

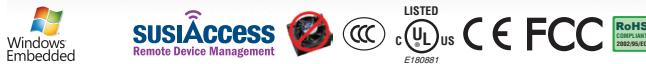
ARK-3403

Intel® Atom™ D510/D525 Fanless Embedded Box PC with PCI/PCIe Expansion and Dual SATA HDDs



Features

- Intel® Atom™ D510/D525 dual core up to 1.8 GHz Fanless Embedded Box PC
- Supports VGA and LVDS dual display and support for widescreens with high resolution
- Supports 2 GbE, eSATA, 6 USB 2.0, audio and 4 COM ports
- Two internal 2.5" SATA HDD drive bays
- Supports 2 x Mini PCIe, 2 x PCI/PCIe expansion interfaces for diverse applications
- Easy integration, easy maintenance, and wide input voltage range
- Supports SUSIAccess and Embedded Software APIs
- IP40

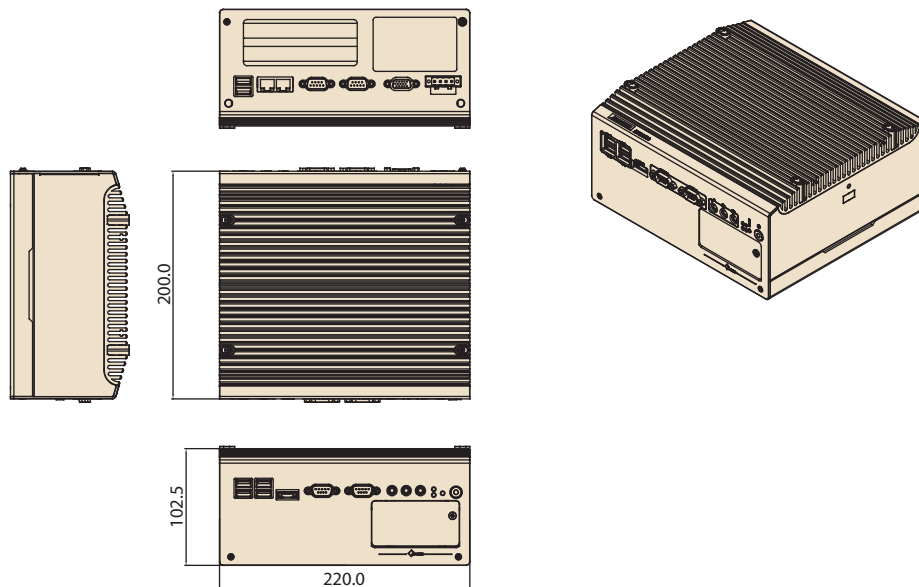


Specifications

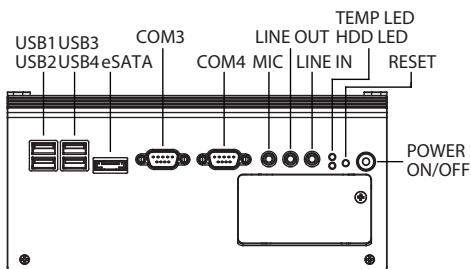
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|-----------------------|------------------------------------|---|---------------------------|
| Processor System | CPU | Intel Atom D510 processor | Intel Atom D525 processor |
| | Max. speed | 1.66 GHz | 1.8 GHz |
| | System Chipset | Intel ICH8-M | |
| Memory | BIOS | AMI 16 Mbit SPI BIOS | |
| | Technology | DDR2 667 MHz | |
| | Max. Capacity | 2 GB | |
| Graphics | Socket | 1 x 200-pin SO-DIMM | |
| | Chipset | Intel 3.5 Gen Integrated Graphic Engine + GFX core | |
| Ethernet | Interface | VGA: up to 1920 x 1200 18-bit LVDS interface(Optional) | |
| | LAN 1 | 10/100/1000 Mbps Intel 82567V Ethernet controller, support Wake on LAN | |
| Audio | LAN 2 | 10/100/1000 Mbps Intel 82583V Ethernet controller, support Wake on LAN | |
| | Amplifier | - | |
| IO interface | Interface | Line-out, Mic-in, Line-in | |
| | Serial Interface | 4 COM, 2 x RS-232 and 2 x RS-232/422/485 port , RS-485 w/auto flow control, 2 extra RS-232 ports (optional) | |
| | USB Interface | 6 x USB ports, Compliant with USB 2.0 | |
| | Parallel Port | Supports D-sub 25-pin connector (optional) | |
| Other | Digital I/O | Support 16-bit digital IO (optional) | |
| | Thermal Alarm | Yellow LED lighting | |
| Expansion | Watchdog Timer | 255-level timer interval, setup by software | |
| | PCI/PCIe Slot | 1 Slot PCI and 1 Slot PCIe x1 (default); 2 Slots PCIe x1 (optional); 2 Slots PCI (optional) | |
| | Mini PCI/Mini PCIe | Supports maximum dimension of 167 mm (width) x 106 mm (length) for expansion PC board 2 x Mini PCIe | |
| Storage | HDD | Supports drive bay space for 2 x SATA 2.5" HDD (9.5 mm height only) | |
| | SSD | Supports CompactFlash socket for type I/II CompactFlash disk | |
| Software Support | Microsoft Windows | Windows 7, XP Professional, XP Embedded, WinCE 6.0 | |
| | Linux | Fedora 12 | |
