

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



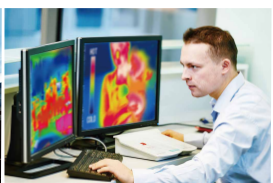
- Workstation-grade Intel® Xeon®/Core™ i7 Processor (Skylake-H) with CM236 chipset
- 10 Independent GigE LAN with 4 IEEE 802.3at PoE+ & 4 IEEE 802.3af PoE
- 2 DDR4 2133MHz Memory, up to 32GB (ECC/Non-ECC)
- 4 SIM Card Socket for WiFi/3G/4G/LTE/GPRS/UMTS
- 10V to 36V DC-in with 80V Surge Protection
- 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



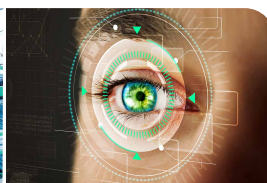
Vehicle Computing



Intelligent Surveillance



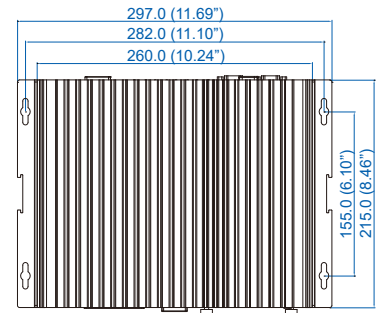
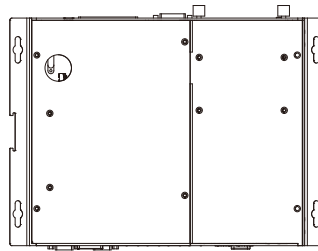
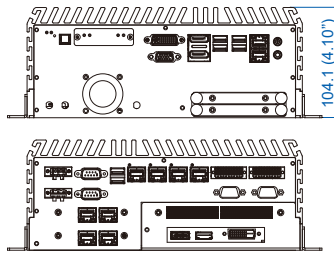
Intelligent Automation



Deep Learning



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

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|---------------------|------------------------------------------------------------------------------------------------------|
| Serial | 4 COM RS-232/422/485 (ESD 8KV) |
| USB | <ul style="list-style-type: none"> 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

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|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mini PCIe | 2 Mini PCIe Socket : <ul style="list-style-type: none"> 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

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|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Processor | <ul style="list-style-type: none"> Intel® HD Graphics P530/530 NVIDIA GeForce® GTX 1050 Ti/GTX 1050 |
| Interface | 7 Display interfaces : <ul style="list-style-type: none"> 2 DVI : Up to 1920 x 1200 @ 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 x 2160 @ 60Hz |

Storage

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|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SATA | 4 SATA III support S/W RAID 0, 1, 5, 10 : <ul style="list-style-type: none"> 3 SATA III (6Gbps) 1 SATA III co-lay with Mini PCIe (6Gbps) |
| mSATA | 4 mSATA connections : <ul style="list-style-type: none"> 3 SATA III (Mini PCIe Type, 6Gbps) 1 SATA III co-lay with SATA (Mini PCIe Type, 6Gbps) |
| Storage Device | <ul style="list-style-type: none"> 1 CFast Socket, Push-in/Push-out Ejector 2 Front-access 2.5" SSD/HDD Tray |

Audio

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

Ethernet

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

PoE+

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

PoE

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

Power

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|-------------------------|---------------------------------------------|
| 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

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|-------------------------|-------------------------------------------------------------------------------|
| 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

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|---------------------------|--------------------------------------------------------------------------------------------------------------------|
| Dimensions (WxLxH) | 260mm x 215mm x 104mm (10.2" x 8.5" x 4.1") |
| Weight | 4.7 kg (10.36 lb) |
| Mounting | <ul style="list-style-type: none"> Wallmount by mounting bracket DIN Rail Mount (Optional) |

Environment

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|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 | <ul style="list-style-type: none"> IEC 60068-2-27 SSD : 50G @ wallmount, Half-sine, 11ms IEC 60068-2-64 SSD : 5Grms, 5Hz to 500Hz, 3 Axis |
| Vibration | <ul style="list-style-type: none"> IEC 60068-2-64 SSD : 5Grms, 5Hz to 500Hz, 3 Axis |
| EMC | E13, CE, FCC, EN50155, EN50121-3-2 |

Order Information

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|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 16GB | Certified DDR4 16GB 2133MHz RAM |
| DDR4 8GB | Certified DDR4 8GB 2133MHz RAM |
| DDR4 4GB | 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 |

ECS-9780 GTX1050-20210322