ARK-1123L

Intel® Atom E3825 SoC with Dual COM and GPIO Palm-Size Fanless Box PC

Windows Embedded SUSIAccess CE FCC RoHS

Features

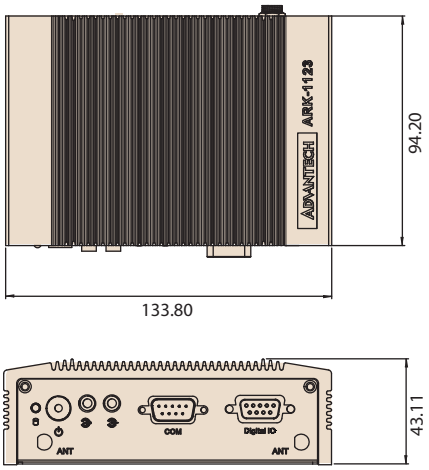
- Intel® Atom™ Processor E3825 Dual Core 1.33 GHz SoC
- 1 x 2.5" SATA HDD/SSD Bay
- 1 x GbE & 1 x VGA & 1 x GPIO
- 1 x RS-232 & 1 x RS-232/422/485
- 1 x Full-Size MiniPCIe (ex. WLAN or WWAN module)
- 1 x Half Size MiniPCIe (ex. mSATA)
- Optional VESA / DIN Rail / Wall Mounting kits
- Threaded DC jack design
- Supports SUSIAccess and Embedded Software APIs

Specifications

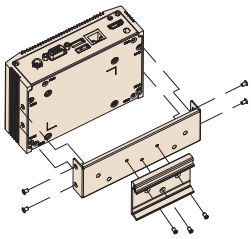
		ARK-1123L-S3A1E
Processor System	CPU	Intel Atom E3825 Dual Core SoC
	Frequency	1.33 GHz
	L2 Cache	1 MB
	BIOS	AMI EFI 64 Mbit (Default BIOS is supported for 64-bit OS installation, BIOS for 32-bit OS is supported by project)
Memory	Technology	DDR3L 1066MHz
	Max. Capacity	8 GB
	Socket	1 x 204-pin SO-DIMM
Graphics	Chipset	Intel® Atom SoC integrated
	Graphic Engine	DirectX* 11.1, OGL 3.0, OCL 1.1, OGL ES 2.0 support 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
I/O Interface	Serial Ports	1 x RS-232 & 1 x RS-232/422/485 (BIOS selectable)
	USB Interface	1 x USB 2.0 & 1 x USB3.0
Other	Watchdog timer	255-level timer interval, setup by software
	GPIO	8 bit GPIO
Expansion	Mini PCIe #1	1 x Full-size Mini PCIe, support WLAN or WWAN module
	Mini PCIe #2	1 x Half-size Mini PCIe, support mSATA module
Storage	2.5" Drive Bay	1 x 2.5" SATA HDD Bay (Max Height 9.5mm)
	mSATA	Leverage MiniPCIe #2 slot
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	With extended temperature SSD/mSATA/RAM : -30 ~ 70° 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 A, CCC, BSMI
	Safety	UL, CCC, BSMI, CB

Dimensions

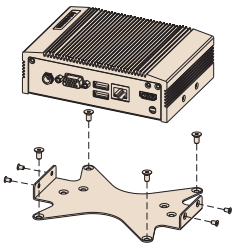
Unit: mm



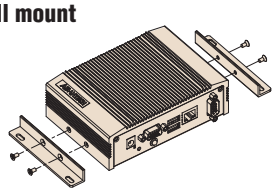
DIN Rail



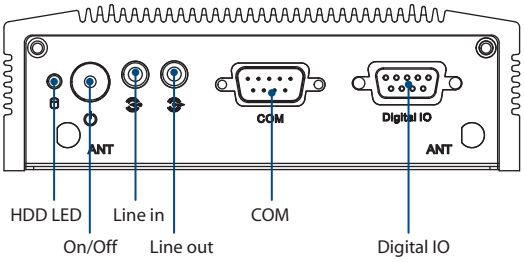
VESA mount



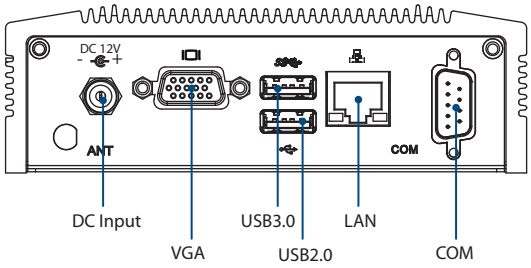
Wall mount



Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Ordering Information

Part Number	Intel CPU	RAM	VGA	GbE	USB 2.0	USB 3.0	RS-232	RS-232/ 422/485	GPIO	Audio	MiniPCIe	2.5" HDD bay	mSATA	Operating Temperature
ARK-1123L-S3A1E	Intel Atom E3825	Up to 8GB	1	1	1	1	1	1	1	Line in Line out	1 Half size 1 Full size	1	1 Half	-30 ~ 70° C

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

Packing List

Part Number	Description
-	1 x ARK-1123L Unit
-	1 x User Manual (Simplified Chinese)
1757004096-01	1 x AC to DC adapter DC12 V/3 A 36 W, 0 ~ 40° C with threaded design

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

Part Number	Description
2070013031	WES7E 64-bit with EN/JP/TC/SC (OS size around 11G)
2070013369	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 (For power adapter 1757004096-01)
170203183C	Power Cable 3-pin 180cm, Europe type (For power adapter 1757004096-01)
170203180A	Power Cable 3-pin 180cm, UK type (For power adapter 1757004096-01)
1700008921	Power Cable 3-pin PSE Mark 183cm (For power adapter 1757004096-01)
1757004522-01	AC-to-DC Wide Temperature Adapter, DC 12V/3.33A 40W, -20° C ~ 70° C
1702002600-01	Power cable 3-pin 183 cm, USA type (For power adapter 1757004522-01)
1700018705	Power cable 3-pin 183 cm, Europe type (For power adapter 1757004522-01)
1700018704	Power cable 3-pin 183 cm, UK type (For power adapter 1757004522-01)
1700000237-01	Power cable 3-pin 183 cm, PSE type (For power adapter 1757004522-01)
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