

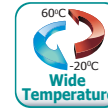
EC800-AL

Atom

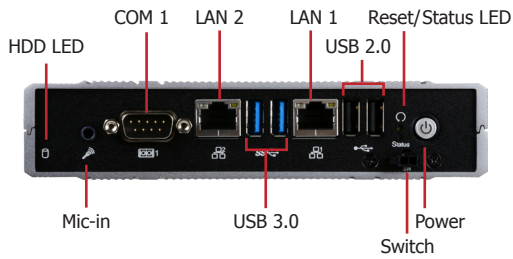


Features

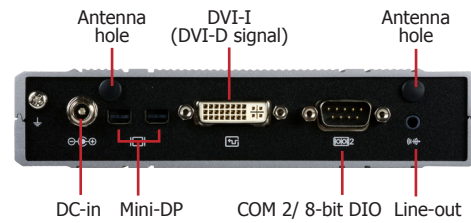
- Palm-sized and Fanless Embedded System
- 4GB/8GB DDR4-2400 memory onboard
- Triple independent displays: 1 VGA/DVI-D + 2 DP/HDMI
- Supports 1 Mini PCIe and 2 M.2 slots
- Rich I/O ports: 2 Intel GbE, 2 COM, 4 USB
- Extended operating temperature: -20 to 60°C



