

ARK-1122

Palm-size and Ultra Low Power Intel® Atom™ N2600/N2800 Fanless Embedded Box PC

Preliminary



Features

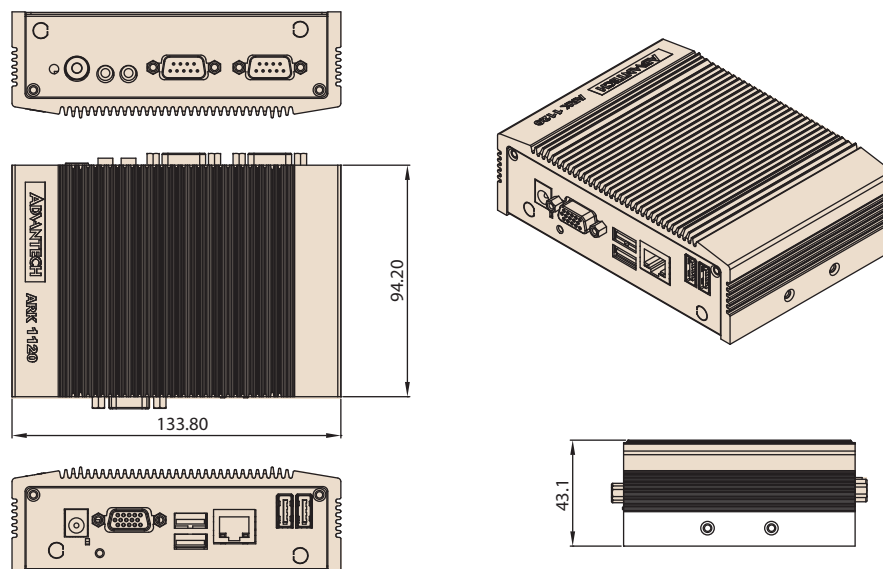
- Sealed construction with fanless design, supports up to Intel® Atom® N2800, 1.86 GHz
- Palm-size form factor: 133.8 x 94.2 x 43.1 mm
- Supports a variety display interfaces such as VGA or VGA + HDMI
- Supports up to 2 x GbE LAN and 4 USB 2.0 ports
- Supports up to 2x RS-232, 2x RS-232/422/485 with auto-flow control
- Built-in 1 x Mini PCIe slot for communication module, like WLAN or WWAN (F SKU)
- Supports mSATA and 2.5" SATA drive bay (H SKU)
- Wide operating temperature support
- Supports SUSIAccess and embedded software APIs

Specifications

		ARK-1122H-S6A1E	ARK-1122C-S6A1E	ARK-1122F-S8A1E
Processor System	CPU	Intel Atom DC N2600 1.6 GHz	Intel Atom DC N2600 1.6 GHz	Intel Atom DC N2800 1.8 GHz
	System Chipset	Intel NM10		
	BIOS	AMI EFI 16 Mbit		
Memory	Technology	DDR3 800 MHz (N2600), DDR3 1066 MHz (N2800), up to 4 GB		
	Socket	1 x 204-pin SO-DIMM		
Graphics	Chipset	Intel Atom N2600/ N2800		
	Interface	VGA + HDMI (1920 x 1200)	VGA (1920 x 1200)	VGA + HDMI (1920 x 1200)
Ethernet	LAN	1 x GbE Intel 82583V LAN	1 x GbE Intel 82583V LAN	2 x GbE Intel 82583V LAN
Audio	Chipset	Realtek ALC892, High Definition Audio (HD)		
	Interface	Line-in and Line-out	-	Line-in and Line-out
I/O Interface	Serial Ports	1 x RS-232	2 x RS-232, 2 x RS-232/422/485, support Auto-flow control	1 x RS-232
	USB Interface	4 x USB ports, USB2.0 Compliant	4 x USB ports, USB2.0 Compliant	3 x USB ports, USB2.0 Compliant
Other	Watchdog timer	255-level timer interval, setup by software		
Expansion	Mini PCIe	1 x half-size Mini PCIe	1 x half-size Mini PCIe	1 x half-size Mini PCIe 1 x full-size Mini PCIe w/SIM Holder
	2.5" HDD/SSD	1 x SATA II drive bay	-	-
Storage	mSATA	1 x full-size Mini PCIe slot	1 x full-size Mini PCIe slot	1 x full-size Mini PCIe slot
Software Support	Microsoft Windows	Windows 7 Pro, WES7, XP Embedded		
Power Requirement	Power Type	Single 12 V _{DC} power input (Supports DC power hot plug)		
	Power Input Voltage	Supports single 12 V input, ± 10%		
	Power Adaptor	AC to DC, DC12 V/3 A, 36 W		
Mechanical	Construction	Aluminum housing		
	Mounting	Desk/Wall-mounting; VESA mounting		
	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	With standard temperature HDD/SSD/mSATA devices: 0 ~ 40° C With extended temperature SSD/mSATA devices: -20 ~ 60° C		
	Storage Temperature	-40 ~ 85° C (-40 ~ 185° F)		
	Relative Humidity	95% @ 40° C (non-condensing)		
	Vibration During Operation	With mSATA: 3Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1hr/axis		
	Shock During Operation	With mSATA: 30Grms, IEC 60068-2-27, half sine, 11ms duration		

Dimensions

Unit: mm (inch)



Ordering Information

Part No.	CPU	Memory (SO-DIMM)	VGA	HDMI	Audio	GbE LAN	2.5" SATAII	mSATA	USB2.0	RS-232	RS-232/422/485	Mini PCIe	Operating Temperature*
ARK-1122H-S6A1E	Intel Atom N2600 1.6 GHz	1	1	1	Line-in Line-out	1	1	1	4	1	-	1 Half size	-20 ~ 60° C
ARK-1122C-S6A1E	Intel Atom N2600 1.6 GHz	1	1	-	-	1	-	1	4	2	2	1 Half size	-20 ~ 60° C
ARK-1122F-S8A1E	Intel Atom N2800 1.86 GHz	1	1	1	Line-in Line-out	2	-	1	3	1	-	1 Half size and 1 Full size**	-20 ~ 60° C

*Operating temperature: -20 ~ 60° C w/extended temperature SSD or mSATA devices; 0 ~ 40° C w/standard temperature HDD, SSD or mSATA devices.

**Full Size Mini PCIe slot with external SIM holder, which supports WLAN or WWAN communication devices.

Packing List

Part Number	Description
-	1 x ARK-1122 unit
-	1 x Driver/Utility CD/Manual
-	1 x Traditional Chinese user manual for CCC
-	1 x China RoHS
1757004096-01	1 x AC to DC adapter DC12 V/3 A 36 W, 0 ~ 40° C for Home and Office use

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

Part Number	Description
2070011879	WES7 for ARK-1122H & ARK-1122F
2070011881	WES7 for ARK-1122C
2070011882	WES2009 for ARK-1122H & ARK-1122F
2070011880	WES2009 for ARK-1122C

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
1960052227N001	ARK-1120 VESA/Desk mount bracket
9666112000E	DIN Rail mounting kits for ARK-112X series