

## Dimensions

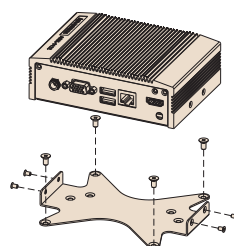


## DIN Rail

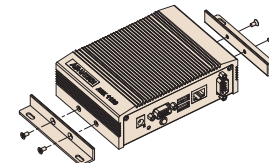
Unit: mm



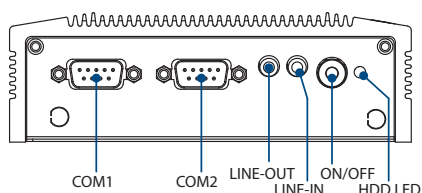
## VESA mount



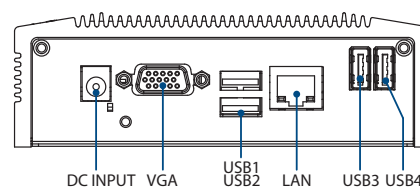
## Wall mount



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



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



## Ordering Information

| Part Number      | Intel CPU         | RAM          | VGA | GbE | Audio               | 2.5" HDD bay   | CF | USB 2.0 | RS-232 | RS-232/422/485 | MiniPCIe    | Operating Temp. | OS               |
|------------------|-------------------|--------------|-----|-----|---------------------|----------------|----|---------|--------|----------------|-------------|-----------------|------------------|
| ARK-1120L-N5A1E  | Atom N455 1.66GHz | Up to 2GB    | 1   | 1   | Line in<br>Line out | 1              | 1  | 4       | 2      | N/A            | 1 Half size | 0 ~ 40° C       | -                |
| ARK-1120LX-N5A1E | Atom N455 1.66GHz | 2GB Built-In | 1   | 1   | Line in<br>Line out | 320GB Built-in | 1  | 4       | 2      | N/A            | 1 Half size | 0 ~ 40° C       | Win XPE Built-in |

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

## Packing List

| Part Number    | Description                                                                       |
|----------------|-----------------------------------------------------------------------------------|
| -              | 1 x ARK-1120 unit                                                                 |
| -              | 1 x Driver/Utility CD/manual                                                      |
| -              | 1 x Traditional Chinese user manual for CCC                                       |
| -              | 1 x China RoHS                                                                    |
| 1960047289T001 | DC power adapter locker                                                           |
| 1757003553     | AC-to-DC Adapter DC12 V/3 A 36 W, with DC-Jack, 0 ~ 40° C for Home and Office Use |

## Optional Items

| Part Number | Description                           |
|-------------|---------------------------------------|
| 1700001524  | Power Cable 3-pin 180 cm, USA type    |
| 170203183C  | Power Cable 3-pin 180 cm, Europe Type |
| 170203180A  | Power Cable 3-pin 180 cm, UK Type     |
| 1700008921  | Power Cable 3-pin PSE Mark 183cm      |
| AMK-V003E   | ARK-112X series VESA mount kits       |
| AMK-R001E   | ARK-112X series DIN Rail mount kits   |
| AMK-W001E   | ARK-112X series wall mount kits       |

## Embedded OS

| Part Number | Description                |
|-------------|----------------------------|
| 2070012123  | XPE WES2009 V4.4 24MUI     |
| 2070012267  | WES7E 32bit w/ EN/JP/TC/SC |

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