



Intel Atom® Processor E3900 Series  
Fanless Embedded System

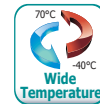


## EC700-AL

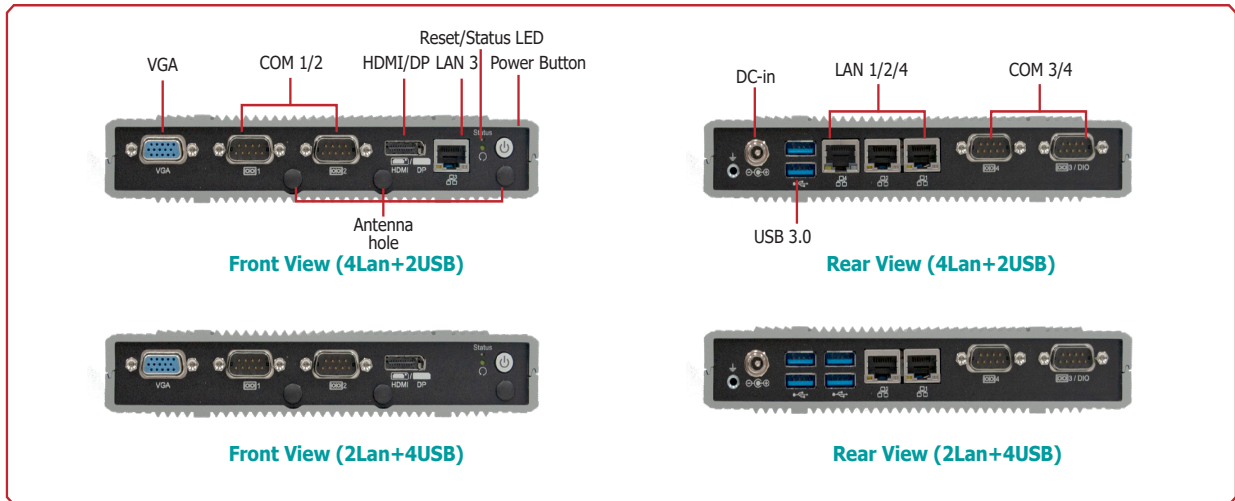


### ► Features

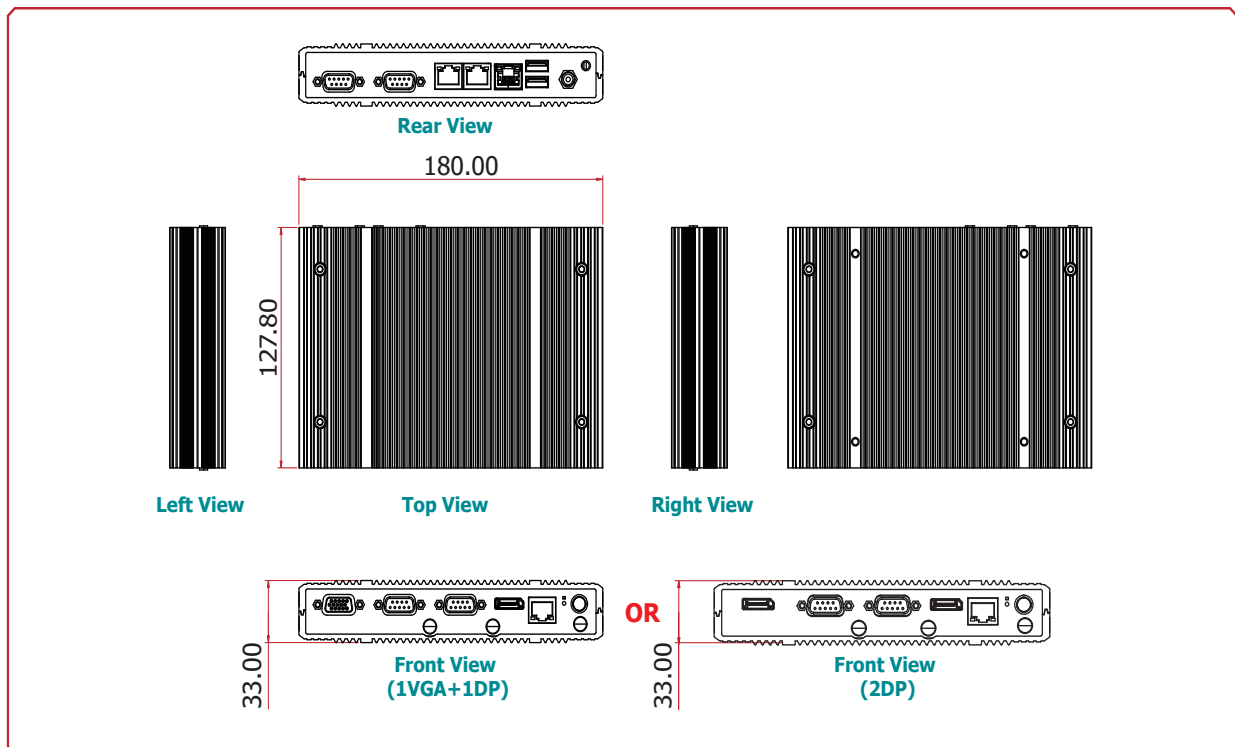
- Compact and Fanless Embedded System
- DDR3L-1866 memory onboard + 1 SODIMM up to 8GB
- Displays: 1 DP/HDMI Auto-detection + 1 DP or 1 VGA
- Supports 2 Mini PCIe and 1 M.2 slots
- Rich I/O ports: up to 4 Intel GbE, 4 COM, 4 USB
- Extended operating temperature: -40 to 70°C
- Windows 7/10/Linux Support
- Cableless use case capable



