

ARK-3405

Intel® Celeron™ N3160 Fanless Embedded Box PC with Rich Expansion and Dual Removable 2.5" HDD Drive Bays

NEW



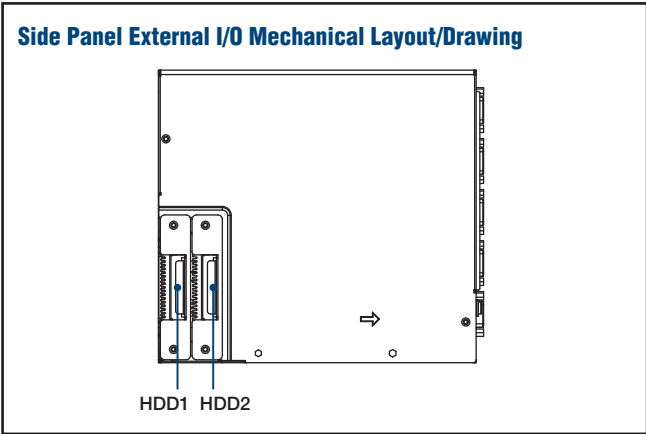
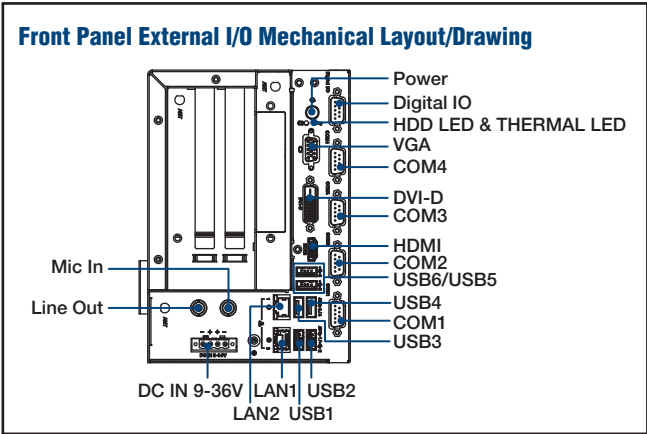
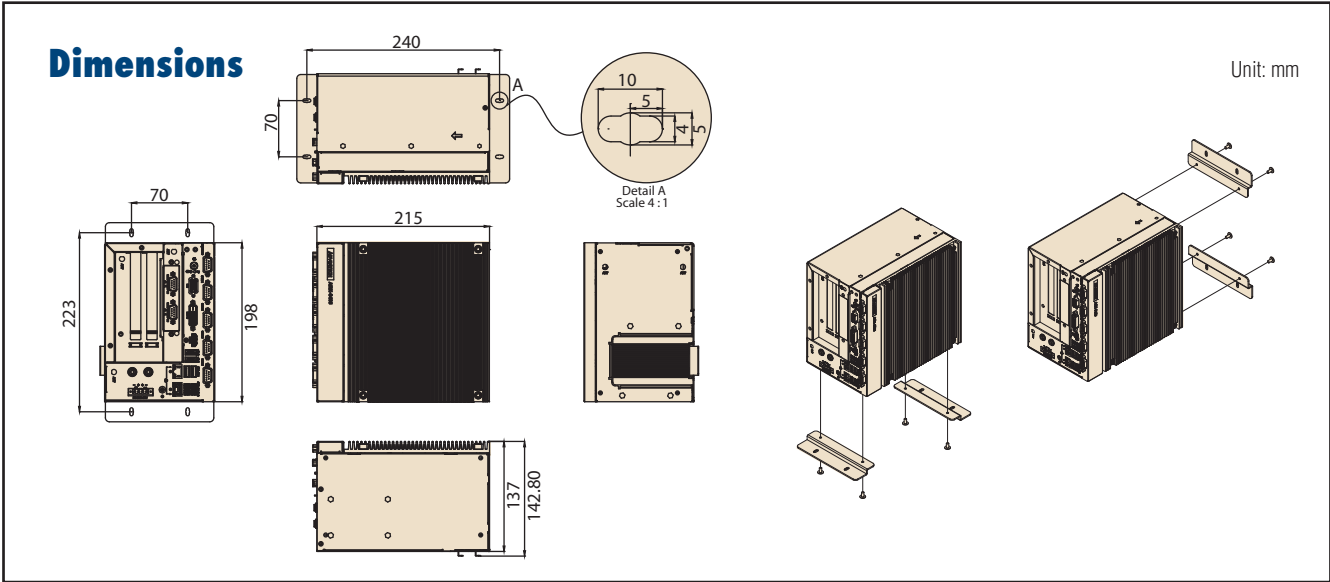
Features

- Intel® Celeron™ N3160 Quad Core 2.24GHz SoC with Turbo boost Support
- Supports VGA /DVI-D/HDMI triple independent display
- Support 2 GbE, 3 USB 3.0, 3 USB 2.0, 1 DIO, audio and 4 COM ports
- Two removable 2.5" SATA HDD drive bays
- Flexible Expansion via PCI/PCIe x1
- Support 2 Mini PCIe with 1 SIM holder for communication module
- Wide range power input 9-36V
- Advantech iDoor module compatible



