

■ Specification

System

Processor	3 rd 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

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
Isolated DIO	8 DI, 8 DO (Optional)
LED	Power, SDD and CFast LEDs
GPIO	16 GPIO

Expansion

Mini PCIe	1 miniPCIe Socket: PCIe + USB + SIM Card Socket
SUMIT A, B	1 miniPCIe Socket: PCIe + USB
JST Connector	2 SUMIT Slots (Optional) 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 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
LAN2-6	Intel® 82574L Gigabit LAN by Each, Wake on LAN, PXE Support

Power

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 Protection	AC to DC +24V / 5A 120W Max. (Optional) 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

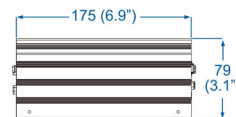
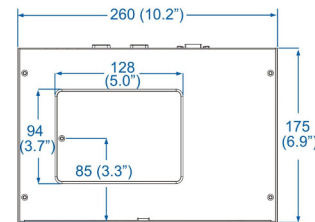
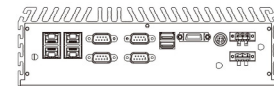
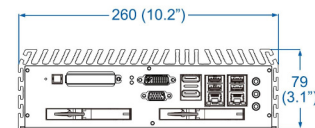
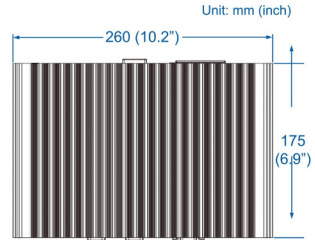
Mechanical

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	Random: 5Grms @5~500 Hz according to IEC68-2-64 Sinusoidal: 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

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



High Performance, Rugged, Extended Temp., Fan-less Embedded System with 9 GbE and Intel® QM77 Express Chipset & Choice of 3rd Gen. Intel® Quad 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
- 9 GbE LANs, Independent LAN Controllers
- QM77 System Chipset
- Support 2 SO-DIMM DDR3 or DDR3L, up to 16GB
- Isolated 8 DI | 8 DO, GPIO 8 DI | 8 DO
- 2 SATA III (6Gbps) 2.5" SSD | HDD, mSATA
- Built-In Input 80 V_{DC} Overvoltage Protection
- 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
- Onboard Trusted Platform Module (Optional)

ECS-7000 series support 3rd 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 9 GbE LANs, CFast, two 2.5" SATA 6Gp/s SSD | HDD 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 3rd 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 LANs, 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).