Panel

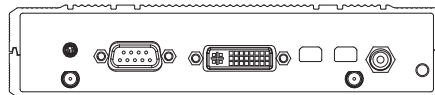


Front View



Rear View

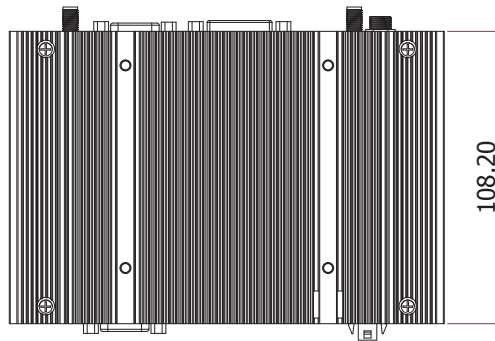
Dimensions



Rear View



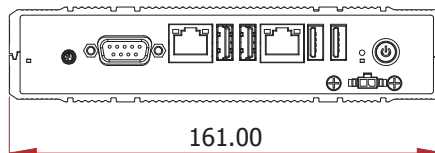
Left View



Top View



Right View

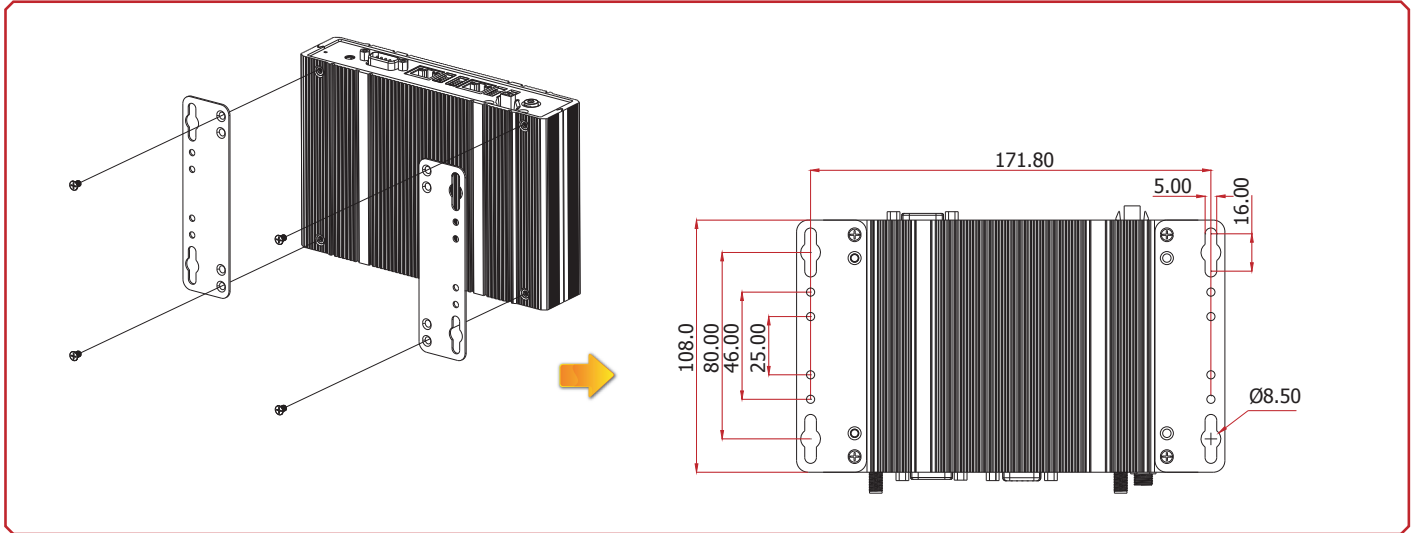


Front View

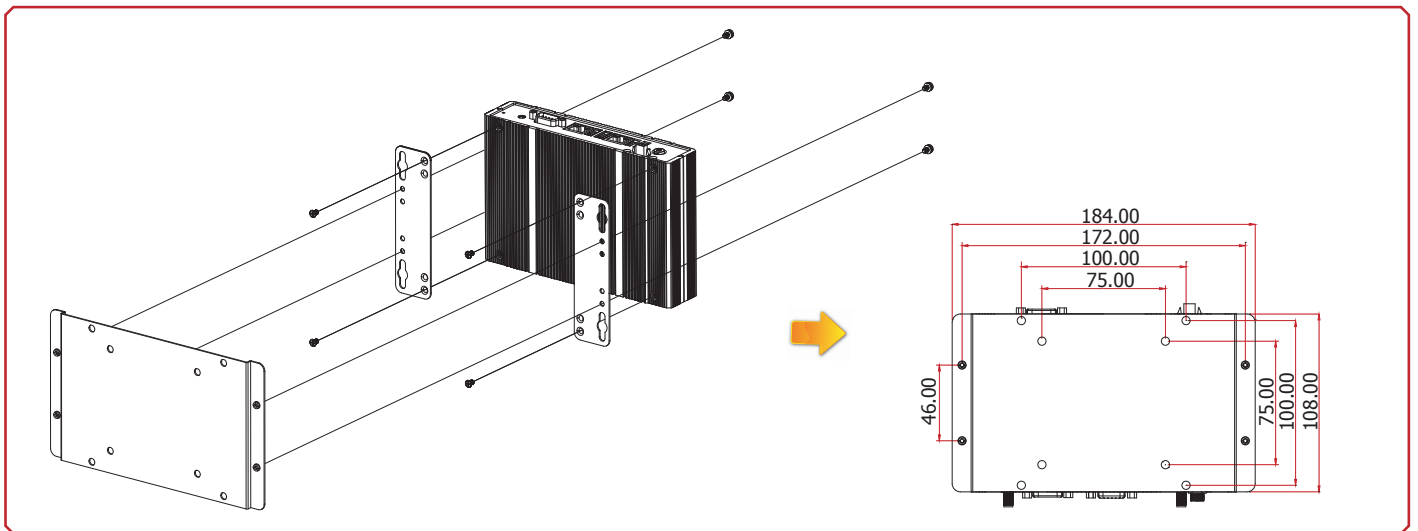
► Specifications

SYSTEM	Processor	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	
	Memory	4GB/8GB Memory Down	Dual Channel LPDDR4 2400MHz
	BIOS	Insyde SPI 128Mbit	
	GRAPHICS	Controller	Intel® HD Graphics
	Feature	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	
	Display	1 x VGA/DVI-D 2 x Mini-DP/Mini-HDMI	VGA: resolution up to 1920x1200 @ 60Hz DVI-D: resolution up to 1920x1200 @ 60Hz DP: resolution up to 4096x2160 @ 60Hz HDMI: resolution up to 3840x2160 @ 30Hz
	Triple Displays	VGA + 2 DP/HDMI	DVI-D + 2 DP/HDMI
	EXPANSION	Interface	1 x Full-size Mini PCIe (PCIe/USB/SATA) 1 x M.2 (2242 B Key) (PCIe/USB/SATA) 1 x M.2 (2230 AE Key) (PCIe/USB)
AUDIO	Audio Codec	Realtek ALC262	
ETHERNET	Controller	2 x Intel® I210AT PCIe (10/100/1000Mbps)	
LED	Indicators	1 x Power LED 1 x HDD LED	
FRONT I/O	Ethernet	2 x GbE (RJ-45)	
	Serial	1 x RS-232/422/485 (DB-9)	
	USB	2 x USB 3.0 (type A) 2 x USB 2.0 (type A)	
	Audio	1 x Mic-in	
	Buttons	1 x Power Button	
REAR I/O	Serial	1 x RS-232/422/485 (DB-9) (8-bit DIO available upon request)	
	Display	1 x VGA/DVI-D 2 x Mini-DP/Mini-HDMI	
	Audio	1 x Line-out	
	Wi-Fi Antenna	2 x Wi-Fi Module Antenna Hole	
	Switch	1 x Power Switch (2-pin)	
WATCHDOG TIMER	Output & Interval	System Reset, Programmable via Software from 1 to 255 Seconds	
POWER	Type	Wide Range 9~36V	
	Connector	DC Jack	
OS SUPPORT		Windows 10 IoT (64-bit) VxWorks 7.0	Linux Yocto Project (64-bit) Ubuntu 16.04 or 16.10 (Intel graphic driver available)
	MECHANISM	Construction	Aluminum
	Mounting	Wall/VESA/DIN Rail Mount (available upon request)	
	Dimensions (W x H x D)	161mm x 35.1mm x 108.2mm	
	Weight	700g	
ENVIRONMENT	Operating Temperature	-20 to 60°C	
	Storage Temperature	-40 to 85°C	
	Relative Humidity	10 to 90% RH (non-condensing)	
STANDARDS AND CERTIFICATIONS	Shock	Operating: 3G, 11ms Non-Operating: 5G, 11ms	
	Vibration	Operating: Random 5~500Hz, IEC68-2-64 (3G) Non-Operating: Sine 10~500Hz, IEC68-2-6 (3G)	