Specifications

Processor System	CPU	Intel Celeron N3160 processor
	Max. speed	1.6GHz, Turbo boost up to 2.24GHz
	BIOS	AMI EFI 64 Mbit BIOS
Memory	Technology	DDR3L 1600MHz
	Max. Capacity	8 GB
	Socket	1 x 204-pin SO-DIMM
Graphics	Chipset	Intel HD 8 Gen Integrated Graphic Engine
	Interface	VGA: Up to 1920 x 1200 @ 60Hz DVI-D: 1920 x 1200 @ 60Hz HDMI: 2560 x 1600 @ 60Hz; 3840 x 2160 @ 30Hz
	Triple Display	VGA + DVI-D + HDMI
Ethernet	LAN 1	10/100/1000 Mbps Intel i210 Ethernet controller, support Wake on LAN
	LAN 2	10/100/1000 Mbps Intel i210 Ethernet controller, support Wake on LAN
Audio	Interface	Realtek ALC892: Mic-in and Line-Out
IO interface	Serial Interface	2 x RS-232, 2 x RS-232/422/485 w/ auto flow control (Default) ; COM 4 support 5V/12V power supply (by jumper) Additional 2 x RS-232 ports support by cable and bracket (Optional by project support)
	USB Interface	3 x USB 2.0 + 3 x USB 3.0, 1 x internal USB2.0
	Digital I/O	8-bit digital IO
	P/S2	1 x PS/2 port support by cable and bracket (Optional by project support)
Other	Watchdog Timer	255-level timer interval, setup by software
	TPM	TPM 2.0 (Optional by project support)
Expansion	Add-on Card Slot	2 Slots PCI (default) 1 Slot PCI and 1 Slot PCIe x1 (Optional: AMO-R020E); 2 Slots PCIe x1 (Optional: AMO-R019E); Maximum card size of 180mm (L) x 110mm (H) Maximum power consumption 10w for each slot
	Mini PCIe	2 x Full-size Mini PCIe (1 Mini PCIe with SIM holder)
Storage	HDD/SSD	Two 2.5" SATA removable HDD Bays with maximum device height 9.5mm
	SD	1 internal SD Card slot support
Software Support	Microsoft Windows	Windows 10, Windows 8.1, Windows 7, WES8.1 , WES7
	Linux	Support by project
Power Requirement	Power Type	AT/ATX
	Power Input Voltage	9 V _{DC} ~ 36 V _{DC}
	Power Adapter	AC to DC, DC12V/7A, 84W (Optional)
Power Consumption	Typical	9.7W
	Max.	22.8W
Mechanical	Construction	Aluminum housing
	Mounting	Desk/wall-mounting
	Dimensions (W x H x D)	142.8 x 198 x 215 mm (5.63" x 7.79" x 8.46")
	Weight	3.16 kg (6.97 lb)
Environment	Operating Temperature	With extended temperature peripherals: -10 ~ 55 °C (-14 ~ 131 °F) with 0.7m/s air flow With 2.5-inch hard disk 0 ~ 40 °C (32 ~ 104 °F) with 0.7m/s air flow
	Storage Temperature	-40 ~ 85° C (-40 ~ 185°F)
	Relative Humidity	95% @ 40° C (non-condensing)
	Vibration Loading During Operation	With SSD: 3 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis
	Shock During Operation	With SSD: 30 G, IEC 60068-2-27, half sine, 11 ms duration
	EMC	CE/FCC Class A, CCC, BSMI
Safety Certifications	CB, UL, CCC, BSMI	



Ordering Information

Part No.	CPU	DDR3L	VGA	DVI-D	HDMI	RS-232	RS-232/422/485	DIO	USB 3.0	USB 2.0	MiniPCIe	SIM	Expansion	iDoor
ARK-3405R-S6A1E	N3160	up to 8GB	1	1	1	2	2	8-bit	3	3	2	1	2 x PCI	1

Packing List

Part Number	Description
-	1 x China RoHS for ARK-3405
-	1 x User Manual (Simplified Chinese)
2190000902	1 x CARDBOARD-WARRANTY
1652003234	1 x 4-pin PLUG-IN BLOCK
1990021361N000	2 x HDD Thermal-Pad
1960069484N000	2 x LAN Clip Bracket
1960073853N001	2 x Mounting Bracket
1990027474N000	1 x CPU Thermal-Pad
9680015173	1 x L type Wrench for top cover

Option Item Information

Part Number	Description
AMO-R019E	2x PCIe1 riser card
AMO-R020E	1x PCI + 1x PCIe1 riser card
96PSA-A84W12P4	AC to DC Adaptor, DC12V/7A, 84W, 0 - 40° C
1702002600	Power Cord, 3-Pin 183cm, USA type
1702002605	Power Cord, 3-Pin 183cm, EU type
1702031801	Power Cord, 3-Pin 183cm, UK type
1700000237	Power Cord, 3-Pin 183cm, PSE type

Embedded OS

Part Number	Description
2070014220	WES7E 64bit ENG/CHT/CHS/JPN
TBC	WES8.1E 64bit ENG/CHT/CHS/JPN

Optional MOS modules for iDoor Expansion

Part Number	Description
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, 4-Ch, DB9, PCIe I/F
MOS-1121Y-1401E	Non-Isolated RS-422/485, 4-Ch, DB9, PCIe I/F
MOS-2120-Z1101E	Giga LAN Ethernet module, 1-Ch, PCIe I/F
MOS-2220-Z1101E	High Speed Serial COM module, 1-Ch, USB I/F
MOS-2220-X1101E	Parallel LPT module, 1-Ch, USB I/F
MOS-2230-Z1201E	CANBus module, 2-Ch, USB 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
MOS-2110Z-1201E	USB module, 2-Ch, PCIe I/F