| Power Requirement | Power Type | AT/ATX | |
| | Power Input Voltage | 12 V _{DC} ~ 24 V _{DC} | |
| | Minimum Power Input | 12 V _{DC} ~ V _{DC} @ 4.6 A ~ 2.4 A | |
| Power Consumption | Power Adapter | AC to DC, DC19V/7.89A, 150W(Optional) | |
| | Typical | 13 W (with Intel Atom D510 1.66 GHz and w/o expansion) | |
| Mechanical | Max. | 15 W (with Intel Atom D510 1.66 GHz and w/o expansion) | |
| | Construction | Aluminum housing | |
| | Mounting | Desk/wall-mounting | |
| | Dimensions (W x H x D) | 220 mm x 102.5 mm x 200 mm (8.66" x 4.04" x 7.87") | |
| Environment | Weight | 4 kg (8.8 lb) | |
| | Operating Temperature | With extended temperature peripherals CompactFlash disk: -10 ~ 55° C With extended temperature peripherals 2.5-inch hard disk -10 to 45° C, 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. 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 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

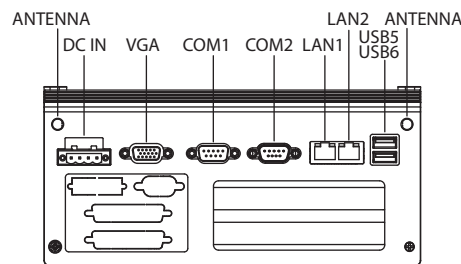
Unit: mm (inch)



Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Packing List

| Part Number | Description |
|----------------|--------------------------------------|
| - | 1 x ARK-3403 unit |
| - | 1 x Driver/Utility CD/Manual |
| 1960014487T00C | 2 x desk/wall mount plate |
| 1652003234 | 1 x 4-pin phoenix DC power connector |

Ordering Information

| Part Number | Description |
|----------------|---|
| ARK-3403-D5A1E | Intel Atom D510 1.66 GHz, w/VGA, 2 x Giga LAN, 6 x USB 2.0, 4 x COM, 2 Mini PCIe, Audio |
| ARK-3403-D6A1E | Intel Atom D525 1.8 GHz, w/VGA, 2 x GLAN, 6 x USB2.0 4 x COM, 2 Mini PCIe, audio |

Optional Items

| Part Number | Description |
|-------------|--|
| 1757002161 | AC-to-DC adapter, DC19 V/7.89A 150 W, with phoenix power plug, 0 ~ 40° C for home and office use |
| 1702002600 | Power cable 3-pin 180 cm, USA type |
| 1702002605 | Power cable 3-pin 180 cm, EU type |
| 1702031801 | Power cable 3-pin 180 cm, UK type |
| 1700008871 | COM Cable D-SUB 9P(M)/IDE#2 10P-2.0 20 cm |
| 1700018187 | LPT cable 2 x 13p-2.0/D-SUB 25P(F) 20 cm |
| 1700018490 | LVDS cable |
| 1700009407 | DIO cable D-SUB 25P(M)/2*10P-1.25 15cm |
| 1700009396 | LVDS power cable |
| AMO-R010E | 2 slot riser card, 1 x PCIe x1 + 1 x PCI |
| AMO-R013E | 2 slot riser card, 2 x PCI |
| AMO-R009E | 2 slot riser card, 2 x PCIe x1 |

Embedded OS

| Part Number | Description |
|-------------|-----------------------------------|
| 2070009923 | WinCE 6.0 ARK-3403 ENG |
| 2070009030 | XPE WES2009 Luna Pier V4.0 ENG |
| 2070010797 | WES7E SPI for ARK-3403 ENG 32 bit |