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



Compliant with EN50121-3-2 & Essential Sections of EN50155



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



Triple Display, DVI-D & 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, Display Port 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/4G/GPS/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), EtherCAT (Ethernet for Control Automation Technology) and process control applications.











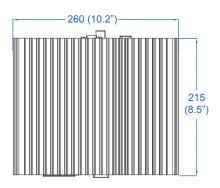


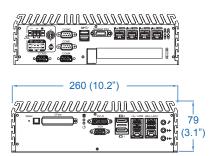


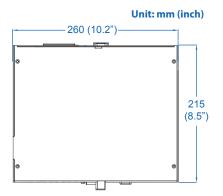




Dimension







Specification

System

3rd Gen. Intel® Quad Core™ i7/i5/i3 Ivy Bridge Intel® Mobile QM77 Chipset

AMI BIOS

IT8783F SIO

DDR3 1066 | 1333 | 1600 MHz or DDR3L 1066 | 1333MHz Memory

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 Power, HDD, CFast LEDs LED

GPIO 16 GPIO

Expansion

1 Slot for PCIe x16 or PCI Expansion Card Mini PCle 1 miniPCle Socket (PCle +USB+ SIM Card Socket),

Optional with mSATA

1 miniPCle Socket (PCle +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 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

Interface

SATA 2 SATA III 6Gbps

1 SATA II 3Gbps, Support Horizontal Type SATA DOM 2 SATA II 3Gbps (Optional)

mSATA

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

Intel® 82579LM Gigabit LAN, Wake on LAN, PXE Support LAN1

Intel® AMT 8.0

Intel® 82574L Gigabit LAN ,Wake on LAN, PXE Support

Power over Ethernet, PoE

Gigabit IEEE 802.3at (25.5W/48V) PoE Ports by Intel® 82574L with Power On/Off Control LAN3 I AN4 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 Gigabit IEEE 802.3at (25.5W/48V) PoE Ports by LAN6 Intel® 82574L with Power On/Off Control

Power

Power Input

3-Pin Terminal Block for DC-IN: V+, V-, Frame Ground

ATX: 2-Pin Remote Power On/Off Switch

DC-IN 6 ~ 36V

Power Adapter AC to DC +24V / 5A. 120W Max. (Optional) On-board LT4356 for High Voltage Surge Protection Protection

Other

Trusted Platform Module (TPM) Watchdog Timer

Power Input Voltage

Infineon SLB9635, LPC Interface (Optional)

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) Weight

260mm x 215mm x 79mm (10.2" x 8.5" x 3.1") 2.1Kg (4.6 lb)

Mounting Wall-Mount by Mounting Bracket Chassis Construction

Aluminum Housing

Environment

Vibration

Shock

EMC

Operating Temperature Storage Temperature Humidity Relative Humidity

-25°C to 70°C (-13°F to 157°F) -40°C to 85°C (-40°F to 185°F) 10% to 95% Humidity, Non-condensing

95% at 70°C

Operating, 5Grms @5~500 Hz According to IEC68-2-64 Operating, 20 Grms, Half-Sine 11 ms Duration

(w/ SSD, According to IEC60068-2-27) CE, FCC, RoHS, EN50155 & EN50121-3-2

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

Order Information

Part No.

ECS-7710 ECS-7701 Intel® 3rd Gen Quad Core™ i7/i5/i3 Fanless Embedded System with 6 Gigabit Ports (4 PoE+) & **1 PCIe x16 Expansion Slot** Intel® 3rd Gen Quad Core™ i7/i5/i3 Fanless Embedded System with 6 Gigabit Ports (4 PoE+) & **1 PCI Expansion Slot**

Option Description

Ivy Bridge 3rd Gen Intel® Mobile Quad Core™ i7 Processor i7-3610QE i5-3610ME Ivy Bridge 3rd Gen Intel® Mobile Core™ i5 Processor Ivy Bridge 3rd Gen Intel® Mobile Core™ i3 Processor i3-3120ME

Vecow DDR3 4GB 1333/1066MHz RAM, Wide Temperature -40°C ~ +85°C M340S-W28M1

Certified DDR3 8GB RAM Certified DDR3 8GB 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