

# RCS-7440/ 7422A/ 7422/ 7404

Intel® Core™ i7/ i5/ i3 Fanless Robust Computing System with Intel® QM77 Chipset, 2 GigE LAN, 8 USB, 4 COM, 4 PCI/ PCIe, 32 Isolated DIO, 16 GPIO, Extended Temperature



## Features

- Quad Core Intel® Core™ i7/ i5/ i3 Processor (Ivy Bridge)
- Supports VGA/ DVI-D/ Dual DisplayPort/ LVDS interface, up to 3 independent displays
- Fanless, -25°C to 70°C Operating Temperature
- 2 GigE LAN, iAMT 8.0 supported
- 32 Isolated DIO, 16 GPIO
- Expansion : 4 PCIe x8/ PCIe x4/ PCI Slot
- 4 COM, 4 USB 3.0, 4 USB 2.0
- 6V to 36V DC-in, 80V Surge Protection
- 2 SATA III for 2.5" SSD/ HDD, 1 CFast Socket
- SIM Card Socket for 3G/ 4G/ LTE/ WiFi/ GPRS/ UMTS



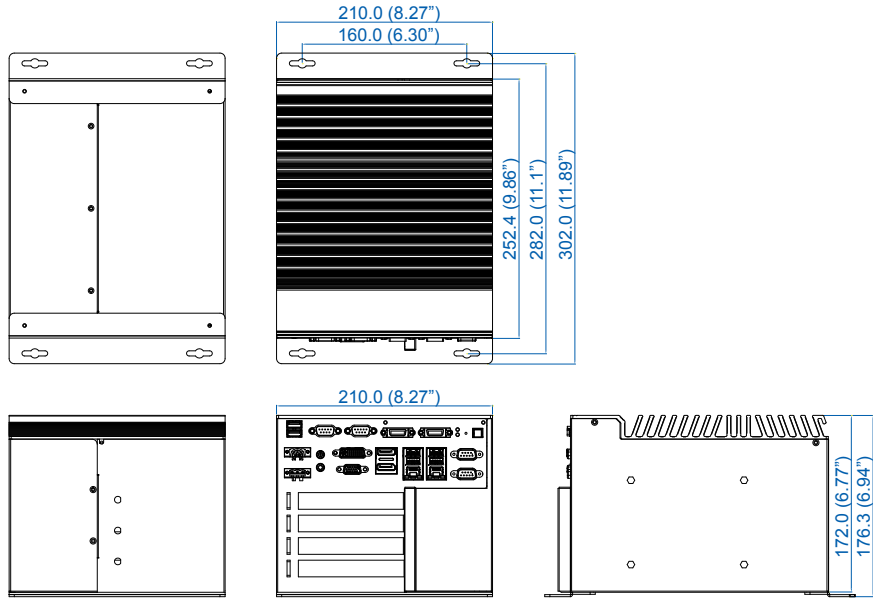
## Specifications

System	
Processor	Intel® Core™ i7-3610QE/ i5-3610ME/ i3-3120ME
Chipset	Intel® QM77
BIOS	AMI
SIO	IT8783
Memory	2 DDR3 1066/ 1333/ 1600 MHz or DDR3L 1066/ 1333 MHz SO-DIMM, up to 16GB
I/O Interface	
Serial	<ul style="list-style-type: none"> <li>▪ 1 COM RS-232/ 422/ 485</li> <li>▪ 3 COM RS-232</li> </ul>
USB	<ul style="list-style-type: none"> <li>▪ 4 USB 3.0 (External)</li> <li>▪ 4 USB 2.0 (2 External, 2 Internal by JST Connector)</li> </ul>
Isolated DIO	Dual 16 Isolated DIO : <ul style="list-style-type: none"> <li>▪ Isolated DIO 1 : 16 Isolated DIO (8 DI, 8 DO)</li> <li>▪ Isolated DIO 2 : 16 Isolated DIO (8 DI, 8 DO)</li> </ul>
GPIO	16 GPIO (Internal)
LED	Power, HDD
SIM Card	1 SIM Card Socket (Internal)
Expansion	
Mini PCIe	2 Mini PCIe Socket : <ul style="list-style-type: none"> <li>▪ 1 Mini PCIe for PCIe/ USB/ Internal SIM Card</li> <li>▪ 1 Mini PCIe for PCIe/ USB/ mSATA</li> </ul>
PCI/ PCIe	RCS-7440 : 1 PCIe x8 Slot, 3 PCIe x4 Slot RCS-7422A : 1 PCIe x8 Slot, 1 PCIe x4 Slot, 2 PCI Slot RCS-7422 : 2 PCIe x4 Slot, 2 PCI Slot RCS-7404 : 4 PCI Slot
Graphics	
Graphics Processor	Intel® HD Graphics 4000
Display Memory	Shared Memory, up to 1.7GB
Interface	<ul style="list-style-type: none"> <li>▪ VGA : DB-15, up to 1920 x 1200</li> <li>▪ DVI-D : Up to 1920 x 1200</li> <li>▪ DisplayPort 1 : Up to 2560 x 1600</li> <li>▪ DisplayPort 2 : Up to 1920 x 1200</li> <li>▪ LVDS : Dual channel 24-bit, up to 1920 x 1200</li> </ul>
Storage	
SATA	<ul style="list-style-type: none"> <li>▪ 2 SATA III (6Gbps)</li> <li>▪ 2 SATA II (3Gbps)</li> </ul>
mSATA	1 mSATA (Mini PCIe Type, SATA II 3Gbps)
Storage Device	<ul style="list-style-type: none"> <li>▪ 1 CFast Socket, Push-in/ Push-out Ejector (Internal)</li> <li>▪ 2 2.5" SSD/ HDD Bracket (Internal)</li> </ul>
Audio	
Audio Codec	Realtek ALC892, 5.1 Channel HD Audio
Audio Interface	1 Mic-in, 1 Line-out

