

# ARK-3202

## Mobile Intel® ATOM N270 Fanless Solution with Dual Display and Multiple I/O

**NEW**



### Features

- Fanless, Intel® ATOM Compact Embedded Box IPC
- Intel® ATOM N270 Processor at 1.6 GHz
- Dual display and support for wide screen with high resolution
- Supports 2 GbE, 5 USB 2.0 and max to 5 COMs ports
- Optional WLAN and HSDPA modules for advanced in-vehicle solution
- Optional GPS on-board for in-vehicle application
- IP40

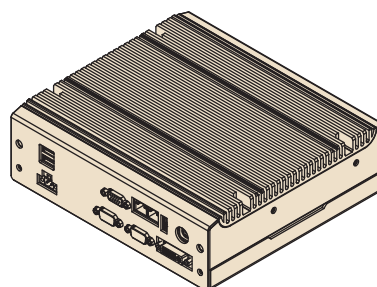
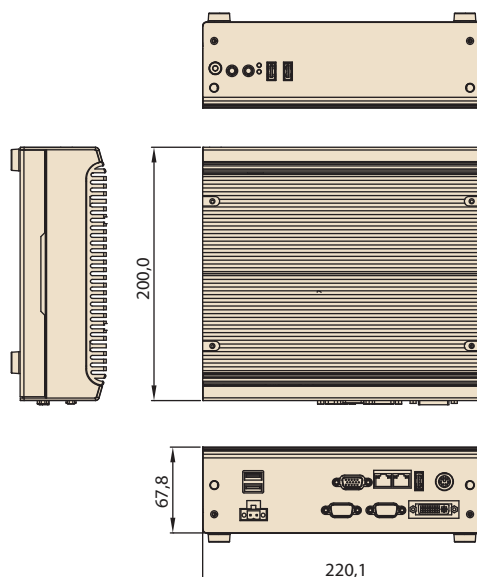


### Specifications

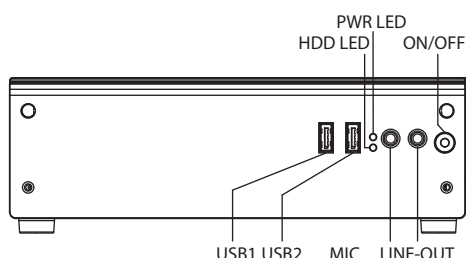
|                   |                                    | ARK-3202L-S6A1E                                                                                                                                                                           | ARK-3202F-S6A1E                                      | ARK-3202V-S6A1E                                         |
|-------------------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|---------------------------------------------------------|
| Processor System  | CPU                                | Intel® ATOM N270                                                                                                                                                                          |                                                      |                                                         |
|                   | Max. speed                         | 1.6 GHz                                                                                                                                                                                   |                                                      |                                                         |
|                   | System Chipset                     | Intel™ 945GSE + ICH7-M Chipset                                                                                                                                                            |                                                      |                                                         |
|                   | Front Side Bus                     | 400/533MHz                                                                                                                                                                                |                                                      |                                                         |
|                   | BIOS                               | AWAR 4 Mbit, SPI                                                                                                                                                                          |                                                      |                                                         |
| Memory            | Technology                         | DDR2 400/533 MHz (945GSE)                                                                                                                                                                 |                                                      |                                                         |
|                   | Max. Capacity                      | 2 GB                                                                                                                                                                                      |                                                      |                                                         |
|                   | Socket                             | 1 x 200-pin SODIMM                                                                                                                                                                        |                                                      |                                                         |
| Graphics          | Chipset                            | Integrated graphics built in Intel® 945GSE                                                                                                                                                |                                                      |                                                         |
|                   | Interface                          | CRT Interface<br>DVI Interface, compliant with DVI 1.0<br>36-bit LVDS interface(Optional)                                                                                                 |                                                      |                                                         |
| Ethernet          | LAN 1                              | 10/100/1000 Mbps Ethernet controller, support Wake On LAN                                                                                                                                 |                                                      |                                                         |
|                   | LAN 2                              | 10/100/1000 Mbps Ethernet controller, support Wake On LAN                                                                                                                                 |                                                      |                                                         |
| Audio             | Amplifier                          | 2.2W amplifier                                                                                                                                                                            |                                                      |                                                         |
|                   | Interface                          | Spkr-out, Mic-in                                                                                                                                                                          |                                                      |                                                         |
| IO interface      | Serial Interface                   | 2 x RS-232 port                                                                                                                                                                           | 2 x RS-232 & 3 x RS-232/422/485 w/ Auto Flow Control | 2 x RS-232 & 3 x RS-232/422/485 w/ Auto Flow Control    |
|                   | USB Interface                      | 5 x USB ports, Compliant with USB 2.0                                                                                                                                                     |                                                      |                                                         |
| Others            | Digital I/O                        | -                                                                                                                                                                                         |                                                      |                                                         |
|                   | GPS                                | -                                                                                                                                                                                         |                                                      | GPS on Board (optional)                                 |
|                   | Thermal alarm                      | -                                                                                                                                                                                         |                                                      |                                                         |
|                   | Watchdog timer                     | 255 levels timer interval, setup by software                                                                                                                                              |                                                      |                                                         |
| Expansion         | MiniPCle                           | -                                                                                                                                                                                         | 2 x Mini CPlE                                        | 2 x Mini CPlE                                           |
| Storage           | HDD                                | 1 x SATA 2.5" HDD                                                                                                                                                                         | 1x SATA 2.5" HDD                                     | N/A                                                     |
|                   | SSD                                | Supports CompactFlash socket for type I/II CompactFlash disk                                                                                                                              |                                                      |                                                         |
| Software support  | Microsoft Windows                  | Vista, XP Professional, XP Embedded                                                                                                                                                       |                                                      |                                                         |
|                   | Linux                              | Fedora 9.0                                                                                                                                                                                |                                                      |                                                         |
| Power requirement | Power Type                         | AT/ATX                                                                                                                                                                                    |                                                      |                                                         |
|                   | Power Input Voltage                | 12 V <sub>DC</sub> ~ 24 V <sub>DC</sub>                                                                                                                                                   | 12 V <sub>DC</sub> ~ 24 V <sub>DC</sub>              | 9 V <sub>DC</sub> ~ 32 V <sub>DC</sub> (for In Vehicle) |
|                   | Minimum Power Input                | 12V-24V, 3.0A-1.5A                                                                                                                                                                        |                                                      |                                                         |
|                   | Power Adapter                      | AC to DC, DC19V/3.42A, 65W (Optional)                                                                                                                                                     |                                                      |                                                         |
| Power consumption | Typical                            | Typical 13.3W (CPU is Intel ATOM N270 1.6 GHz and w/o expansion)                                                                                                                          |                                                      |                                                         |
|                   | Max.                               | Max. 17.1W (CPU is Intel ATOM N270 1.6 GHz and w/o expansion)                                                                                                                             |                                                      |                                                         |
| Mechanical        | Construction                       | Aluminum housing                                                                                                                                                                          |                                                      |                                                         |
|                   | Mounting                           | Desk/wall-mounting                                                                                                                                                                        |                                                      |                                                         |
|                   | Dimensions (W x H x D)             | 220 mm x 68 mm x 200 mm (8.66" x 2.67" x 7.87")                                                                                                                                           |                                                      |                                                         |
|                   | Weight                             | 3 kg (6.6 lb)                                                                                                                                                                             |                                                      |                                                         |
| Environment       | Operating Temperature              | With Industrial Grade CompactFlash disk: -20 ~ 60° C (-4 ~ 140° F)<br>With 2.5-inch extended temperature hard disk 0 to 45° C (32 ~ 112° F), with air flow                                |                                                      |                                                         |
|                   | Storage Temperature                | -40 ~ 85° C (-40 ~ 185° F)                                                                                                                                                                |                                                      |                                                         |
|                   | Relative Humidity                  | 95% @ 40° C (non-condensing)                                                                                                                                                              |                                                      |                                                         |
|                   | Vibration Loading During Operation | With CompactFlash disk: 5 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 Oct./min, 1 hr/axis.<br>With 2.5-inch hard disk: 1 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 Oct./min, 1 hr/axis. |                                                      |                                                         |
|                   | Shock During Operation             | With CompactFlash disk: 50 G, IEC 60068-2-27, half sine, 11 ms duration<br>With hard disk: 20 G, IEC 60068-2-27, half sine, 11 ms duration                                                |                                                      |                                                         |
|                   | EMC                                | CE/FCC Class A, CCC, BSMI                                                                                                                                                                 |                                                      |                                                         |
|                   | Safety Certifications              | UL, CCC, BSMI                                                                                                                                                                             |                                                      |                                                         |

