

ECS-7000-4G

Fanless Embedded System with 4 GbE, and Intel® QM77 Express Chipset and Choice of 3rd Generation Intel® Core™ i7 | i5 | i3 Mobile Processor



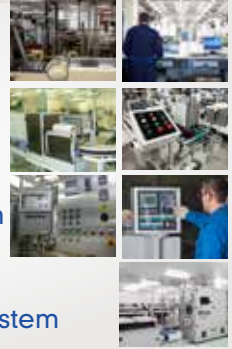
- 3rd Gen Intel® Quad Core™ i7 | i5 | i3 Ivy Bridge Mobile Processor (6M Cache, up to 3.30 GHz)
- Fanless, -25°C to 70°C Operation Temperature
- Built-in Input 80 V_{DC} Overvoltage Protection
- Support 2 SO-DIMM DDR3 or DDR3L, up to 16GB
- QM77 System Chipset
- 2 SATA III (6Gbps) 2.5" SSD | HDD, mSATA
- 4 GbE LAN, Independent LAN Controllers
- Rich I/O: 4 COM, 4 USB 3.0, 2 USB2.0, 2 Mini-PCIe (1 with SIM Card Socket)
- 5 Display Support: 2 DP, DVI-D, VGA, LVDS 3 Independent Displays
- Intel® AMT 8.0 Support

Based on 3rd Gen Intel® Quad-Core™ i7 Processor (6M Cache, up to 3.30 GHz), ECS-7000-4G integrates 4 GbE LAN. With maximum dual channel 16GB ram, DVI-D/HDMI and VGA dual display, CFAST, two 2.5" SATA 6Gp/s HDD/SSD trays, 2 miniPCI-express with SIM card supports for WiFi, 3G/GPRS, and still keep outstanding thermal design for -25 degree to +70 degree Celsius industrial operating temperature range. ECS-7000-4G provides four 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-7000-4G integrates fully power management function to optimize voltage efficiency. Improving network traffic load-balancing by optimized parallel and pipelined architectures, the four gigabit Ethernet controllers of ECS-7000-4G enable to smooth the network traffic loading for most demanding occasions. ECS-7000-4G is designed for machine vision, intelligent automation, intelligent manufacture system, and process control applications.





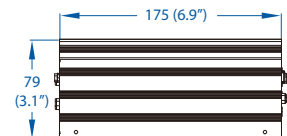
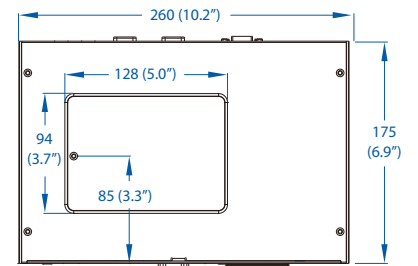
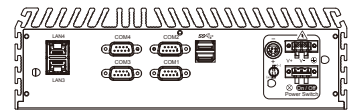
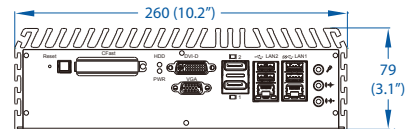
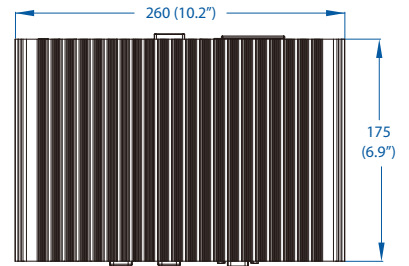
- Process Control
- Intelligent Automation
- Machine Vision
- Intelligent Manufacture System



Specification

System	
Processor	3 rd Generation Intel® Core™ i7 i5 i3 Ivy Bridge Processors (6M Cache, up to 3.30 GHz)
Chipset	Intel® Mobile QM77
BIOS	AMI
SIO	IT8783F
Memory	DDR3 1066 1333 1600 MHz, DDR3L 1066 1333 MHz 16GB Max., 2 204-pin SO-DIMM Sockets
I/O Port	
Serial Interface	3 COM RS-232, 1 COM RS-232 485 422
USB	4 USB 3.0, 2 USB 2.0, 2 Internal USB 2.0
LED	Power, SDD, CFast, and WDT LEDs
GPIO	16 GPIO
Expansion	
Mini PCIe	miniPCIe Socket (PCIe + USB + SIM card socket), Optional with mSATA miniPCIe Socket (PCIe + USB), Optional with mSATA
JST Connector	1 Internal 6-pin (Internal USB 2.0)
Graphics	
Chipset	Intel® GMA HD 4000
Display Memory	Shared Memory, Up to 1.7GB
Interface	DB-15 VGA 1920 x 1200 Max. DVI-D 1920 x 1200 Max. Display Port 1 2560 x 1600 Max. Display Port 2 1920 x 1200 Max. LVDS Dual Channel 24-bit 1920 x 1200 Max.
Storage	
SATA	2 SATA III 6Gbps 1 SATA II 3Gbps - Support Horizontal Type SATA DOM
mSATA	2 SATA II 3Gbps
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
LAN2	Intel® 82574L Gigabit LAN
LAN3	Intel® 82574L Gigabit LAN
LAN4	Intel® 82574L Gigabit LAN
Power	
Power Input	1 Mini DIN One 3-pin Terminal Block for DC-IN : V+, V-, Frame Ground DC-IN 6 ~ 36V
Power Input Voltage	AC to DC +24V 5A, 120W Max. (Optional)
Power Adapter Protection	On-board LT4356 for Power Input 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	
Chassis Construction	Aluminum Housing
Size(W x D x H)	260mm x 175mm x 79mm (10.2" x 6.9" x 3.1")
Weight	2.8Kg (6 lb)
Mounting	Wall-mount by Mounting Bracket
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	Rational: 5Grms @5~500 Hz according to IEC68-2-64
Shock	Operating, 50 Grms, Half-sine 11 ms Duration (w / SSD, According to IEC60068-2-27)
EMC	CE, FCC, RoHS

Unit: mm (inch)



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

Order Information

Part Number	Description
ECS-7000-4G	4 GbE LAN Fanless Embedded Controller, 2 SATA III 6 Gbps SSD HDD
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