

ARK-6322

Intel Celeron Quad Core J1900 SoC
with 6 COM and 8 USB Fanless Box PC



Features

- Intel Celeron Quad Core J1900 2.0GHz SoC
- DDR3L 1333 MHz SO-DIMM memory support up to 8GB
- Dual display : VGA + DisplayPort
- Support 1 x 3.5" or 2.5" SATA HDD Bay and mSATA
- Multiple I/O: 1 x USB 3.0, 7 x USB 2.0, 2 x LAN and 6 x COM
- Support 1 x Full-size and 1 x half-size MiniPCle
- Lockable DC jack design
- Optional iDoor Modules
- Optional VESA / Wall Mounting kits
- Supports SUSIAccess and Embedded Software APIs

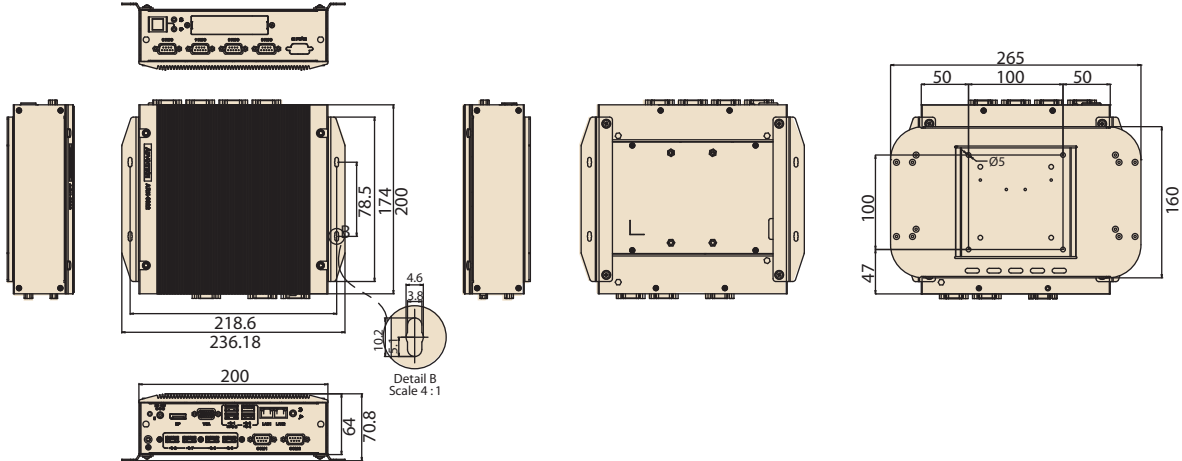


Specifications

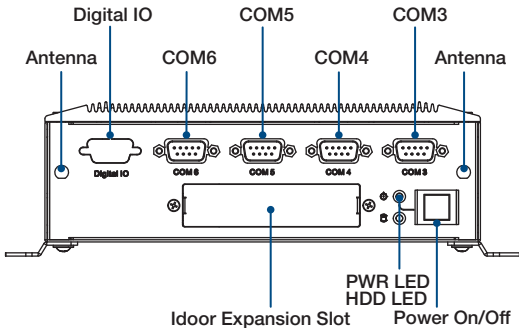
| | | |
|--------------------|----------------------------|---|
| Processor System | CPU | Intel Celeron Processor J1900 Quad Core |
| | Max. Speed | 2.0 GHz, Turbo Boost up to 2.41GHz |
| | L2 Cache | 2 MB |
| | BIOS | AMI 16 Mbit SPI (Default BIOS is supported for 64-bit OS installation, BIOS for 32-bit OS is supported by project) |
| Memory | Technology | Dual channel DDR3L 1333MHz SDRAM |
| | Max. Capacity | 8 GB, 4 GB per SO-DIMM |
| | Socket | 2 x 204-pin SO-DIMM |
| Graphics | Controller | Intel Gen 7 Graphics Engines and media encode/decode engine; GPU Frequency: 688 MHz |
| | VRAM | Shared system memory up to 224 MB SDRAM |
| | VGA | Supports up to 2048 x 1280 |
| | Display port | Supports resolution up to 2560 x 1600 |
| Ethernet | Dual Display | VGA+DP |
| | LAN1 | 10/100/1000 Mbps Realtek 8111E GbE |
| Audio | LAN2 | 10/100/1000 Mbps Realtek 8111E GbE |
| | Interface | Realtek ALC892, High Definition Audio, Line-out or Mic-in |
| I/O Interface | Serial Port | 5 x RS-232 ports, 1 x RS-232/422/485 with auto flow control (COM3) |
| | USB | 1 x USB 3.0 port and 7 x USB 2.0 ports |
| Other | Watchdog timer | 255-level timer interval, setup by software |
| | Digital I/O | 8-bit programmable (Reserved) |
| Expansion | Mini PCIe1 | 1 x Full-size Mini PCIe, supports mSATA module and WWAN module |
| | Mini PCIe2 | 1 x Half-size Mini PCIe, supports WLAN module |
| Storage | HDD | 1 x SATA HDD Bay for 2.5" or 3.5" device with maximum height 26.1mm |
| | Solid State Disk | 1 x mSATA share with mini-PCIe slot |
| Software Support | Microsoft Windows | Windows 10, Windows 8 , Windows 7, WES8, WES7 |
| | Linux | Support (by project) |
| Power Requirements | Power Type | ATX mode |
| | Power Input Voltage | 12 V _{DC} , ± 10% |
| | Power Adapter | AC to DC, DC12V / 5A, 60W (Optional) |
| Power Consumption | Typical | 15.7 W |
| | Maximum | 24.7 W |
| Mechanical | Construction | Aluminum housing |
| | Mounting | Wall mounting kit (optional), VESA mounting kit (optional) |
| | Dimensions (W x H x D) | 200 x 64 x 200 mm |
| | Weight | 2.0 kg |
| Environment | Operating Temperature | With extended temperature peripherals/SSD: 0 ~ 50° C (32 ~ 122° F) with 0.7 m/s air flow With 3.5-inch hard disk 0 ~ 40° C (32 ~ 104° F) with 0.7 m/s air flow; With 2.5-inch hard disk 0 ~ 45° C (32 ~ 112° F) with 0.7 m/s air flow |
| | Storage temperature | -40 ~ 85° C (-40 ~ 185° F) |
| | Relative Humidity | 95% @ 40° C (non-condensing) |
| | Vibration During Operation | With HDD: 0.5 Grms, IEC 60068-2-64, random, 5~500Hz, 3 axes, 1hr/axis |
| | Shock During Operation | With HDD: 10 G, IEC 60068-2-27, half sine, 11 ms duration |
| | EMC | CE/FCC Class A, CCC, BSMI |
| | Safety | CB, UL, CCC, BSMI |

