

EC800-AL

Atom

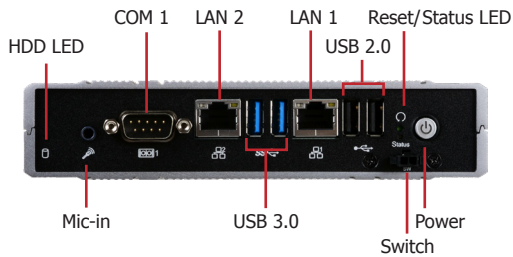


Features

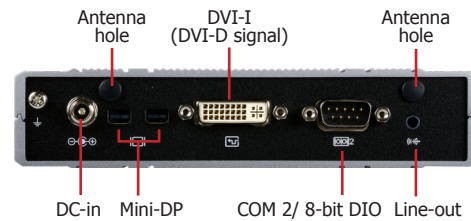
- Palm-sized and Fanless Embedded System
- 2GB/4GB/8GB LPDDR4-2400 memory onboard
- Triple independent displays: 1 VGA/DVI-D + 2 DP/HDMI
- Supports 1 Mini PCIe and 2 M.2 slots
- Rich I/O ports: 2 Intel GbE, 2 COM, 4 USB
- Extended operating temperature: -40 to 70°C



Panel

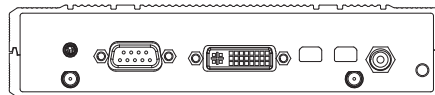


Front View



Rear View

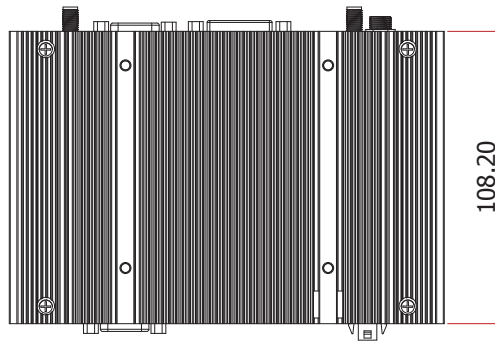
Dimensions



Rear View



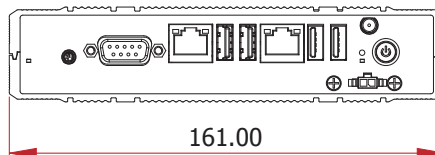
Left View



Top View



Right View

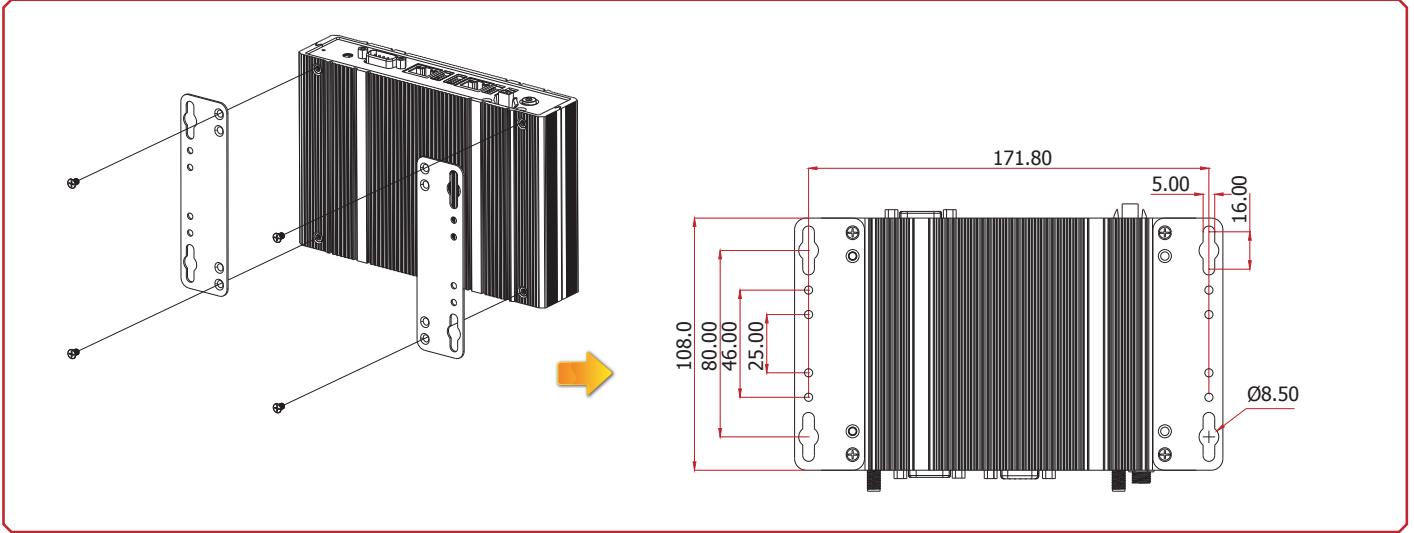


Front View

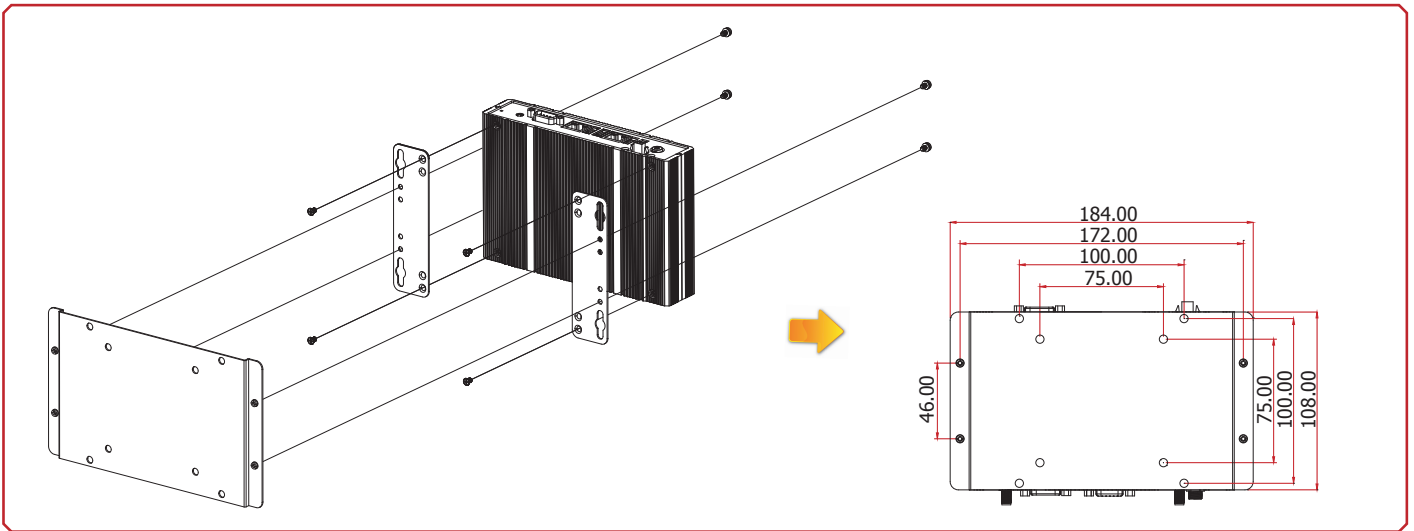
► Specifications

| | | | |
|-------------------------------------|-------------------------------|--|--|
| 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 | 2GB/4GB/8GB Memory Down | Dual Channel LPDDR4 2400MHz |
| | BIOS | Insyde SPI 128Mbit (supports UEFI boot only) | |
| | 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/Micro-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 HDMI | DVI-D + 2 DP |
| 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 E 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 | |
| | Switch | 1 x Power Switch (2-pin) | |
| 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/Micro-HDMI | |
| | Audio | 1 x Line-out | |
| | Wi-Fi Antenna | 2 x Wi-Fi Module Antenna Hole | |
| 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 (UEFI ONLY) | | Windows 10 IoT (64-bit) | Linux Yocto Project (64-bit) |
| MECHANISM | | Ubuntu 16.04 64-bit (Intel graphic driver available) | |
| | 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 | E3950, N4200: -20 to 60°C (standard), -40 to 60°C (wide-temp) E3940, E3930: -20 to 60°C (standard), -40 to 70°C (wide-temp) With 0.4m/s Air Flow | |
| | 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) | |

