

# ECX-1300 GTX1050

Intel® Xeon®/Core™ i7/i5/i3 Expandable GPU Computing System with Intel® C246 & NVIDIA® GeForce® GTX 1050, NVIDIA® Pascal™ architecture, 2 GigE LAN, 4 Front-access SSD Tray, 1 PCIe/PCI, 6 USB 3.1, 2 M.2 Socket, 3 SIM, 16 GPIO, High Performance, Independent Graphics



## Features

- 8th Generation Intel® Xeon®/Core™ i7/i5/i3 (Coffee Lake-S) with workstation-grade Intel® C246 Chipset
- 2 DDR4 2666MHz Memory, up to 64GB (ECC/Non-ECC)
- NVIDIA® GeForce® GTX 10 Series graphics engine supports NVIDIA® Pascal™ GPU architecture, up to 8K resolution
- 1 VGA, 1 HDMI, 2 DVI & 3 DisplayPort interfaces support up to 6 independent HD displays
- Multiple external USB 3.1 Gen 2 support up to 10Gbps data transfer
- 2 GigE LAN support iAMT 12.0, 1 PCIe/PCI
- 4 2.5" SSD trays, RAID 0, 1, 5, 10 supported
- 3 External SIM sockets, 6 USB 3.1, 4 COM RS-232/422/485
- 12V to 36V DC-in, 80V Surge Protection, Ignition Control



