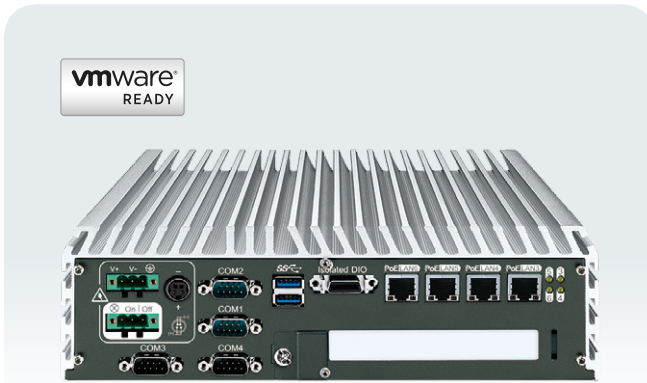


ECS-7710/7701

Intel® Core™ i7/ i5/ i3 Fanless Embedded System with Intel® QM77 Chipset, 6 GigE LAN with 4 PoE+, 1 PCI/ PCIe, 2 2.5" SSD, Isolated DIO, High Performance, Rugged, Extended Temperature



Features

- Quad Core Intel® Core™ i7/ i5/ i3 Processor (Ivy Bridge)
- Supports VGA/ DVI-D/ Dual DisplayPort/ LVDS interface, up to 3 independent displays
- Fanless, -25°C to 70°C Operating Temperature
- 6 GigE LAN with 4 IEEE 802.3at PoE+
- 16 Isolated DIO, 16 GPIO
- SIM Card Socket for 3G/ 4G/ LTE/ WiFi/ GPRS/ UMTS
- 6V to 36V DC-in, 80V Surge Protection
- Expansion : 1 PCI/ PCIe x16, 2 Mini PCIe
- 4 COM, 4 USB 3.0, 4 USB 2.0
- 2 2.5" SSD/ HDD, 1 Front-access CFast Socket