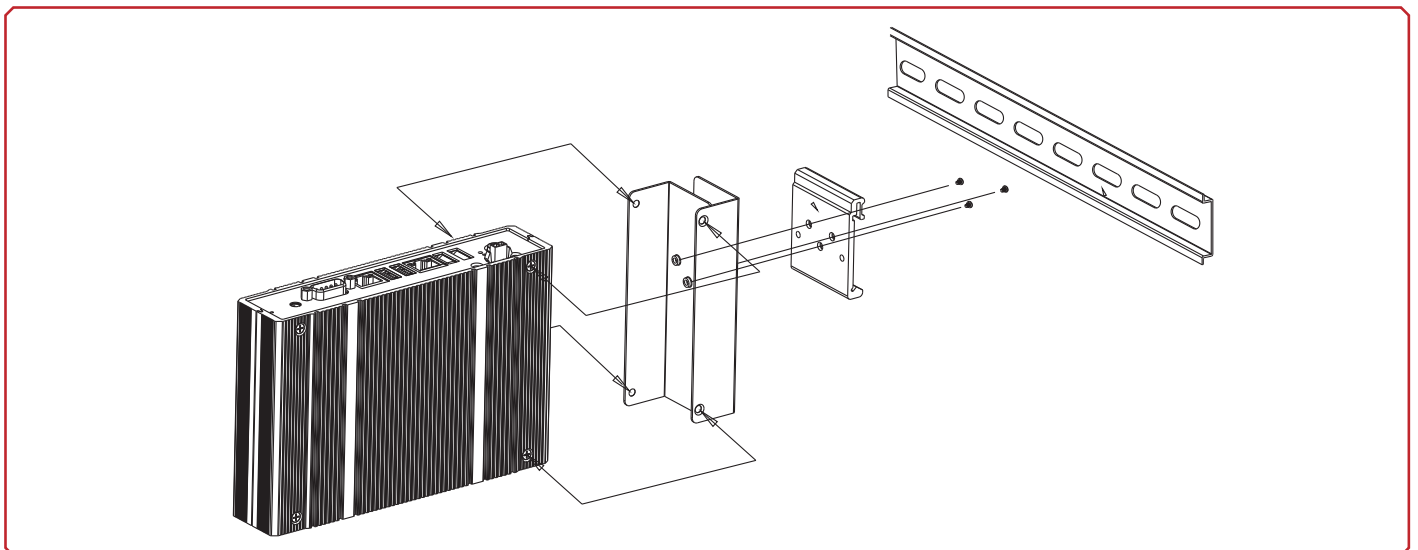
Wall Mounting



VESA Mounting



DIN Rail Mounting



► Ordering Information

Model Name	Part Number	Description
EC800-AL	750-EC8002-000G	Fanless, Intel Atom E3950, 2 Mini-DP, 1 DVI-D, 2 LAN, 2 COM, 4 USB, 4GB LPDDR4 onboard, RoHS
EC800-AL	750-EC8002-100G	Fanless, Intel Atom E3950, 2 Mini-HDMI, 1 VGA, 2 LAN, 2 COM, 4 USB, 4GB LPDDR4 onboard, RoHS

► Optional Items

Optional Items	Part Number	Description
Storage	785-MW128GMH	mSATA Card, 128GB MLC, -40 to 85°C, RoHS
	785-MW64GMH	mSATA Card, 64GB MLC, -40 to 85°C, RoHS
	785-MW32GMH	mSATA Card, 32GB MLC, -40 to 85°C, RoHS
Wi-Fi	785-WIFIKT	Wi-Fi Kit, RoHS
Power Cord	785-PWRD	Power Cord, Standards (USA/EUR/CH), 1.8m, RoHS
Power Adapter	671-106012-000G	60W, 12V/5A, Level 6, RoHS
	671-106013-000G	60W, 12V/5A (-30 to 70°C), Level 6, RoHS
	671-106011-000G	60W, 19V/3.15A, Level 6, RoHS
Wall Mount	761-EC8000-000G	EC800 Wall Mount Kit, RoHS
VESA Mount	761-EC8000-100G	EC800 Mount Kit (75x75mm, 100x100mm), RoHS
DIN Rail Mount	TBD	EC800 DIN Rail Mount Kit, RoHS

► Packing List

• 1 EC800-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
• 1 CD disk includes:
- Drivers / Manual