

# EC700-AL

Atom

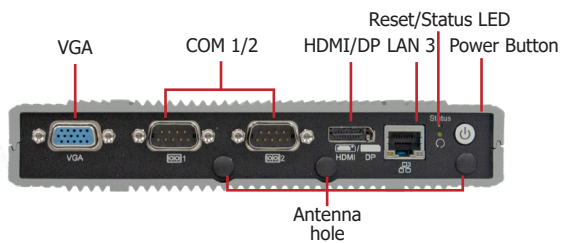


## Features

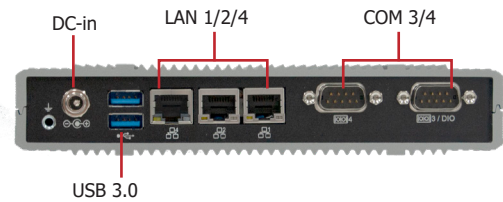
- Compact and Fanless Embedded System
- DDR3L memory onboard + 1 SODIMM up to 8GB
- Displays: 1 DP/HDMI auto-detection + 1 DP or 1 VGA
- Supports 2 Mini PCIe and 1 M.2 slots
- Rich I/O ports: up to 4 Intel GbE, 4 COM, 4 USB
- Extended operating temperature: -40 to 70°C
- Windows 7/10/Linux supported
- Cableless use case capable



## Panel



Front View (4Lan+2USB)



Rear View (4Lan+2USB)



Front View (2Lan+4USB)



Rear View (2Lan+4USB)

## Dimensions

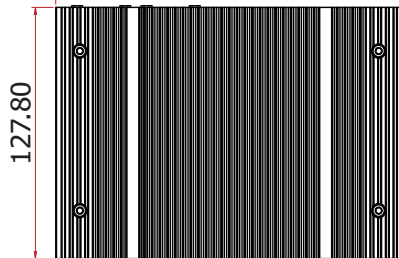


Rear View

180.00



Left View

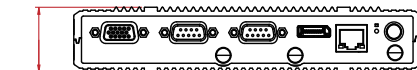


Top View

127.80



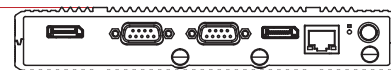
Right View



Front View  
(VGA+DP/HDMI Combo)

33.00

OR



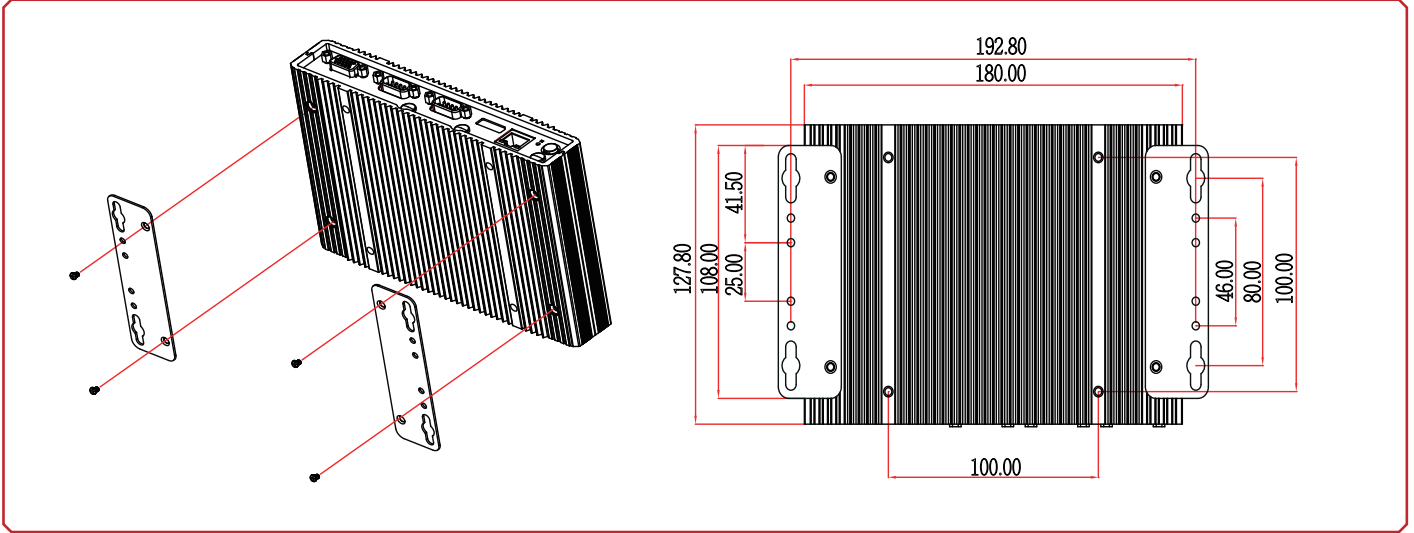
Front View  
(DP+DP/HDMI Combo)