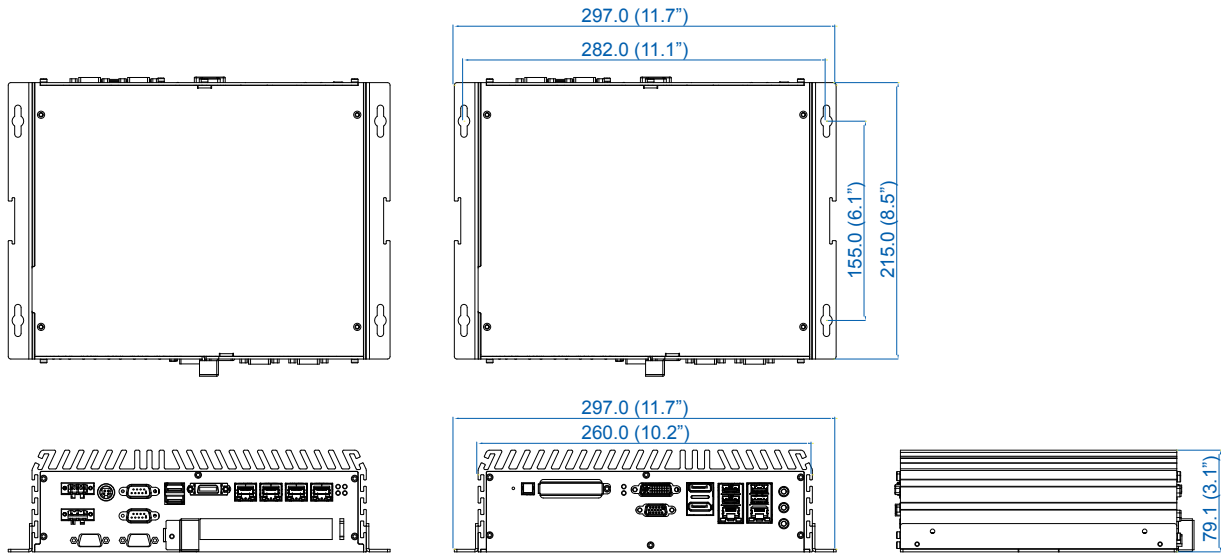
Specifications

System	
Processor	Intel® Core™ i7-3610QE/ i5-3610ME/ i3-3120ME
Chipset	Intel® QM77
BIOS	AMI
SIO	IT8783
Memory	2 DDR3 1066/ 1333/ 1600 MHz or DDR3L 1066/ 1333 MHz SO-DIMM, up to 16GB
I/O Interface	
Serial	<ul style="list-style-type: none"> ▪ 1 COM RS-232/ 422/ 485 ▪ 3 COM RS-232
USB	<ul style="list-style-type: none"> ▪ 4 USB 3.0 (External) ▪ 4 USB 2.0 (2 External, 2 Internal by JST Connector)
Isolated DIO	16 Isolated DIO : 8 DI, 8 DO
GPIO	16 GPIO (Internal)
LED	Power, HDD, PoE
SIM Card	1 SIM Card Socket (Internal)
Expansion	
Mini PCIe	2 Mini PCIe Socket : <ul style="list-style-type: none"> ▪ 1 Mini PCIe Socket for PCIe/ USB/ Internal SIM Card/ Optional mSATA ▪ 1 Mini PCIe Socket for PCIe/ USB/ Optional mSATA
PCI/ PCIe	ECS-7710 : 1 PCIe x16 Slot ECS-7701 : 1 PCI Slot
Graphics	
Graphics Processor	Intel® HD Graphics 4000
Display Memory	Shared Memory, up to 1.7GB
Interface	<ul style="list-style-type: none"> ▪ VGA : DB-15, up to 1920 x 1200 ▪ DVI-D : Up to 1920 x 1200 ▪ DisplayPort 1 : Up to 2560 x 1600 ▪ DisplayPort 2 : Up to 1920 x 1200 ▪ LVDS : Dual channel 24-bit, up to 1920 x 1200
Storage	
SATA	<ul style="list-style-type: none"> ▪ 2 SATA III (6Gbps) ▪ 1 SATA II (3Gbps), supports horizontal type SATA DOM
mSATA	2 SATA II (Mini PCIe Type, 3Gbps)
Storage Device	<ul style="list-style-type: none"> ▪ 1 CFast Socket, Push-in/ Push-out Ejector ▪ 2 2.5" SSD/ HDD Bracket (Internal)
Audio	
Audio Codec	Realtek ALC892, 5.1 Channel HD Audio
Audio Interface	1 Line-in, 1 Line-out, 1 Mic-in
Ethernet	
LAN 1	Intel® 82579LM GigE LAN supports iAMT 8.0
LAN 2	Intel® 82574L GigE LAN

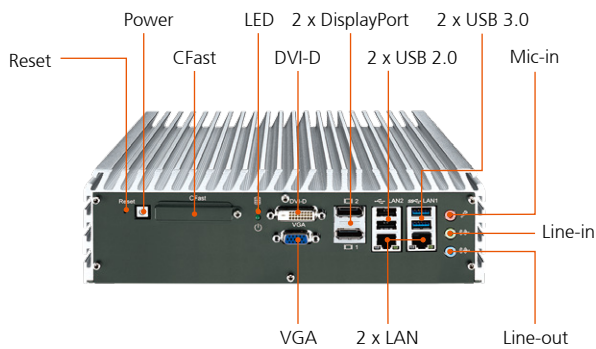
PoE	
LAN 3	GigE IEEE 802.3at (25.5W/48V) PoE+ by Intel® 82574L
LAN 4	GigE IEEE 802.3at (25.5W/48V) PoE+ by Intel® 82574L
LAN 5	GigE IEEE 802.3at (25.5W/48V) PoE+ by Intel® 82574L
LAN 6	GigE IEEE 802.3at (25.5W/48V) PoE+ by Intel® 82574L
Power	
Power Input	6V to 36V, DC-in
Power Interface	<ul style="list-style-type: none"> ▪ 3-pin Terminal Block : V+, V-, Frame Ground ▪ Mini-DIN 4-pin
Remote Switch	3-pin Terminal Block : On, Off, IGN
Surge Protection	Up to 80V/1ms Transient Power
Others	
TPM	Optional Infineon SLB9635 supports TPM 1.2, LPC Interface
Watchdog Timer	Reset : 1 to 255 sec./min. per step
Smart Management	Wake on LAN, PXE supported
HW Monitor	Monitoring temperature, voltages. Auto throttling control when CPU overheats.
Software Support	
OS	Windows 8.1, Windows 7, Windows XP, Linux
Mechanical	
Dimensions (W x L x H)	260mm x 215mm x 79mm (10.2" x 8.5" x 3.1")
Weight	2.8 kg (6.2 lb)
Mounting	<ul style="list-style-type: none"> ▪ Wallmount by mounting bracket ▪ Din Rail Mount (Optional) ▪ 2U Rackmount (Optional)
Environment	
Operating Temperature	-25°C to 70°C (-13°F to 158°F)
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Humidity	10% to 95% Humidity, non-condensing
Relative Humidity	95% @ 70°C
Shock	<ul style="list-style-type: none"> ▪ IEC 60068-2-27 ▪ SSD : 50G @ wallmount, Half-sine, 11ms
Vibration	<ul style="list-style-type: none"> ▪ IEC 60068-2-64 ▪ SSD : 5Grms, 5Hz to 500Hz, 3 Axis
Certification	E13, CE, FCC, EN50155, EN50121-3-2, VMware Ready

