

ECS-7700

High Performance, Rugged, Extended Temp., Intel® 3rd Gen. Quad Core™ i7/i5/i3 Fanless Embedded System with 6 Gigabit Ports (4 PoE+) and 1 PCIe/PCI Expansion Slot



3rd Gen Intel® Quad Core™ i7/i5/i3 Ivy Bridge Mobile Processor



4 GigE PoE+ Ports & 2 GigE LAN Ports



Fanless, -25°C to 70°C Operation Temp.



1 PCIe or PCI Expansion Slot



4 COM, 4 USB 3.0, 2 USB2.0, 2 Mini-PCIe (1 with SIM Card Socket)

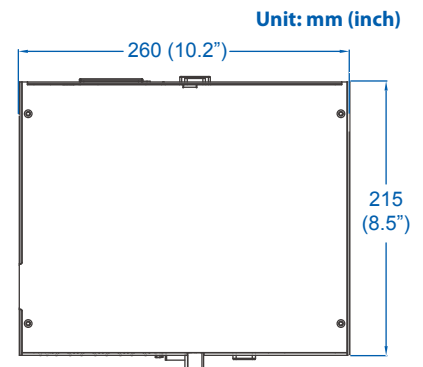
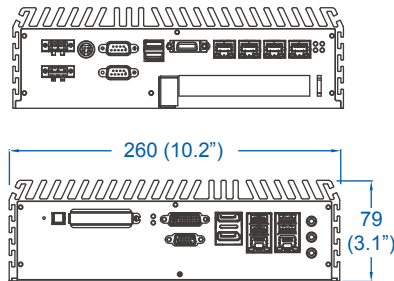
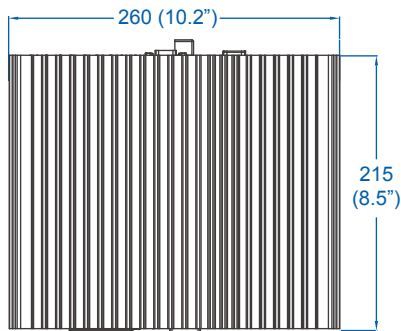


Triple Display, DVI-D / HDMI & VGA, 2 Display Ports

Based on 3rd Gen Intel® Quad-Core™ i7 Processor (6M Cache, up to 3.30 GHz), ECS-7700 series integrates 2 GbE LAN, 4 GigE PoE+ ports, and one PCIe/PCI expandable slot. With maximum dual channel 16GB ram, DVI-D/HDMI and VGA triple display, two 2.5" SATA 6Gp/s HDD/SSD, one SATA 3Gp/s SSD/HDD supports SATA DOM, one of 2 miniPCI-express supports SIM card for WiFi, 3G/GPRS, and still keep outstanding thermal design for -25 degree to +70 degree Celsius industrial operating temperature range. ECS-7700 series provides 2 fully integrated Gigabit Ethernet interfaces for either 1000 Mb/s or 10/100 Mb/s operation rates by each and jumbo frames up to 9018 bytes. Enabling accurate time synchronization, wake-up function, and boot up through the extensible firmware interface (PXE), ECS-7700 series integrates fully power management function to optimize voltage efficiency. Empowering 4 GigE IEEE 802.3at PoE+ ports, ECS-7700 series is the ideal option for GigE cameras required efficient power supply and distances connection. Improving network traffic load-balancing by optimized parallel and pipelined architectures, the 2 gigabit Ethernet controllers of ECS-7700 series enable to smooth the network traffic loading for most demanding occasions. ECS-7700 series is designed for machine vision, intelligent automation, intelligent manufacturing system, automation networking communication, IOT (Internet of Things), and process control applications.



Dimension



Unit: mm (inch)

Specification

System

Processor	3 rd Gen. Intel® Quad Core™ i7/i5/i3 Ivy Bridge
Chipset	Intel® Mobile QM77
BIOS	AMI
SIO	IT8783
Memory	DDR3 1066 1333 1600 MHz or DDR3L 1066 1333MHz Max. 16GB Two 204-pin SO-DIMM Sockets

I/O Interface

Serial Interface	3 COM RS-232, 1 COM RS-232/485/422
USB Interface	4 USB 3.0 (Compatible to USB 2.0) 2 USB 2.0 2 Internal USB 2.0
Isolated DIO	8 DI, 8 DO, 5V~24V Input (Optional)
LED	Power/Suspend, SDD, CFast, and WDT LEDs
GPIO	16 GPIO