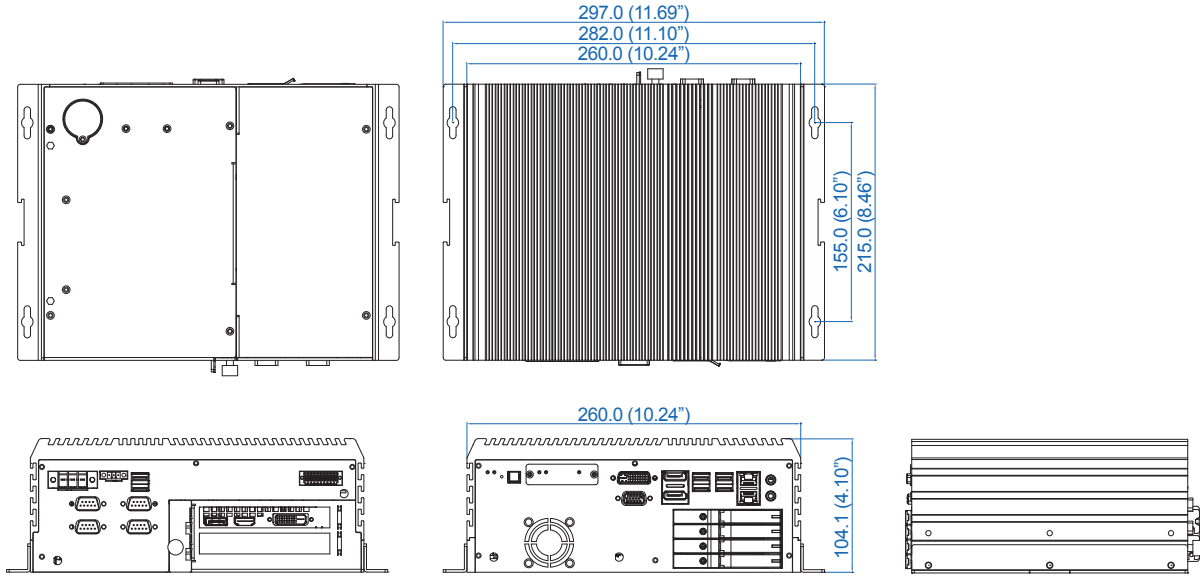
## Specifications

System	
Processor	6 Cores Intel® Xeon®/Core™ i7/i5/i3 Processor (Coffee Lake-S)
Chipset	Intel® C246
BIOS	AMI
SIO	IT8786E
Memory	2 DDR4 2666MHz SO-DIMM, up to 64GB (ECC/Non-ECC)
I/O Interface	
Serial	4 COM RS-232/422/485 (ESD 8KV)
USB	<ul style="list-style-type: none"> <li>▪ 6 USB 3.1 (External)</li> <li>▪ 1 USB 2.0 (Internal)</li> </ul>
GPIO	16 GPIO
LED	Power, HDD, Wireless
SIM Card	3 External SIM Card Socket
Expansion	
Mini PCIe	2 Full-size for PCIe/USB/External SIM Card/mSATA
M.2	1 M.2 Key E Socket
PCI/PCIe	ECX-1310-GTX1050 : 1 PCIe x4 ECX-1301-GTX1050 : 1 PCI
Graphics	
Graphics Processor	<ul style="list-style-type: none"> <li>▪ Intel® UHD Graphics P630/630</li> <li>▪ NVIDIA® GeForce® GTX 1050</li> </ul>
Interface	<ul style="list-style-type: none"> <li>▪ 1 VGA : Up to 1920 x 1200 @60Hz</li> <li>▪ 1 HDMI : Up to 4096 x 2304 @60Hz</li> <li>▪ 2 DVI-D : Up to 1920 x 1200 @60Hz</li> <li>▪ 1 DisplayPort : Up to 7680 x 3840 @60Hz</li> <li>▪ 2 DisplayPort : Up to 4096 x 2304 @60Hz</li> </ul>
Storage	
SATA	4 SATA III (6Gbps) support S/W RAID 0, 1, 5, 10
mSATA	2 SATA III (Mini PCIe Type, 6Gbps)
M.2	<ul style="list-style-type: none"> <li>▪ 1 M.2 Key B Socket</li> </ul>
Storage Device	<ul style="list-style-type: none"> <li>▪ 1 CFast Socket, Push-in/Push-out Ejector</li> <li>▪ 4 Front-access 2.5" SSD/HDD Tray</li> </ul>
Audio	
Audio Codec	Realtek ALC892, 5.1 Channel HD Audio
Audio Interface	1 Mic-in, 1 Line-out
Ethernet	
LAN 1	Intel® I219LM GigE LAN supports iAMT 12.0
LAN 2	Intel® I210 GigE LAN

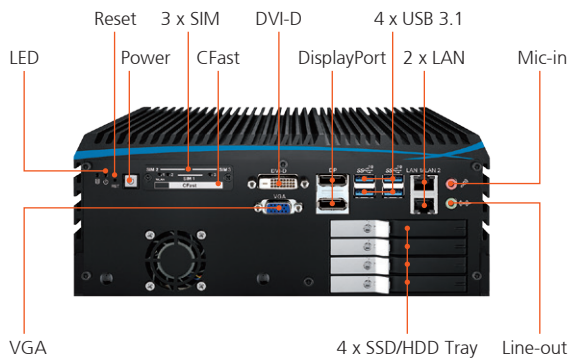
Power	
Power Input	12V to 36V, DC-in
Power Interface	3-pin Terminal Block : V+, V-, Frame Ground
Ignition Control	16 Mode (Internal)
Remote Switch	3-pin Terminal Block
Surge Protection	Up to 80V/1ms Transient Power
Others	
TPM	Optional Infineon SLB9665 supports TPM 2.0, LPC Interface
Watchdog Timer	Reset : 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.
Software Support	
OS	Windows 10, Linux
Mechanical	
Dimensions	260mm x 215mm x 104.1mm (10.24" x 8.46" x 4.10")
Weight	5.8 kg (12.79 lb)
Mounting	<ul style="list-style-type: none"> <li>▪ Wallmount by mounting bracket</li> <li>▪ DIN Rail Mount (Optional)</li> </ul>
Environment	
Operating Temperature	<b>35W TDP CPU</b> : -20°C to 60°C (-4°F to 140°F) <b>65W TDP CPU</b> : -20°C to 55°C (-4°F to 131°F) <b>80W TDP CPU</b> : -20°C to 45°C (-4°F to 113°F)
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Humidity	5% to 95% Humidity, non-condensing
Relative Humidity	95% @ 60°C
Shock	<ul style="list-style-type: none"> <li>▪ IEC 60068-2-27</li> <li>▪ SSD : 50G @ wallmount, Half-sine, 11ms</li> </ul>
Vibration	<ul style="list-style-type: none"> <li>▪ IEC 60068-2-64</li> <li>▪ SSD : 5Grms, 5Hz to 500Hz, 3 Axis</li> </ul>
EMC	CE, FCC, EN50155, EN50121-3-2

