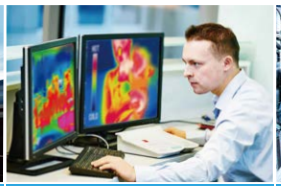
ECS-9780 GTX1050 Series

Workstation-grade Intel® Xeon®/Core™ i7 Processor (Skylake-H) Embedded System with Intel® CM236 & NVIDIA GeForce® GTX 1050 Ti/GTX 1050, NVIDIA Pascal™ architecture, 10-port GigE LAN w/8 PoE, 2 Front-access SSD Tray, 4 SIM, 6 USB 3.0, 4 COM, 32 Isolated DIO,
High Performance, Independent Graphics

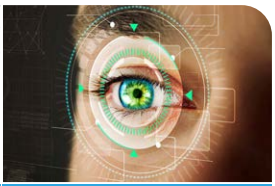
- Workstation-grade Intel® Xeon®/Core™ i7 Processor (Skylake-H) with CM236 chipset
- 10 Independent GigE LAN with 4 IEEE 802.3at PoE+ & 4 IEEE 802.3af PoE
- 2 DDR4 2133MHz Memory, up to 32GB (ECC/Non-ECC)
- 4 SIM Card Socket for WiFi/3G/4G/LTE/GPRS/UMTS
- 10V to 36V DC-in with 80V Surge Protection
- Configurable Ignition Power Control
- NVIDIA GeForce® GTX 10 Series graphics engine supports NVIDIA Pascal™ GPU architecture, up to 8K resolution
- Display : 1 VGA, 2DVI, 1 HDMI & 3 DisplayPort, up to 6 independent HD displays
- 2 Front-access 2.5" SSD Tray, 6 USB 3.0, 4 COM
- 32 Isolated DIO, 2 Mini PCIe/mSATA
- Optional supports full function SUMIT A, B

Machine Vision

Vehicle Computing


Intelligent Surveillance

Intelligent Automation

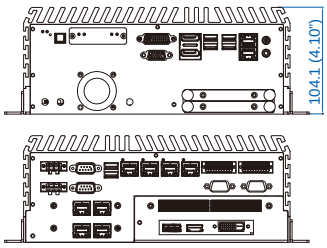

Deep Learning

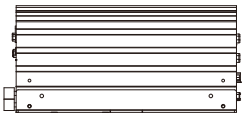
8K
PoE
Isolated DIO
SUMIT
SIM
TPM
10V~36V
80V
-20°
60°
E13
EN50155

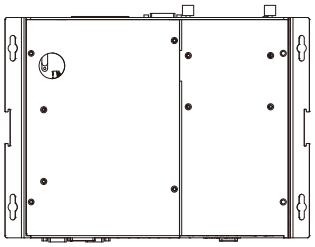
Vecow

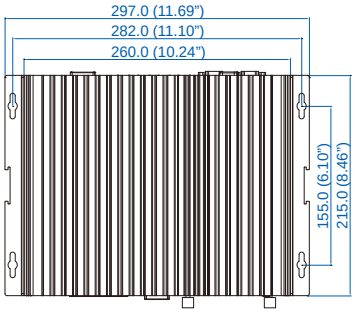
Dimensions & Drawing

Unit: mm (inch)









Specifications

System

Processor	Intel® Xeon® E3-1505M v5/Core™ i7-6820EQ Processor (Skylake-H)
Chipset	Intel® CM236
BIOS	AMI
SIO	IT8786E
Memory	2 DDR4 2133MHz SO-DIMM, up to 32GB
OS	Windows 10, Windows 8.1, Windows 7, Linux

I/O Interface

Serial	4 COM RS-232/422/485 (ESD 8KV)
USB	• 6 USB 3.0 (External) • 1 USB 2.0 (Internal)
Isolated DIO	32 Isolated DIO : 16 DI, 16 DO
LED	Power, HDD, PoE, Wireless
SIM Card	4 SIM Card Socket (3 External, 1 Internal)

Expansion

Mini PCIe	2 Mini PCIe Socket : • 1 Full-size for PCIe/USB/External SIM Card/mSATA • 1 Full-size for PCIe/Internal SIM Card/mSATA
SUMIT A, B	2 SUMIT Slot (Optional)

Graphics

Processor	• Intel® HD Graphics P530/530 • NVIDIA GeForce® GTX 1050 Ti/GTX 1050
Interface	7 Display interfaces : • 2 DVI : Up to 1920 x1200 @ 60 Hz • 1 DisplayPort : Up to 7680 x 3840 @ 60Hz • 2 DisplayPort : Up to 4096 x 2304 @ 60Hz • 1 VGA : Up to 1920 x 1200 @ 60Hz • 1 HDMI : Up to 4096 × 2160 @ 60Hz