33.00

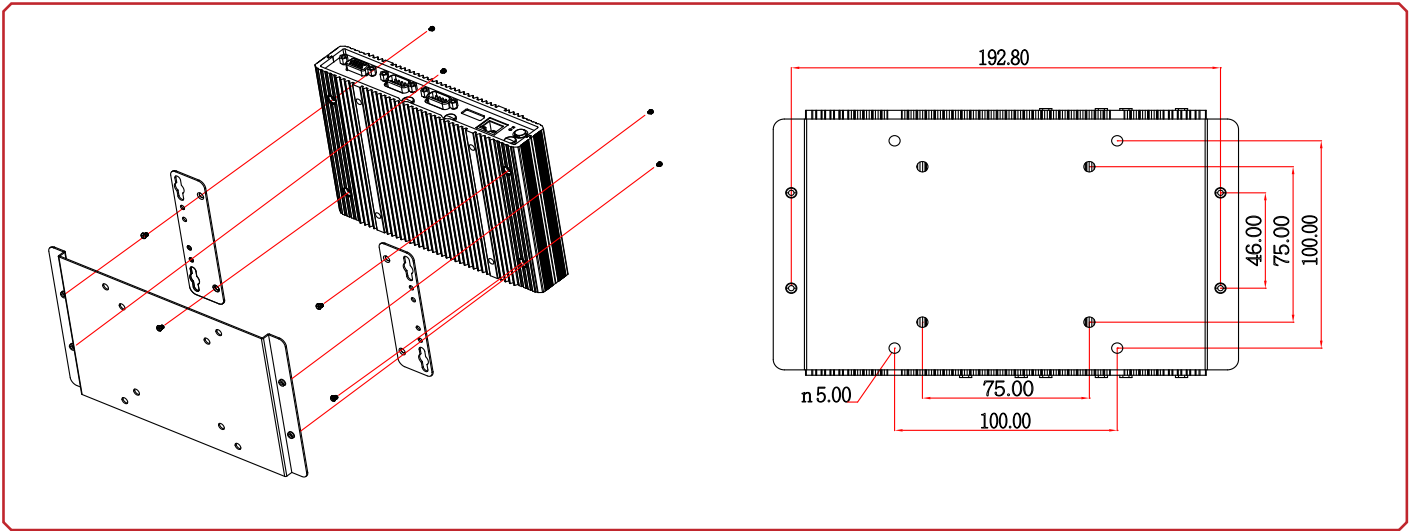
## ► Specifications

<b>SYSTEM</b>	<b>Processor</b>	Intel Atom® Processor E3900 Series, BGA 1296 Intel Atom® x7-E3950 Processor, Quad Core, 2M Cache, 1.6GHz (2.0GHz), 12W Intel Atom® x5-E3940 Processor, Quad Core, 2M Cache, 1.6GHz (1.8GHz), 9W Intel Atom® x5-E3930 Processor, Dual Core, 2M Cache, 1.3GHz (1.8GHz), 6W Intel® Pentium® Processor N4200, Quad Core, 2M Cache, 1.1GHz (2.5GHz), 6W Intel® Celeron® Processor N3350, Dual Core, 2M Cache, 1.1GHz (2.4GHz), 6W Intel® Celeron® Processor J3355, Dual Core, 2M Cache, 2.0GHz (2.5GHz), 10W Intel® Celeron® Processor J3455, Quad Core, 2M Cache, 1.5GHz (2.3GHz), 10W
	<b>Memory</b>	2GB/4GB/8GB Memory onboard One 204-pin SODIMM up to 8GB Total Memory up to 8GB
	<b>BIOS</b>	Insyde SPI 128Mbit (supports UEFI/Legacy mode)
	<b>GRAPHICS</b>	<b>Controller</b> Intel® HD Graphics
<b>GRAPHICS</b>	<b>Feature</b>	OpenGL 4.2, Direct X 11.1, OpenCL 1.2, OGL ES 3.0 HW Decode: H.264, MPEG2, VC1, VP8, H.265, MPEG4, MVC, VP9, WMV9, JPEG/MJPEG HW Encode: H.264, MPEG4, VP8, H.265, MVC
	<b>Display</b>	1 x DP/HDMI Auto-detection (DP support 4k/HDMI support 1080p) 1 x DP or 1 x VGA HDMI: resolution up to 3840x2160 @ 30Hz DP: resolution up to 4096x2160 @ 60Hz VGA: resolution up to 1920x1200 @ 60Hz
	<b>Dual Displays</b>	DP/HDMI + VGA or DP/HDMI + DP
	<b>STORAGE</b>	<b>Internal</b> Support EMMC up to 8G/16GB/32GB/64GB (optional) 1x 2.5" SATA bay (7mm SSD)