Dimensions

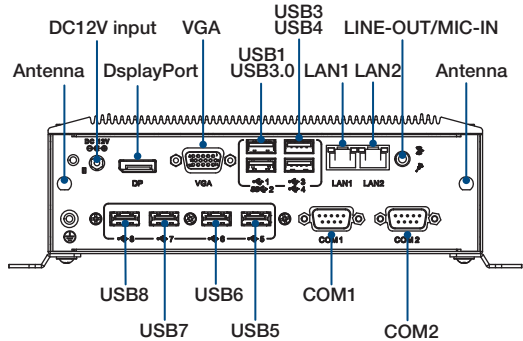
Unit: mm



Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Ordering Information

| Part No. | CPU | DDR3 | VGA | DP | RS-232/422/485 | RS-232 | USB 3.0 | USB 2.0 | MiniPCIe* | HDD Bay | GPIO** | DC input |
|----------------|----------------------------|------------|-----|----|----------------|--------|---------|---------|-----------|------------------|--------|----------|
| ARK-6322-Q0A2E | Intel Celeron J1900 2.0GHz | Up to 8 GB | 1 | 1 | 1 | 5 | 1 | 7 | 2 | 1 x 3.5" or 2.5" | 1 | 12V |

*Full-size Mini PCIe co-lay with mSATA.
 ** Reserved 8-bits DIO
 Note: Memory, storage and operating system bundled by request.

Packing List

| Part Number | Description |
|----------------|-------------------------------------|
| 1960065854N001 | 1x bracket for idoor module |
| - | 1x Power bracket |
| 2006632201 | 1x User Manual (Simplified Chinese) |
| 202KAKMC00 | 1x China RoHS for ARK-6322 |
| 2190000902 | 1x CARDBOARD-WARRANTY REV. A2 |

Embedded OS

| Part Number | Description |
|----------------|--|
| 2070013367 | WE8S V6.5.2 EN/SC/TC/JP |
| 2070013550 | WES7E V5.6.8 EN/SC/TC/JP |
| 20706WX9ES0058 | Win 10 IoT Ent 64bit 1809 LTSC EN (OS Size: around 12.4GB) |

Note: Default BIOS is for 64bit OS support only. For 32bit OS, please update BIOS. (P/N:1420036912)

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 |
| 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-V008E | VESA mounting kit |
| AMK-W002E | Wall mounting kit |
| 1700024047-01 | F Cable 2*5P-2.0/D-SUB 9P(F) 15CM, GPIO cable |
| MOS-2230-Z1201E | CANBus module, 2-Ch, USB I/F. |
| MOS-2220-X1101E | Parallel LPT module, 1-Ch, USB I/F. |
| MOS-2220-Z1101E | High Speed Serial COM module, 1-Ch, USB I/F. |
| MOS-2120-Z1101E | Giga LAN Ethernet module, 1-Ch, PCIe I/F. |
| MOS-2120-Z1201 | Dual Intel I210 GbE LAN iDoor, 2-Ch, PCIe I/F |
| MOS-2110Z-1201E | USB module, 2-Ch, PCIe I/F |
| MOS-1120Y-Q202E | Isolated RS-232, 2-Ch, DB9, PCIe I/F |
| MOS-1121Y-Q202E | Isolated RS-422/485, 2-Ch, DB9, PCIe I/F |
| MOS-1120Y-1402E | Non-Isolated RS-232, DB37, 4-Ch, PCIe I/F |
| MOS-1121Y-1402E | Non-Isolated RS-422/485, DB37, 4-Ch, PCIe I/F |
| MOS-1130Y-Q201E | Isolated CANBus, 2-Ch, DB9, PCIe I/F |
| MOS-1110Y-0101E | Isolated 16 DI/8 DO, 1-Ch, DB37, PCIe I/F |