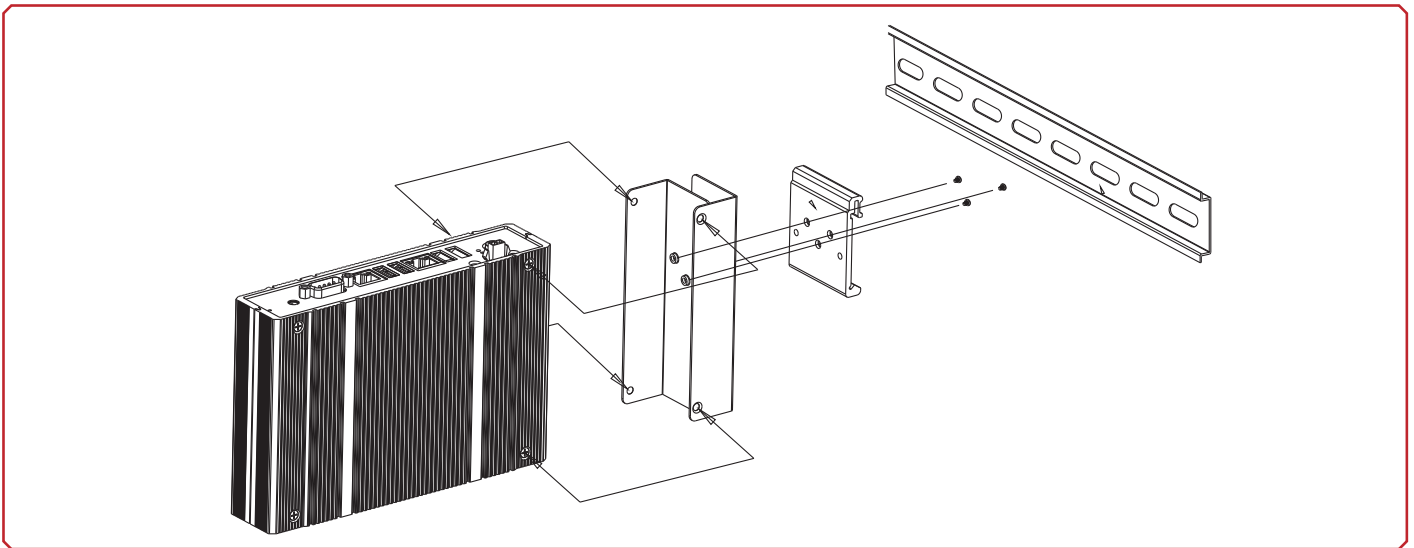
► Wall Mounting



► VESA Mounting



► DIN Rail Mounting



► Ordering Information

| Model Name | Part Number | Description |
|-------------------------------|-----------------|--|
| EC800-AL552CPD-E3950-4 | 750-EC8002-000G | Fanless, Intel Atom E3950, 2 Mini-DP, 1 DVI-D, 2 LAN, 2 COM, 4 USB, 4GB LPDDR4 onboard, -20 to 60°C, RoHS |
| EC800-AL552CHV-E3950-4 | 750-EC8002-100G | Fanless, Intel Atom E3950, 2 Micro-HDMI, 1 VGA, 2 LAN, 2 COM, 4 USB, 4GB LPDDR4 onboard, -20 to 60°C, RoHS |
| EC800-AL552TPD-E3950-8 | 750-EC8002-200G | Fanless, Intel Atom E3950, 2 Mini-DP, 1 DVI-D, 2 LAN, 2 COM, 4 USB, 8GB LPDDR4 onboard, -40 to 60°C (wide-temp), RoHS |
| EC800-AL552THV-E3950-8 | 750-EC8002-300G | Fanless, Intel Atom E3950, 2 Micro-HDMI, 1 VGA, 2 LAN, 2 COM, 4 USB, 8GB LPDDR4 onboard, -40 to 60°C (wide-temp), RoHS |
| EC800-AL552CPD-N4200-4 | 750-EC8002-400G | Fanless, Intel Pentium N4200, 2 Mini-DP, 1 DVI-D, 2 LAN, 2 COM, 4 USB, 4GB LPDDR4 onboard, -20 to 60°C, RoHS |
| EC800-AL552THV-E3930-4 | 750-EC8002-500G | Fanless, Intel Atom E3930, 2 Micro-HDMI, 1 VGA, 2 LAN, 2 COM, 4 USB, 4GB LPDDR4 onboard, -40 to 70°C (wide-temp), RoHS |
| EC800-AL552THV-E3930-2 | 750-EC8002-600G | Fanless, Intel Atom E3930, 2 Micro-HDMI, 1 VGA, 2 LAN, 2 COM, 4 USB, 2GB LPDDR4 onboard, -20 to 60°C, RoHS |

► Optional Items

| Optional Items | Part Number | Description |
|----------------------------------|-----------------|--|
| 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 |
| SSD mSATA | 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 |
| SSD M.2 | 785-M208GM42 | M.2 2242 8GB, MLC |
| | 785-M216GM42 | M.2 2242 16GB, MLC |
| | 785-M232GM42 | M.2 2242 32GB, MLC |
| | 785-M264GM42 | M.2 2242 64GB, MLC |
| | 785-M2128GM42 | M.2 2242 128GB, MLC |
| | 785-M2256GM42 | M.2 2242 256GB, MLC |
| | 785-M2512GM42 | M.2 2242 512GB, MLC |
| Extend Power Switch Cable | A81-004070-016G | Power cable 2pin stripped, length 1000mm |

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 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 |