## Dimensions

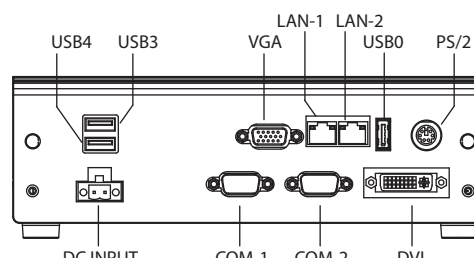
Unit: mm



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



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



## Packing List

| Part Number    | Description                          |
|----------------|--------------------------------------|
| -              | 1 x ARK-3202 Unit                    |
| 1960014487T00C | 2 x Desk/Wall mount plate            |
| 1700009001     | 1 x 2-pin Phoenix DC power connector |
| -              | 1 x User Manual (Simplified Chinese) |
| -              | 1 x Utility CD                       |

## Ordering Information

| Part Number     | Description                                                                                                           |
|-----------------|-----------------------------------------------------------------------------------------------------------------------|
| ARK-3202F-S6A1E | Intel ATOM N270 1.6GHz Compact Embedded Box IPC, w/ 2 x GbE, 5 x USB 2.0, 4 x COM, 2 x MiniPCle, GPS, VGA, DVI, Audio |
| ARK-3202L-S6A1E | Intel ATOM N270 1.6GHz Compact Embedded Box IPC, w/ 2 x GbE, 5 x USB 2.0, 2 x COM, VGA, DVI, Audio                    |
| ARK-3202V-S6A1E | Intel ATOM N270 1.6GHz Compact Embedded Box IPC, w/ 2 x GbE, 5 x USB 2.0, 4 x COM, 2 x MiniPCle, GPS, VGA, DVI, Audio |

## Optional Items

| Part Number | Description                                                                                    |
|-------------|------------------------------------------------------------------------------------------------|
| 1757000222  | AC-to-DC Adapter, DC19 V/3.42A 65W, with Phoenix Power Plug, 0 ~ 40° C for Home and Office Use |
| 1700001947  | Power cable 2-pin 180 cm, USA for ARK-338X                                                     |
| 1700001948  | Power cable 2-pin 180 cm, Europe for ARK-338X                                                  |
| 1700001949  | Power cable 2-pin 180 cm, UK for ARK-338X                                                      |
| 1700009398  | LVDS power cable for ARK-3202                                                                  |