

ECS-4000-2G

Intel® Core™ i7/ i5/ i3 Processor (Broadwell-U) Fanless Embedded System with 2 Gigabit LAN, 16 DIO, Slim, Rugged, Extended Temperature



Features

- 5th Generation Intel® Core™ i7/ i5/ i3 SoC (Broadwell-U)
- Supports 4K Resolution, up to 3 independent displays
- Fanless, -25°C to 70°C Operating Temperature
- 2 Independent Gigabit LAN
- 2 Mini PCIe Socket for 3G/ 4G/ LTE/ WiFi/ GPRS/ UMTS
- 2 External SIM Card Socket
- 16 DIO (8 DI, 8 DO)
- 2 2.5" SSD, 1 Front-access CFast Socket
- 6V to 36V DC-in, 80V Surge Protection
- Configurable Ignition Power Control



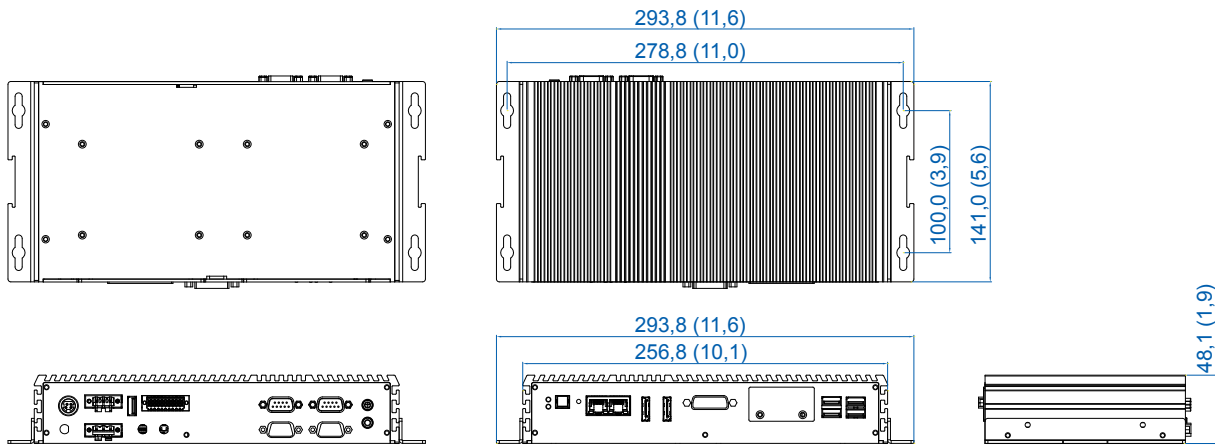
Specifications

System	
Processor	Intel® Core™ i7-5650U/ i5-5350U/ i3-5010U
Chipset	Intel® SoC (Broadwell-U)
BIOS	AMI
SIO	IT8786E
Memory	2 DDR3L 1333/ 1600 MHz SO-DIMM, up to 16GB
I/O Interface	
Serial	4 COM RS-232/ 422/ 485
USB	<ul style="list-style-type: none"> ▪ 2 USB 3.0 ▪ 4 USB 2.0 (3 External, 1 Internal)
DIO	16 DIO : 8 DI, 8 DO
LED	Power, HDD
SIM Card	2 SIM Card Socket (External)
Expansion	
Mini PCIe	2 Mini PCIe Socket : <ul style="list-style-type: none"> ▪ 1 Mini PCIe for PCIe/ USB/ External SIM Card ▪ 1 Mini PCIe for PCIe/ USB/ External SIM Card/ mSATA
Graphics	
Graphics Processor	Intel® HD Graphics 6000
Interface	<ul style="list-style-type: none"> ▪ DVI-D : Up to 1920 x 1080 @ 60Hz ▪ DisplayPort 1 : Up to 3840 x 2160 @ 60Hz ▪ DisplayPort 2 : Up to 3840 x 2160 @ 60Hz
Storage	
SATA	2 SATA III (6Gbps)
mSATA	1 SATA III (Mini PCIe Type, 6Gbps)
Storage Device	<ul style="list-style-type: none"> ▪ 1 CFast Socket, Push-in/ Push-out Ejector ▪ 2 2.5" SSD/ HDD Bracket (Internal)
Audio	
Audio Codec	Realtek ALC888S-VD, 7.1 Channel HD Audio
Audio Interface	1 Mic-in, 1 Line-out
Ethernet	
LAN 1	Intel® I218 Gigabit LAN supports iAMT
LAN 2	Intel® I210 Gigabit LAN