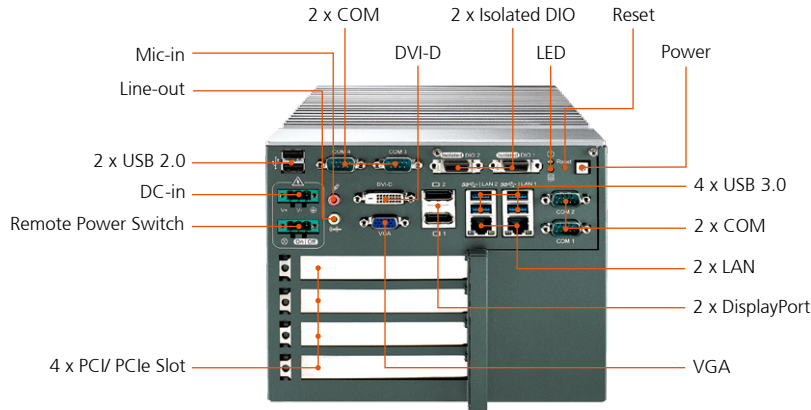
Ethernet	
LAN 1	Intel® 82579LM GigE LAN supports iAMT 8.0
LAN 2	Intel® 82574L GigE LAN
Power	
Power Input	6V to 36V, DC-in
Power Interface	3-pin Terminal Block : V+, V-, Frame Ground
Remote Switch	3-pin Terminal Block
Surge Protection	Up to 80V/1ms Transient Power
Others	
TPM	Optional Infineon SLB9635 supports TPM 1.2, 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 8.1, Windows 7, Windows XP, Linux
Mechanical	
Dimensions (W x L x H)	172mm x 252mm x 210mm (6.77" x 9.86" x 8.27")
Weight	3.8 kg (8.4 lb)
Mounting	Wallmount by mounting bracket
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	10% to 95% Humidity, non-condensing
Relative Humidity	95% @ 70°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>
Certification	CE, FCC

# Dimensions

Unit : mm/ inch



# Front I/O



# Order Information

<b>RCS-7440</b>	RCS-7000, 1 PCIe x8, 3 PCIe x4, 2 GigE LAN, 8 USB, 4 COM, 1 SIM, Isolated DIO, 16 GPIO
<b>RCS-7422A</b>	RCS-7000, 1 PCIe x8, 1 PCIe x4, 2 PCI, 2 GigE LAN, 8 USB, 4 COM, 1 SIM, Isolated DIO, 16 GPIO
<b>RCS-7422</b>	RCS-7000, 2 PCIe x4, 2 PCI, 2 GigE LAN, 8 USB, 4 COM, 1 SIM, Isolated DIO, 16 GPIO
<b>RCS-7404</b>	RCS-7000, 4 PCI, 2 GigE LAN, 8 USB, 4 COM, 1 SIM, Isolated DIO, 16 GPIO
<b>i7-3610QE</b>	Ivy Bridge 3rd Gen Intel® Mobile Quad Core™ i7 Processor
<b>i5-3610ME</b>	Ivy Bridge 3rd Gen Intel® Mobile Core™ i5 Processor
<b>i3-3120ME</b>	Ivy Bridge 3rd Gen Intel® Mobile Core™ i3 Processor
<b>M340S-W28M1</b>	Vecow DDR3 4GB 1333/ 1066 MHz RAM, Wide Temperature -40°C to +85°C
<b>Certified DDR3 4GB RAM</b>	Certified DDR3 4GB 1333/ 1600 MHz RAM
<b>Certified DDR3 8GB RAM</b>	Certified DDR3 8GB 1333/ 1600 MHz RAM
<b>PWA-120W</b>	120W, 24V, 90V AC to 264V AC Power Adapter with 3-pin Terminal Block
<b>PWA-160W-WT</b>	160W, 24V, 85V AC to 264V AC Power Adapter with 3-pin Terminal Block, Wide Temperature -30°C to +70°C
<b>SCSI-20P-100</b>	20-pin SCSI Cable, 1M
<b>TMB-SCSI-20P</b>	Terminal Board with One 20-pin SCSI Connector and DIN-Rail Mounting
<b>3G Module</b>	Mini PCIe 3G/GPS Module with Antenna
<b>4G Module</b>	Mini PCIe 4G/GPS Module with Antenna
<b>WiFi &amp; Bluetooth Module</b>	Intel® Mini PCIe WiFi & Bluetooth Module with Antenna