Dimensions

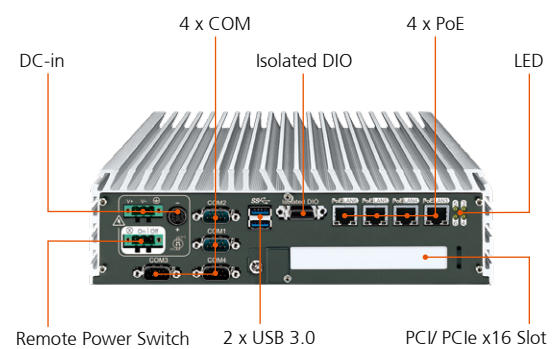
Unit : mm/ inch



Front I/O



Rear I/O



Order Information

ECS-7710	ECS-7700, 6 GigE LAN with 4 PoE+, 1 PCIe x16, 8 USB, 4 COM, 1 SIM, Isolated DIO, 16 GPIO
ECS-7701	ECS-7700, 6 GigE LAN with 4 PoE+, 1 PCI, 8 USB, 4 COM, 1 SIM, Isolated DIO, 16 GPIO
i7-3610QE	Ivy Bridge 3rd Gen Intel® Mobile Quad Core™ i7 Processor
i5-3610ME	Ivy Bridge 3rd Gen Intel® Mobile Core™ i5 Processor
i3-3120ME	Ivy Bridge 3rd Gen Intel® Mobile Core™ i3 Processor
M340S-W28M1	Vecow DDR3 4GB 1333/ 1066 MHz RAM, Wide Temperature -40°C to +85°C
Certified DDR3 4GB RAM	Certified DDR3 4GB 1333/ 1600 MHz RAM
Certified DDR3 8GB RAM	Certified DDR3 8GB 1333/ 1600 MHz RAM
PWA-120W	120W, 24V, 90V AC to 264V AC Power Adapter with 3-pin Terminal Block
PWA-120WM4P	120W, 24V, 90V AC to 264V AC Power Adapter with 4-pin Mini-DIN Connector
PWA-160W-WT	160W, 24V, 85V AC to 264V AC Power Adapter with 3-pin Terminal Block, Wide Temperature -30°C to +70°C
VESA Mount	VESA Mounting Kit
DIN-RAIL	DIN Rail Kit
Rack Mount	2U Rackmount Kit
SCSI-20P-100	20-pin SCSI Cable, 1M
TMB-SCSI-20P	Terminal Board with One 20-pin SCSI Connector and DIN-Rail Mounting
3G Module	Mini PCIe 3G/GPS Module with Antenna
4G Module	Mini PCIe 4G/GPS Module with Antenna
WiFi & Bluetooth Module	Intel® Mini PCIe WiFi & Bluetooth Module with Antenna