ESIS Industrial Electronics
www.esis.com.au
Ph 02 9481 7420
Fax 02 9481 7267
esis.enq@esis.com.au

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 MiniPCIe
- 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
	Dual Display	VGA+DP
Ethernet	LAN1	10/100/1000 Mbps Realtek 8111E GbE
	LAN2	10/100/1000 Mbps Realtek 8111E GbE
Audio	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 Votage	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

All product specifications are subject to change without notice.
Last updated: 14-Jul-2017

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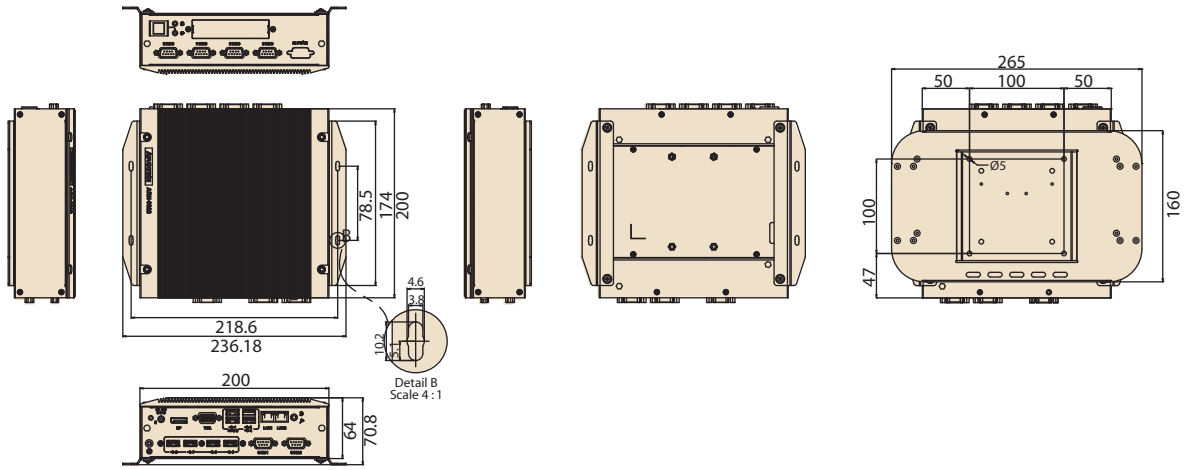
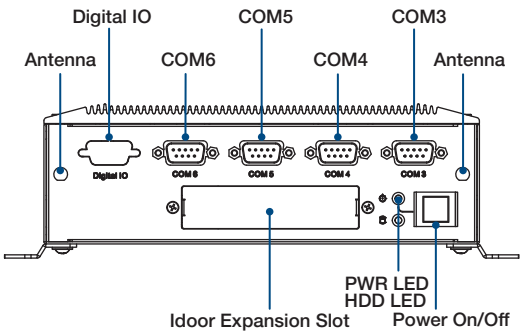
Dimensions

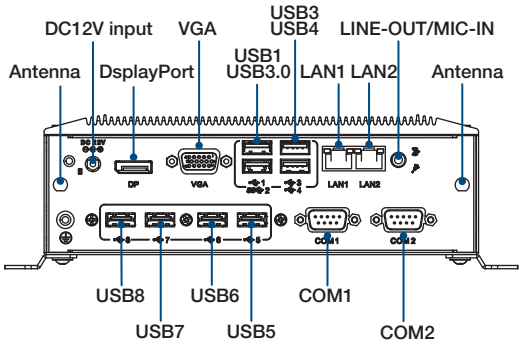
Unit: mm



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-Q0A1E	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)
2026632200	1x China RoHS for ARK-6322 Electronic Pollution 1st
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
2070014897	Win 10 IoT Ent (Value) 64bit Eng

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-1120Y-0201E	Isolated RS-232, 2-Ch, DB9, PCIe I/F
MOS-1121Y-0201E	Isolated RS-422/485, 2-Ch, DB9, PCIe I/F
MOS-1120Y-1401E	Non-Isolated RS-232, DB37, 4-Ch, PCIe I/F
MOS-1121Y-1401E	Non-Isolated RS-422/485, DB37, 4-Ch, PCIe I/F
MOS-1130Y-0201E	Isolated CANBus, 2-Ch, DB9, PCIe I/F
MOS-1110Y-0101E	Isolated 16 DI/8 DO, 1-Ch, DB37, PCIe I/F