### ► Panel



### ► Dimensions





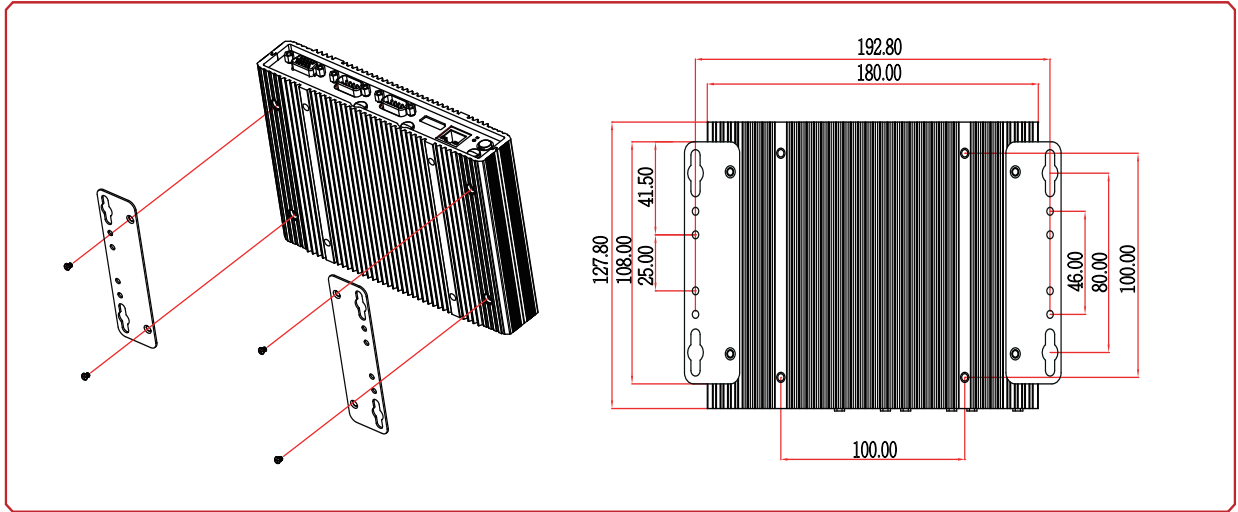
**Specifications**

<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
	<b>BIOS</b>	Insyde SPI 128Mbit (supports UEFI/Legacy mode)
<b>GRAPHICS</b>	<b>Controller</b>	Intel® HD Graphics
	<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>STORAGE</b>	<b>Dual Displays</b>	DP/HDMI + VGA or DP/HDMI + DP
	<b>Internal</b>	Support EMMC up to 8G/16GB/32GB/64GB (optional) Only EC700-AL-2LD / EC700-AL-3LD supports: 1 x 2.5" SATA 3.0 Drive Bay (support thickness 7mm HDD or 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>AUDIO</b>	<b>Audio Codec</b>	Realtek ALC262
<b>ETHERNET</b>	<b>Controller</b>	EC700-AL-2L: 2 x Intel® I210IT PCIe (10/100/1000Mbps) EC700-AL-4L: 4 x Intel® I210IT 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>	EC700-AL-4L: 1 x GbE (RJ-45)
	<b>Serial</b>	3 x RS-232/422/485 (DB-9) (8-bit DIO available upon request)
	<b>Display</b>	1 x DP/HDMI combo
	<b>Buttons</b>	1 x Power Button 1 x Reset Button
<b>REAR I/O</b>	<b>Wi-Fi Antenna</b>	3 x Wi-Fi Antenna Hole
	<b>Ethernet</b>	EC700-AL-2L: 2 x GbE (RJ-45) EC700-AL-4L: 3 x GbE (RJ-45)
	<b>Serial</b>	1 x RS-232/422/485 (DB-9)
	<b>Display</b>	1 x DP or 1 x VGA
	<b>USB</b>	EC700-AL-2L: 4 x USB 3.0 (type A) EC700-AL-4L: 2 x USB 3.0 (type A)
	<b>Audio</b>	1 x Mic-in 1 x Line-out
<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>		Windows 10 IoT (64-bit) Windows 7 (32/64-bit) Project support 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 121.2mm
	<b>Weight</b>	700g
<b>ENVIRONMENT</b>	<b>Operating Temperature</b>	-20 to 60°C -40 to 70°C (E3930 only)
	<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