<b>EXPANSION</b>	<b>Interface</b> 1 x Full-size mSATA (SATA/LPC) 1 x Full-size Mini PCIe (USB2.0/reset/nano-SIM) 1 x M.2 (2230 E Key) (PCIe/USB2.0)	
<b>ETHERNET</b>	<b>Controller</b> 2 or 4 x Intel® I210 PCIe (10/100/1000Mbps)	
<b>LED</b>	<b>Indicators</b> 1 x Power LED 1 x Status LED	
<b>FRONT I/O</b>	<b>Ethernet</b>	1 x GbE (RJ-45) (configuration options)
	<b>Serial</b>	2 x RS-232/422/485 (DB-9) (8-bit DIO available upon request)
	<b>Display</b>	1 x DP/HDMI combo (auto-detection) 1 x DP or 1 x VGA (configuration options)
	<b>Buttons</b>	1 x Power button 1 x Reset button
	<b>Antenna Holes</b>	3 x Wi-Fi antenna holes
<b>REAR I/O</b>	<b>Ethernet</b>	2 or 3 x GbE (RJ-45) (configuration options)
	<b>Serial</b>	2 x RS-232/422/485 (DB-9)
	<b>USB</b>	2 or 4 x USB 3.0 (type A) (configuration options)
<b>WATCHDOG TIMER</b>	<b>Output &amp; Interval</b>	System Reset, Programmable via Software from 1 to 255 Seconds
<b>POWER</b>	<b>Type</b>	Wide range 9~36V
	<b>Connector</b>	DC Jack
<b>OS SUPPORT (UEFI ONLY)</b>	<b>Microsoft</b>	Windows 10 IoT (64-bit) Windows 7 (32/64-bit) Project support
	<b>Linux</b>	Linux
<b>MECHANISM</b>	<b>Construction</b>	Aluminum + Metal
	<b>Mounting</b>	Wall/VESA/DIN Rail Mount (available upon request)
	<b>Dimensions (W x H x D)</b>	180mm x 33mm x 127.8mm
	<b>Weight</b>	700g
<b>ENVIRONMENT</b>	<b>Operating Temperature</b>	-20 to 60°C -40 to 70°C
	<b>Storage Temperature</b>	-40 to 85°C
	<b>Relative Humidity</b>	5 to 95% RH (non-condensing)
	<b>STANDARDS AND CERTIFICATIONS</b>	<b>Certification</b> CE, FCC class A, RoHS, CCC, UL, KC