Storage

SATA	4 SATA III support S/W RAID 0, 1, 5, 10 : • 3 SATA III (6Gbps) • 1 SATA III co-lay with Mini PCIe (6Gbps)
mSATA	4 mSATA connections : • 3 SATA III (Mini PCIe Type, 6Gbps) • 1 SATA III co-lay with SATA (Mini PCIe Type, 6Gbps)
Storage Device	• 1 CFast Socket, Push-in/Push-out Ejector • 2 Front-access 2.5" SSD/HDD Tray

Audio

Audio Codec	Realtek ALC888S-VD, 7.1 Channel HD Audio
Audio Interface	1 Mic-in, 1 Line-out

Ethernet

LAN 1	Intel® I219LM GigE LAN supports iAMT 11.0
LAN 2	Intel® I210 GigE LAN

PoE+

LAN 3 to LAN 6	GigE IEEE 802.3at (25.5W/48V) PoE+ by Intel® I210

PoE

LAN 7 to LAN 10	GigE IEEE 802.3af (15.4W/48V) PoE by Intel® I350

Power

Power Input	10V to 36V, DC-in
Power Interface	3-pin Terminal Block : V+, V-, Frame Ground
Ignition Control	16 Mode (Internal)
Remote Switch	3-pin Terminal Block
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.

Mechanical

Dimensions (WxLxH)	260mm x 215mm x 104mm (10.2" x 8.5" x 4.1")
Weight	4.7 kg (10.36 lb)
Mounting	• Wallmount by mounting bracket • DIN Rail Mount (Optional)

Environment

Operating Temp.	-20°C to 60°C (-4°F to 140°F)
Storage Temp.	-40°C to 85°C (-40°F to 185°F)
Humidity	5% to 95% Humidity, non-condensing
Relative Humidity	95% at 60°C
Shock	• IEC 60068-2-27 • SSD : 50G @ wallmount, Half-sine, 11ms
Vibration	• IEC 60068-2-64 • SSD : 5Grms, 5Hz to 500Hz, 3 Axis
EMC	E13, CE, FCC, EN50155, EN50121-3-2

Order Information

ECS-9780-505M-GTX1050T	• ECS-9700, Quad Core Intel® Xeon® E3-1505M v5, NVIDIA GeForce® GTX 1050 Ti, 10-port GigE LAN w/8 PoE, 2 SSD, 6 USB 3.0, 4 COM, 4 SIM, 32 Isolated DIO (ECC supported)
ECS-9780-505M-GTX1050	• ECS-9700, Quad Core Intel® Xeon® E3-1505M v5, NVIDIA GeForce® GTX 1050, 10-port GigE LAN w/8 PoE, 2 SSD, 6 USB 3.0, 4 COM, 4 SIM, 32 Isolated DIO (ECC supported)
ECS-9780-820Q-GTX1050T	• ECS-9700, Quad Core Intel® Core™ i7-6820EQ, NVIDIA GeForce® GTX 1050 Ti, 10-port GigE LAN w/8 PoE, 2 SSD, 6 USB 3.0, 4 COM, 4 SIM, 32 Isolated DIO
ECS-9780-820Q-GTX1050	• ECS-9700, Quad Core Intel® Core™ i7-6820EQ, NVIDIA GeForce® GTX 1050, 10-port GigE LAN w/8 PoE, 2 SSD, 6 USB 3.0, 4 COM, 4 SIM, 32 Isolated DIO
DDR4 16G	• Certified DDR4 16GB 2133MHz RAM
DDR4 8G	• Certified DDR4 8GB 2133MHz RAM
DDR4 4G	• Certified DDR4 4GB 2133MHz RAM
PWA-280W-WT	• 280W, 24V, 85V AC to 264V AC Power Adapter with 3-pin Terminal Block, Wide Temperature -30°C to +70°C
VESA Mount	• VESA Mounting Kit
DIN-RAIL	• DIN Rail Kit
TMK2-20P-100	• Terminal Block 20-pin to Terminal Block 20-pin Cable, 100cm
TMK2-20P-500	• Terminal Block 20-pin to Terminal Block 20-pin Cable, 500cm
TMB-TMBK-20P	• Terminal Board with One 20-pin Terminal Block Connector and DIN-Rail Mounting
3G Module	• Mini PCIe 3G/GPS Module with Antenna
4G Module	• Mini PCIe 4G/GPS Module with Antenna
WiFi & Bluetooth Module	• Mini PCIe WiFi & Bluetooth Module with Antenna

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ECS-9780 GTX1050-20210322

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