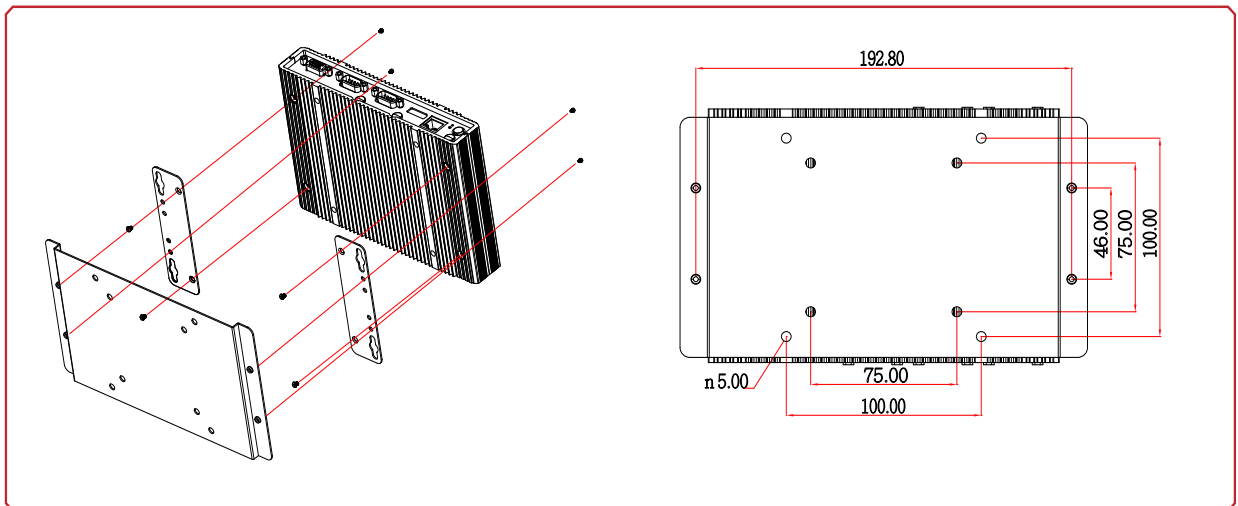


**EC700-AL**

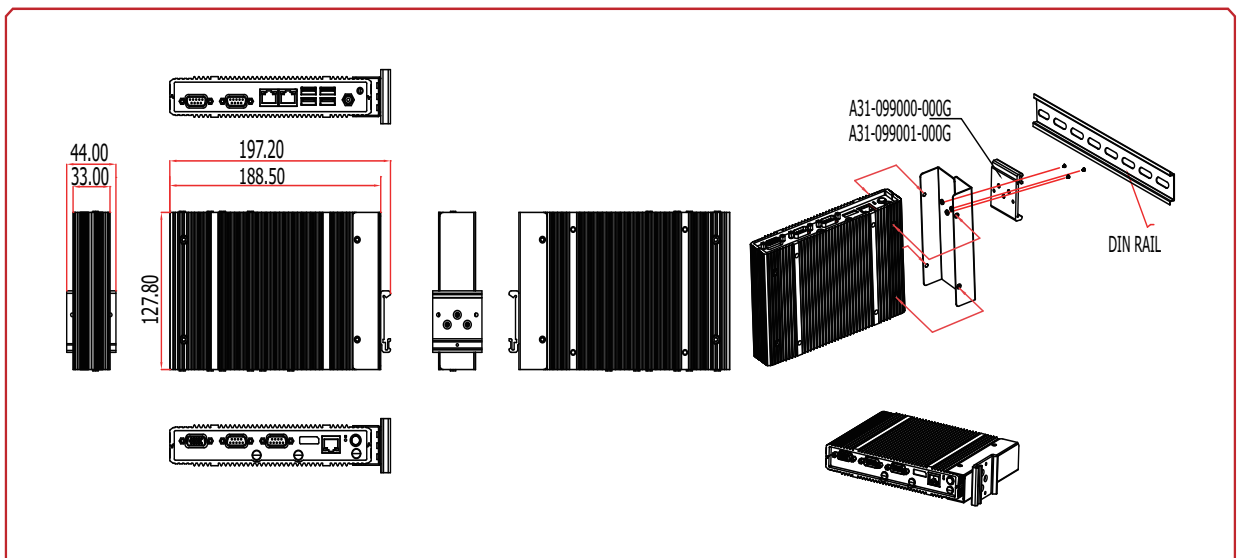
**Wall Mounting**



**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

### Optional Items

Optional Items	Part Number	Description
<b>Adapter</b>	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
<b>Power Cord</b>	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
	A81-004056-000G	Power Cord Japan 3pin 2000mm Length
<b>OS</b>	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
<b>Memory SO-DIMM</b>	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-EC7003-001G	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

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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