ARK-10 A3

Intel® Celeron Quad Core J1900 Quad Core SoC with Dual GbE and Dual COM Fanless Box PC

Features

- Intel® Celeron J1900 Quad Core 2.0 GHz SoC
- 2G DDR3L Memory & 500G 2.5" 24x7 SATA HDD Built In
- 2 x GbE for Multiple Internet Transmission
- 2 x RS-232/422/485 (BIOS selection)
- 1 x Full-Size MiniPCIe (ex. WLAN or WWAN module) #1
- Optional VESA / DIN Rail / Wall Mounting kits
- Threaded DC jack design
- Supports WISE-PaaS DeviceOn and Embedded Software APIs

Specifications

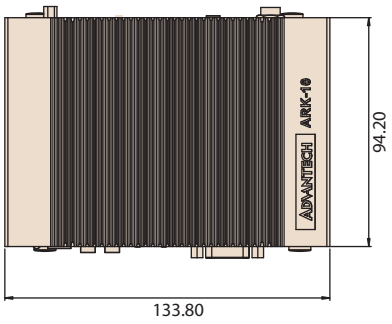
		ARK-10-U0A3
Processor System	CPU	Intel® Celeron Processor J1900 Quad Core SoC
	Frequency	2.0 GHz (Up to 2.41 GHz w/ burst frequency enabled)
	L2 Cache	2 MB
	BIOS	AMI EFI 64 Mbit (Default BIOS is supported for 64-bit OS installation, BIOS for 32-bit OS is supported by project)
Memory	Technology	DDR3L 1333 MHz
	Socket	1 x 204-pin SO-DIMM, 2 GB Memory Built In
Graphics	Chipset	Intel® Atom SoC integrated
	Graphic Engine	DirectX* 11.1, OGL 3.0, OCL 1.1, OGL ES 2.0 Encode: H264, MPEG2/4, VC1, WMV9 Decode: H264, MPEG2
	VGA	1 x VGA, support up to 1920 x 1200 at 60Hz
Audio	Main System	ALC-888S, High Definition Audio. Line-out & Line-in
Ethernet	LAN #1	10/100/1000 Mbps Intel I210 GbE, support Wake on LAN
	LAN #2	10/100/1000 Mbps Intel I210 GbE, support Wake on LAN
I/O Interface	Serial Ports	2 x RS-232/422/485 (BIOS selectable)
	USB Interface	2 x USB 2.0 & 1 x USB3.0
Other	Watchdog timer	255-level timer interval, setup by software
Expansion	Mini PCIe	1 x Full-size Mini PCIe, support WLAN or WWAN module #1
Storage	2.5" Drive Bay	1 x 500GB 2.5" 24x7 SATA HDD Built In
	mSATA	1x half-size mSATA (Suggest to assembly by CTOS or T-Part due to complex installation)
Software Support	Microsoft Windows	WES7, Windows 7, WE8S, Windows 8 (32-bit support by project)
	Linux	Support (by Project)
Power Requirement	Power Input Voltage	Single 12 V_{DC}
	Power Adapter	AC to DC, DC12 V/3 A, 36 W with threaded design
Mechanical	Construction	Aluminum housing
	Mounting	VESA/DIN Rail/Wall Mounting Kits (Optional)
	Dimensions (W x H x D)	133.8 x 43.1 x 94.2 mm (5.27" x 1.7" x 3.71")
Environment	Operating Temperature	0 ~ 50° C with 0.7m/s air flow
	Storage Temperature	-40 ~ 85 °C (-40~185 °F)
	Relative Humidity	95% @ 40 °C (non-condensing)
	Vibration During Operation	0.5Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis
	Shock During Operation	10G, IEC 60068-2-27, half sine, 11 ms duration
Regulation	EMC	CE/FCC Class A, CCC, BSMI
	Safety	UL, CCC, BSMI, CB

#1 Mini PCIe is hardware interface for wireless communication integration only. System level RF certification is not available.

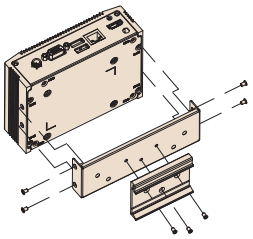
Alex Wang 15323776600

Dimensions

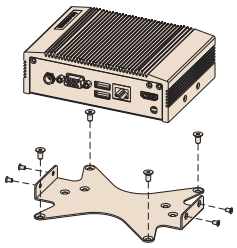
Unit: mm



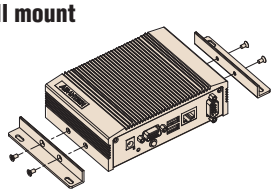
DIN Rail



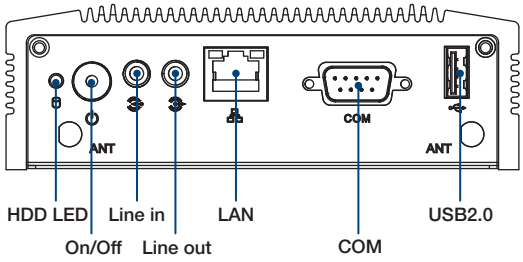
VESA mount



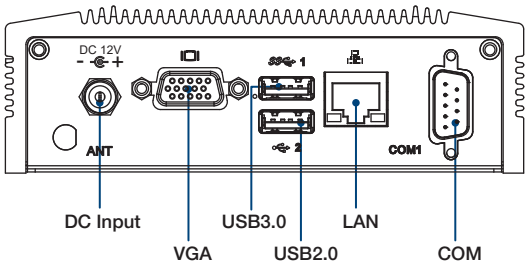
Wall mount



Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Ordering Information

Part Number	CPU	RAM	VGA	GbE	USB 2.0	USB 3.0	RS-232/ 422/485	Audio	MiniPCIe	2.5" HDD bay	mSATA	Operating Temperature
ARK-10-U0A3	Intel Atom J1900 QC	2GB Built In	1	2	2	1	2	Line in Line out	1 Full-size	1 x 500G 2.5" 24x7 HDD Built In	1 (H/S)	0 ~ 50 °C

Packing List

Part Number	Description
-	1 x ARK-10 Unit
-	1 x User Manual (Simplified Chinese)
96PSA-A36W12W7-5	1 x AC to DC adapter DC 12V/3A 36W

Embedded OS (Only available for T-Parts OEM, and CTOS service)

Part Number	Description
2070013062	WES7E 64-bit with EN/JP/TC/SC (OS size around 11G)
2070013368	WE8S 64-bit with EN/JP/TC/SC (OS size around 13G)

* Default BIOS is supported for 64-bit OS installation, BIOS for 32-bit OS is supported by project.

Optional Items

Part Number	Description
1700001524	Power Cable 3-pin 180cm, USA type
170203183C	Power Cable 3-pin 180cm, Europe type
170203180A	Power Cable 3-pin 180cm, UK type
1700008921	Power Cable 3-pin PSE Mark 183cm
AMK-V003E	ARK-112X series VESA mounting kit
AMK-R001E	ARK-112X series DIN-rail mounting kit
AMK-W001E	ARK-112X series Wall mounting kit