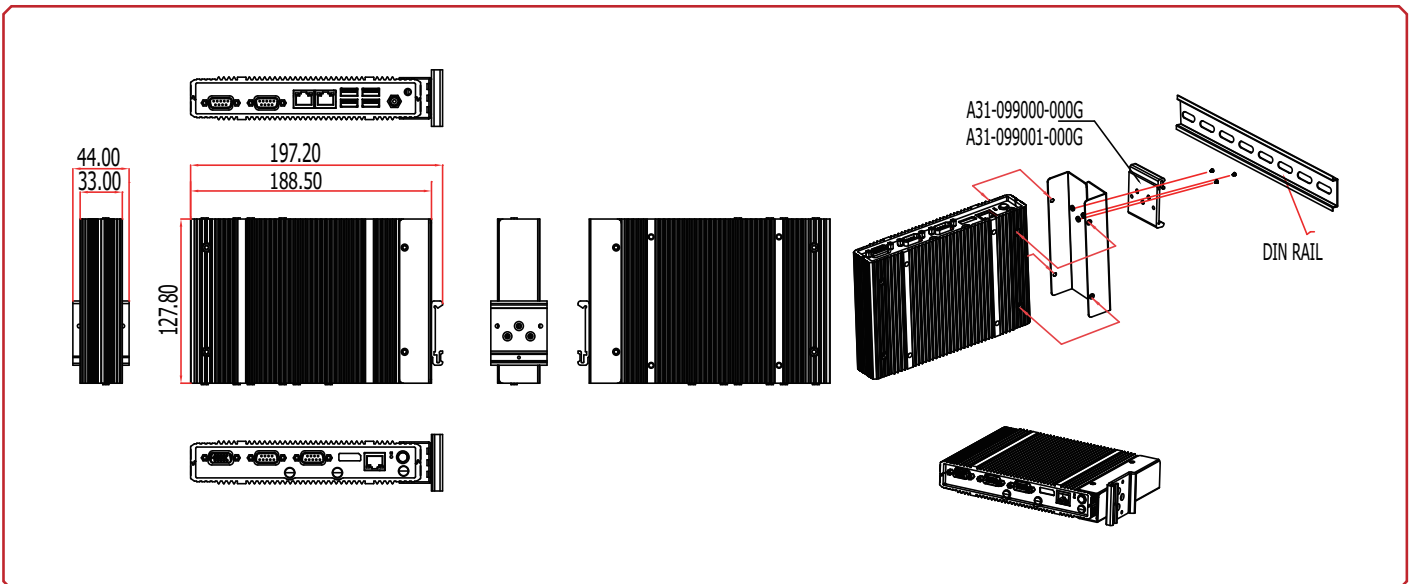
► Wall Mounting



► VESA Mounting



► DIN Rail Mounting



### ► Ordering Information

Model Name	Part Number	Description
EC700-AL	750-EC7003-000G	Fanless, E3950, DDR3L 4GB down, eMMC 64GB, 4LAN, 2USB3.0, DP/HDMI, VGA, -40 to +70C, F/G SYSTEM, ROHS
EC700-AL	750-EC7003-100G	Fanless, E3940, DDR3L 4GB down, eMMC 32GB, 4LAN, 2USB3.0, DP/HDMI, DP, F/G SYSTEM, ROHS
EC700-AL	750-EC7003-200G	Fanless, E3930, DDR3L 2GB down, eMMC 16GB, 2LAN, 4USB3.0, DP/HDMI, VGA, -40 to +70C, F/G SYSTEM, ROHS
EC700-AL	750-EC7003-300G	Fanless, E3930, DDR3L 2GB down, eMMC 8GB, 2LAN, 4USB3.0, DP/HDMI, VGA, F/G SYSTEM, ROHS
EC700-AL	750-EC7003-400G	Fanless, N4200, DDR3L 4GB down, eMMC 32GB, 2LAN, 4USB3.0, DP/HDMI, VGA, F/G SYSTEM, ROHS
EC700-AL	750-EC7003-500G	Fanless, N3350, DDR3L 2GB down, eMMC 8GB, 2LAN, 4USB3.0, DP/HDMI, VGA, F/G SYSTEM, ROHS
EC700-AL	750-EC7003-600G	Fanless, N4200, DDR3L 4GB down, eMMC 32GB, 4LAN, 2USB3.0, DP/HDMI, VGA, F/G SYSTEM, ROHS
EC700-AL	750-EC7003-700G	Fanless, E3950, 2 USB 3.0, 4 LAN, DP/HDMI, VGA, F/G SYSTEM, ROHS
EC700-AL	750-EC7003-800G	Fanless, E3950, 4 USB 3.0, 2 LAN, DP/HDMI, VGA, F/G SYSTEM, ROHS
EC700-AL	750-EC7003-900G	Fanless, E3940, 2 USB 3.0, 4 LAN, DP/HDMI, VGA, F/G SYSTEM, ROHS
EC700-AL	750-EC7003-A00G	Fanless, E3940, 4 USB 3.0, 2 LAN, DP/HDMI, VGA, F/G SYSTEM, ROHS
EC700-AL	750-EC7003-B00G	Fanless, E3930, 2 USB 3.0, 4 LAN, DP/HDMI, VGA, F/G SYSTEM, ROHS
EC700-AL	750-EC7003-C00G	Fanless, E3930, 4 USB 3.0, 2 LAN, DP/HDMI, VGA, F/G SYSTEM, ROHS
EC700-AL	750-EC7003-D00G	Fanless, N4200, 2 USB 3.0, 4 LAN, DP/HDMI, VGA, F/G SYSTEM, ROHS

