

# ECS-7000-9R

High Performance, Rugged, Extended Temp., -25°C ~ 70°C

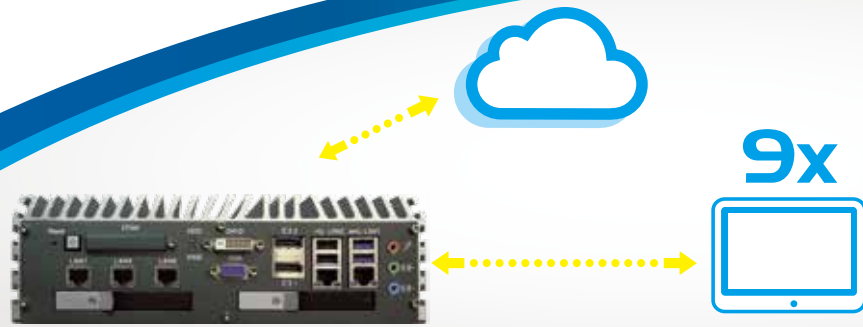
3<sup>rd</sup> Gen. Intel® Quad Core™ i7/i5/i3 Fanless Embedded System with 9 GbE LAN



- 3<sup>rd</sup> 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<sub>DC</sub> Overvoltage Protection
- Support 2 SO-DIMM DDR3 or DDR3L, up to 16GB
- QM77 System Chipset
- 2 SATA III (6Gbps) 2.5" HDD / SSD, mSATA
- 9 GbE LAN, Independent Lan Controller
- 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

ECS-7000 series support 3<sup>rd</sup> Gen Intel® Quad-Core™ series processor (6M Cache, up to 3.30 GHz), DDR3L and DDR3 maximum dual channel 16GB ram, 3 independent display (DP, DVI-D, and VGA), isolated DIO, maximum 6 GbE LANs, CFAST, two 2.5" SATA 6Gp/s HDD/SSD trays, 4 COM, 4 USB 3.0 ports, JST connector, and 2 miniPCI-express, plus with overvoltage protection and Trusted Platform Module which making ECS-7000 series stand out from others in machine vision and GigE imaging, intelligent automation, surveillance and security, and most of embedded applications. ECS-7000 full series powered by cutting-edge the 3<sup>rd</sup> Gen Intel® Quad-Core™ i7 Processor (6M Cache, up to 3.3 GHz) not only increasing power efficiency as much as 25% also integrates Intel® HD 4000 graphics and extremely low thermal design power as 35W providing an enhanced reliability, safety and shock resistance for fanless operation required environments. Maximum 9 GbE LAN, ECS-7000 series provide stable and speedy Ethernet with 9.6 kb/s to 1 Gb/s data transmission option for high bandwidth and supports Ethernet Control Automation Technology (EtherCAT).

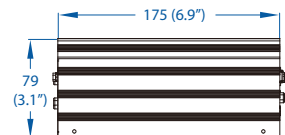
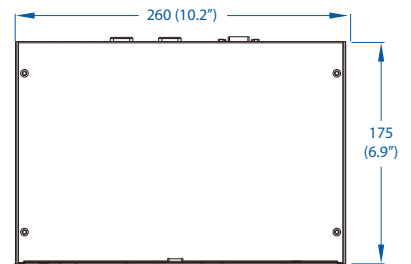
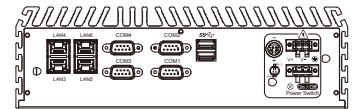
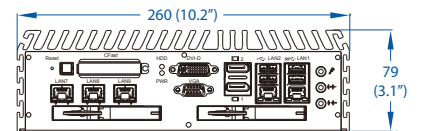
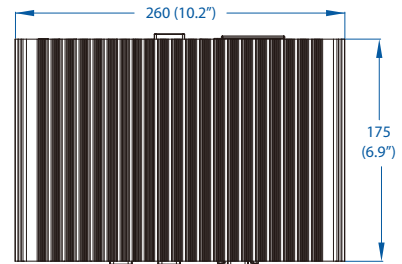




## Specification

<b>System</b>	
Processor	3 <sup>rd</sup> Generation Intel® Quad 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
<b>I/O Port</b>	
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
<b>Expansion</b>	
Mini PCIe	miniPCIe Socket (PCIe + USB + SIM card socket), Optional with mSATA
JST Connector	miniPCIe Socket (PCIe + USB), Optional with mSATA 1 Internal 6-pin (Internal USB 2.0)
<b>Graphics</b>	
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.
<b>Storage</b>	
SATA	2 Front Panel Accessible SATA III 6Gbps with Key Locks 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
<b>Audio</b>	
Audio Codec	Realtek ALC892, 5.1 Channel HD Audio
Audio Interface	Line-in, Line-out, Mic-in, Front Audio Header
<b>Ethernet</b>	
LAN1	Intel® 82579LM Gigabit LAN
LAN2~LAN9	Intel® 82574L Gigabit LAN
<b>Power</b>	
Power Input	1 Mini DIN One 3-pin Terminal Block for DC-IN : V+, V-, Frame Ground
Power Input Voltage	DC-IN 6 ~ 36V
Power Adapter	AC to DC +24V / 5A. 120W Max. (Optional)
Protection	On-board LT4356 for Power Input High Voltage Surge Protection
<b>Other</b>	
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
<b>Mechanical</b>	
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
<b>Environment</b>	
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	Random: 0.5Grms @5~500 Hz according to IEC68-2-64 Sinusoidal: 0.5Grms @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 Class A

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



Unit: mm (inch)

## Order Information

Part Number	Description
ESC-7000-9R	9 GbE LAN Fanless Embedded Controller, 2 Front Panel Accessible SSD   HDD Trays with Key Locks
Option	Description
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