

ARK-1123H

Intel® Celeron Quad Core J1900 SoC with Dual HDMI/GbE IoT Fanless BOX PC



WISE-PaaS/RMM



Features

- Intel® Celeron J1900 Quad Core 2.0 GHz SoC
- 1 x 2.5" SATA HDD/SSD Bay
- 2 x GbE for Multiple Internet Transmission
- 2 x Independent HDMI
- 1 x RS-232/422/485 (BIOS selection)
- 1 x Full-Size MiniPCle (ex. WLAN or WWAN module)
- 1 x Half Size mSATA
- Optional VESA / DIN Rail / Wall Mounting kits
- Threaded DC jack design
- Supports SUSIAccess and Embedded Software APIs
- Support WIFI 802.11 a/b/g/n bundled for IoT Gateway

Specifications

ARK-1123H-U0A2E		
Processor System	CPU	Intel® Celeron™ Processor J1900 Quad Core 2.0 GHz 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 1333MHz
	Max. Capacity	8 GB
	Socket	1 x 204-pin SO-DIMM
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
	HDMI	2 x Lockable HDMI connector, support up to 1920 x 1080 at 60Hz (2nd HDMI w/o audio function by Intel limitation)
	Audio	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	1 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 PCle	1 x Full-size Mini PCle, support WLAN or WWAN module
Storage	2.5" Drive Bay	1 x 2.5" SATA HDD Bay (Max Height 9.5mm)
	mSATA	1 x Half-size mPCle (Suggest to assembly by CTOS or T-Part due to complex installation)
Software Support	Microsoft Windows	WES7, Windows 7, WE8S, Windows 8 and Windows 10
	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
Power Consumption	Typical	5.64W
	Max.	14.04W
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")
	Weight	0.8kg
Environment	Operating Temperature	With extended temperature SSD/mSATA/RAM : -20 ~ 60° C with 0.7m/s air flow With standard temperature HDD/SSD/mSATA/RAM peripherals: 0 ~ 40° 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	With mSATA/SSD: 3 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis With HDD: 0.5Grms, IEC 60068-2-64, random, 5~500Hz, 3 axes, 1hr/axis
	Shock During Operation	With mSATA/SSD: 30 G, IEC 60068-2-27, half sine, 11 ms duration With HDD: 10G, IEC 60068-2-27, half sine, 11 ms duration
Regulation	EMC	CE/FCC Class B, CCC, BSMI
	Safety	UL, CCC, BSMI, CB

Technical drawing of a DIN Rail Mounting Bracket showing dimensions in mm. The drawing includes a side view and a top view. Key dimensions are: overall width 100, mounting hole spacing 75, bracket height 47.3, and mounting hole diameter Ø4.50 (4X).

an mount

164.40
152.40
73.90
93.90

Detail A
Scale 2:1

The diagram shows the rear panel of the Raspberry Pi 4 Model B with the following labels and connections:

- HDD LED**: Points to the first LED indicator on the left.
- On/Off**: Points to the second LED indicator.
- Line in**: Points to the first of four 3.5mm audio jacks.
- Line out**: Points to the second of four 3.5mm audio jacks.
- LAN**: Points to the Ethernet port.
- COM**: Points to the 25-pin D-sub serial port.
- COM**: Points to the 4-pin mini-USB port.
- USB2.0**: Points to the USB Type-A port.
- ANT**: Points to the antenna connector on the far right.

The diagram shows the rear panel of the Raspberry Pi 4 Model B with the following ports and labels:

- DC Input:** A DC 12V power jack with a polarity symbol (positive center pin).
- ANT:** An antenna connector.
- HDMI:** An HDMI port.
- USB3.0:** Two USB 3.0 Type-A ports.
- USB2.0:** Two USB 2.0 Type-A ports.
- LAN:** An Ethernet port.
- ANT:** Another antenna connector.
- HDMI:** A second HDMI port.

Part Number	CPU	RAM	HDMI	GbE	USB 2.0	USB 3.0	RS-232/422/485	Audio	MiniPCle	2.5" HDD bay	mSATA	Operating Temperature
ARK-1123H-U0A2E	Intel Celeron J1900	Up to 8GB	2	2	2	1	1	Line in Line out	1 Full size	1	1 (H/S)	-20 ~ 60° C

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

Part Number	Description
-	1 x ARK-1123H Unit
-	1 x User Manual (Simplified Chinese)
96PSA-A36W12W7	1 x AC to DC adapter DC 12V/3A 36W -20 ~ 60° C

Part Number	Description
2070013033	WE57E 64-bit with EN/JP/TC/SC (OS size around 11G)
2070013371	WE8S 64-bit with EN/JP/TC/SC (OS size around 13G)
2070014792	WIN10 IoT LTSB_x64_Eng
2070014334	Win10 IoT Core_x32 V10.1.10586.0 EN
2070014369	IDP-WR3.1 x64 V1.0 1 EN

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
1700023855-01	1M lockable HDMI cable
1700023856-01	3M lockable HDMI cable
AMQ-WIFI08E	WiFi802.11a/b/g/n. Atheros AR9462 2T2R

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