### ► Optional Items

Optional Items	Part Number	Description
Adapter	671-106013-000G	60W 12V inlet C14, locable DC Jack 5.5/2.5mm, cable length 1000mm, wide temp.
	671-106012-000G	60W 12V inlet C14, locable DC Jack 5.5/2.5mm, cable length 1500mm
Power Cord	332-700010-201G	Power Cord US 3pin 1830mm Length
	A81-004003-000G	Power Cord EU 2pin 1830mm Length
	A81-000001-000G	Power Cord China 3pin 1830mm Length
	A81-000046-000G	Power Cord JP 3pin 1830mm length (with DFI PSE logo)
OS	921-151350-000G	Win10 IoT Ent 2019 LTSC MultiLang Entry EPKEA MUV-00005
	921-151360-000G	Win10 IoT Ent 2019 LTSC MultiLang Entry PKEA MUV-00004
Memory SO-DIMM	138-320485-114G	2GB DDR3L 1600Mhz SO-DIMM 1Rx8 256Mx8 CL11 1.35V
	138-340005-115G	4GB DDR3L 1600Mhz SO-DIMM 1Rx8 512Mx8 CL11 1.35V
	138-380003-101G	8GB DDR3L 1600Mhz SO-DIMM 2Rx8 512Mx8 CL11 1.35V
	138-320485-113G	2GB DDR3L 1600Mhz SO-DIMM 1Rx8 256Mx8 CL11 1.35V, wide temp.
	138-340005-126G	4GB DDR3L 1600Mhz SO-DIMM 1Rx8 512Mx8 CL11 1.35V, wide temp.
	138-380003-102G	8GB DDR3L 1600Mhz SO-DIMM 2Rx8 512Mx8 CL11 1.35V, wide temp.



<b>SSD MSATA</b>	638-703203-110G	32GB, mSATA SSD, SATA3, MLC
	638-706403-130G	64GB, mSATA SSD, SATA3, MLC
	638-712800-160G	128GB, mSATA SSD, SATA3, MLC
	638-725600-100G	256GB, mSATA SSD, SATA3, MLC
	TBD	64GB, mSATA SSD, SATA3, 3D TLC, PE: 3K
	TBD	128GB, mSATA SSD, SATA3, 3D TLC, PE: 3K
	TBD	256GB, mSATA SSD, SATA3, 3D TLC, PE: 3K
	TBD	512GB, mSATA SSD, SATA3, 3D TLC, PE: 3K
	TBD	1TB, mSATA SSD, SATA3, 3D TLC, PE: 3K
	638-712806-100G	128GB, mSATA SSD, SATA3, MLC, Wide Temp
	TBD	256GB, mSATA SSD, SATA3, MLC, Wide Temp
	TBD	128GB, mSATA SSD, SATA3, 3D TLC, PE: 3K, Wide Temp.
	TBD	256GB, mSATA SSD, SATA3, 3D TLC, PE: 3K, Wide Temp.
<b>SSD 2.5"</b>	635-600322-1A0G	32GB, 2.5" SSD, SATA3, MLC
	635-600644-100G	64GB, 2.5" SSD, SATA3, MLC
	635-601282-1E0G	128GB, 2.5" SSD, SATA3, MLC
	635-602562-121G	256GB, 2.5" SSD, SATA3, MLC
	635-605122-130G	512GB, 2.5" SSD, SATA3, MLC
	635-601286-110G	128GB, 2.5" SSD, SATA3, 3D TLC, PE: 3K
	635-602566-150G	256GB, 2.5" SSD, SATA3, 3D TLC, PE: 3K
	635-605126-140G	512GB, 2.5" SSD, SATA3, 3D TLC, PE: 3K
	635-610006-110G	1TB, 2.5" SSD, SATA3, 3D TLC, PE: 3K
<b>Din Rail Kit</b>	761-EC7003-000G	EC700-AL Din Rail Kit
<b>WallMount Kit</b>	761-EC7003-100G	EC700-AL Wallmount Kit
<b>VESA Kit</b>	761-EC7003-002G	EC700-AL VESA Kit

785-XXX is a group number instead of a unique part number. Please contact your regional sales representative if you need more information.

### ► Packing List

• 1 EC700-AL system unit
• Mounting screws for Mini PCIe module
• Mounting screws for M.2 module (8mm & 4mm), washer between 2 M.2 modules
• 1 Quick Installation Guide