Expansion

PCIe/PCI	1 slot for PCIe x16 or PCI Expansion Card
Mini PCIe	1 miniPCIe Socket (PCIe +USB+ SIM Card Socket), Optional with mSATA 1 miniPCIe Socket (PCIe +USB), Optional with mSATA
JST Connector	1 Internal 6-pin (2 Internal USB2.0)

Graphics

Chipset	Intel® GMA HD 4000, Triple Independent Display
Display Memory	Shared Memory, Up to 1.7GB
Interface	DB-15 VGA / 1920x1200 max. DVI-D / 1920x1200 max. Display Port 1 / 2560x1600 max. Display Port 2 / 1920x1200 max. LVDS/Dual channel 24-bit/ 1920x1200 max.

Storage

SATA	2 SATA III 6Gbps 1 SATA II 3Gbps, Support Horizontal Type SATA DOM
mSATA	2 SATA II 3Gbps (Optional)
Storage Expansion	CFast Slot, External Hot-Swap, Push In/Out Ejector

Audio

Audio Codec	Realtek® ALC892, 5.1 Channel HD Audio
Audio Interface	Line-In, Line-Out, Mic-In, Front Audio Header

Ethernet

LAN1	Intel® 82579LM Gigabit LAN, wake on LAN, PXE support
LAN2	Intel® 82574L Gigabit LAN

Power over Ethernet, PoE

LAN3	Gigabit IEEE 802.3at (25.5W/48V) PoE Ports by Intel® 82574L with Power On/Off Control
LAN4	Gigabit IEEE 802.3at (25.5W/48V) PoE Ports by Intel® 82574L with Power On/Off Control
LAN5	Gigabit IEEE 802.3at (25.5W/48V) PoE Ports by Intel® 82574L with Power On/Off Control
LAN6	Gigabit IEEE 802.3at (25.5W/48V) PoE Ports by Intel® 82574L with Power On/Off Control

Power

Power Input	1 Mini DIN 3-Pin Terminal Block for DC-IN : V+, V-, Frame Ground
Power Input Voltage	ATX: 2-Pin Remote Power On/Off Switch
Power Adapter	DC-IN 6 ~ 36V
Protection	AC to DC +24V / 5A. 120W Max. (Optional) On-board LT4356 for High Voltage Surge Protection

Other

Trusted Platform Module (TPM)	Infineon SLB9635, LPC Interface (Optional)
Watchdog Timer	Reset: 1 to 255 sec./min. Per Step
HW Monitor	Temperature/Voltages Auto Throttling Control When CPU Overheats

Mechanical

Dimension (W x L x H)	260mm x 215mm x 79mm (10.2" x 8.5" x 3.1")
Weight	2.1Kg (4.6 lb)
Mounting	Wall-Mount by Mounting Bracket
Chassis Construction	Aluminum Housing

Environment

Operating Temperature	-25°C to 70°C (-13°F to 157°F)
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Humidity	10% to 95% Humidity, Non-condensing
Relative Humidity	95% at 70°C
Vibration	Operating, 5Grms @5~500 Hz According to IEC68-2-64
Shock	Operating, 20 Grms, Half-Sine 11 ms Duration (w/ SSD, According to IEC60068-2-27)
EMC	CE, FCC, RoHS

*All product specifications and photos are subject to change without prior notice.

Order Information

Part No.

Description

ECS-7710	Intel® 3 rd Gen Quad Core™ i7/i5/i3 Fanless Embedded System with 6 Gigabit Ports (4 PoE+) & 1 PCIe/16 Expansion Slot
ECS-7701	Intel® 3 rd Gen Quad Core™ i7/i5/i3 Fanless Embedded System with 6 Gigabit Ports (4 PoE+) & 1 PCI Expansion Slot

Option

Description

i7-3610QE	Ivy Bridge 3 rd Gen Intel® Mobile Quad Core™ i7 Processor
i5-3610ME	Ivy Bridge 3 rd Gen Intel® Mobile Core™ i5 Processor
i3-3120ME	Ivy Bridge 3 rd Gen Intel® Mobile Core™ i3 Processor
M340S-W28M1	Vecow DDR3 4GB 1333/1066MHz RAM, Wide Temperature -40°C ~ +85°C
KVR1333D3S9/4G	Kingston® DDR3 4GB PC1333 RAM
PWA-120WM4P	120W, 24V, 90VAC to 264VAC Power Adapter
SCSI-20P-100	20-pin SCSI Cable, 1M
TMB-SCSI-20P	Terminal Board with One 20-pin SCSI Connector and DIN-Rail Mounting