## Dimensions

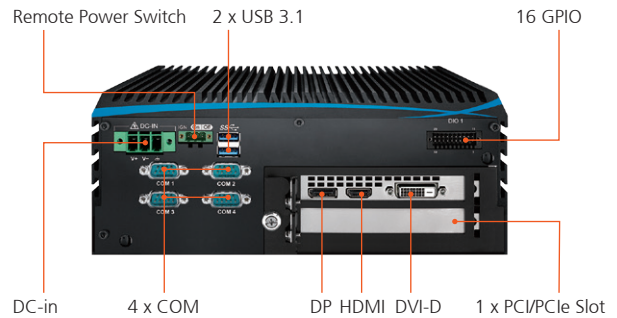
Unit : mm/ inch



## Front I/O



## Rear I/O



## Order Information

<b>ECX-1310-GTX1050</b>	ECX-1300, NVIDIA® GeForce® GTX 1050, 2 GigE LAN, 4 SSD Tray, 1 PCIe x4, 6 USB 3.1, 4 COM, 3 SIM, 16 GPIO
<b>ECX-1301-GTX1050</b>	ECX-1300, NVIDIA® GeForce® GTX 1050, 2 GigE LAN, 4 SSD Tray, 1 PCI, 6 USB 3.1, 4 COM, 3 SIM, 16 GPIO

## Accessories

<b>DDR4 32G</b>	Certified DDR4 32GB 2666MHz RAM
<b>DDR4 16G</b>	Certified DDR4 16GB 2666/2400/2133MHz RAM
<b>DDR4 8G</b>	Certified DDR4 8GB 2666/2400/2133MHz RAM
<b>DDR4 4G</b>	Certified DDR4 4GB 2666/2400/2133MHz RAM
<b>PWA-160WB-WT</b>	160W, 24V, 85V AC to 264V AC Power Adaptor with 3-pin Terminal Block (7.62mm pitch), Wide Temperature -30°C to +70°C
<b>PWA-280WB-WT</b>	280W, 24V, 85V AC to 264V AC Power Adaptor with 3-pin Terminal Block (7.62mm pitch), Wide Temperature -30°C to +70°C
<b>PWS-360W</b>	360W, 24V, 90V AC to 264V AC Power Supply
<b>PWS-480W-WT</b>	480W, 24V, 90V AC to 305V AC Power Supply, Wide-Temp, IP65
<b>VESA Mount</b>	VESA Mounting Kit
<b>DIN-RAIL Kit</b>	DIN Rail and VESA Mounting Kit
<b>TMK2-20P-100</b>	Terminal Block 20-pin to Terminal Block 20-pin Cable, 100cm
<b>TMK2-20P-500</b>	Terminal Block 20-pin to Terminal Block 20-pin Cable, 500cm
<b>TMB-TMBK-20P</b>	Terminal Board with One 20-pin Terminal Block Connector and DIN-Rail Mounting
<b>4G Module</b>	Mini PCIe 4G/GPS Module with Antenna
<b>WiFi &amp; Bluetooth</b>	WiFi & Bluetooth Module with Antenna

## CPU List

Series	CPU	Cache (MB)	Turbo Freq. (GHz)	TDP (W)	ECC Memory
Intel® Xeon®	E-2176G	12	4.6	80	Yes
	E-2124G	8	4.5	71	
Intel® Core™	i7-8700	12	4.6	65	NA
	i7-8700T		4.0	35	
	i5-8500	9	4.1	65	NA
	i5-8500T		3.5	35	
	i3-8100	6	3.6	65	Yes
i3-8100T	3.1		35		