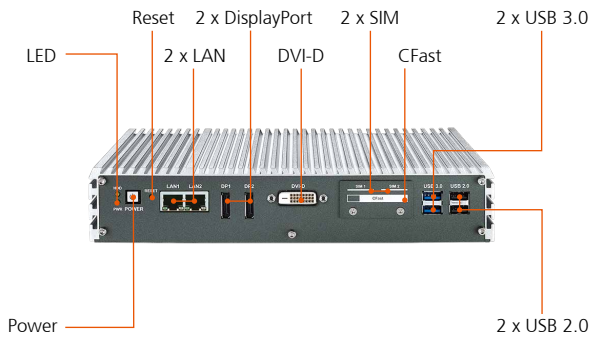
Power	
Power Input	6V to 36V, DC-in
Power Interface	<ul style="list-style-type: none"> ▪ 3-pin Terminal Block : V+, V-, Frame Ground ▪ Mini-DIN 4-pin
Ignition Control	16 Mode (Internal)
Remote Switch	3-pin Terminal Block : On, Off, IGN
Surge Protection	Up to 80V/1ms Transient Power
Others	
TPM	Optional Infineon SLB9665 supports TPM 2.0, LPC Interface
Watchdog Timer	Reset : 1 to 255 sec./min. per step
Smart Management	Wake on LAN, PXE supported
HW Monitor	Monitoring temperature, voltages. Auto throttling control when CPU overheats.
Software Support	
OS	Windows 8, Windows 7, Linux
Mechanical	
Dimensions (W x L x H)	257mm x 141mm x 48mm (10.1" x 5.6" x 1.9")
Weight	2.1 kg (4.6 lb)
Mounting	<ul style="list-style-type: none"> ▪ Wallmount by mounting bracket ▪ DIN Rail Mount
Environment	
Operating Temperature	-25°C to 70°C (-13°F to 158°F)
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Humidity	5% to 95% Humidity, non-condensing
Relative Humidity	95% @ 70°C
Shock	<ul style="list-style-type: none"> ▪ IEC 60068-2-27 ▪ SSD : 50G @ wallmount, Half-sine, 11ms
Vibration	<ul style="list-style-type: none"> ▪ IEC 60068-2-64 ▪ SSD : 5Grms, 5Hz to 500Hz, 3 Axis
EMC	CE, FCC, EN 50155, EN 50121-3-2

Dimensions

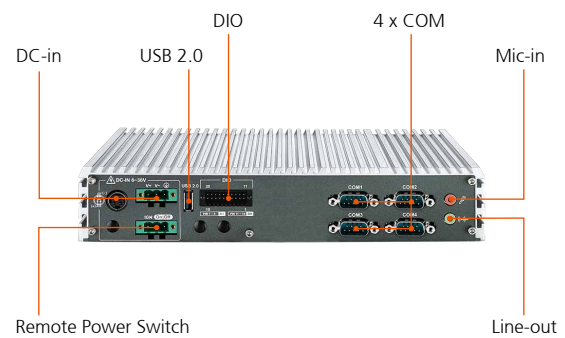
Unit : mm/ inch



Front I/O



Rear I/O



Order Information

ECS-4000-2G650U	ECS-4000 Slim Embedded System, Intel® Core™ i7-5650U Processor (Broadwell-U), 2 GbE LAN, 4 COM, 6 USB, 16 DIO
ECS-4000-2G350U	ECS-4000 Slim Embedded System, Intel® Core™ i5-5350U Processor (Broadwell-U), 2 GbE LAN, 4 COM, 6 USB, 16 DIO
ECS-4000-2G010U	ECS-4000 Slim Embedded System, Intel® Core™ i3-5010U Processor (Broadwell-U), 2 GbE LAN, 4 COM, 6 USB, 16 DIO
M340L-W28M1	Vecow DDR3L 4GB 1333/1066 MHz RAM, Wide Temperature -40°C to +85°C
DDR3L4G	Certified DDR3L-1600 4G RAM
DDR3L8G	Certified DDR3L-1600 8G RAM
PWA-120W	120W, 24V, 90VAC to 264VAC Power Adapter with 3-pin Terminal Block
PWA-120WM4P	120W, 24V, 90VAC to 264VAC Power Adapter with 4-pin Mini-DIN Connector
PWA-160W-WT	160W, 24V, 85VAC to 264VAC Power Adapter with 3-pin Terminal Block, Wide Temperature -30°C to +70°C
TMBK-20P-100	Terminal Block 20-pin to SCSI, 100cm
TMBK-20P-500	Terminal Block 20-pin to SCSI, 500cm
TMB-SCSI-20P	Terminal Board with One 20-pin SCSI Connector and DIN-Rail Mounting
VESA Mount	VESA Mounting Kit
DIN-RAIL	DIN Rail Kit
3G Module	Mini PCIe 3G/GPS Module with Antenna
4G Module	Mini PCIe 4G/GPS Module with Antenna
WiFi & Bluetooth Module	Intel® Mini PCIe WiFi & Bluetooth Module with Antenna