

# RCS-7000 series

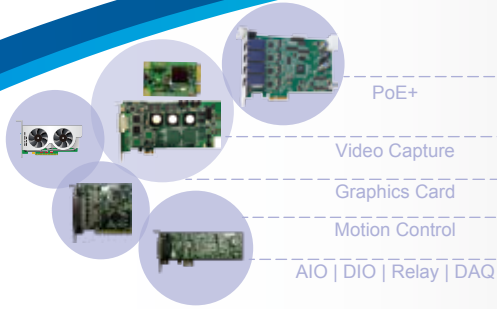
High Performance, Rugged, Extended Temp, Fan-less Robust Computing System with 2 | 4 PCI | PCI-e Slots, Intel® QM77 Express Chipset & Choice of 3<sup>rd</sup> Gen. Intel® Core™ i7 | i5 | i3 Mobile Processors



- 3<sup>rd</sup> Gen. Intel® Quad Core™ i7 | i5 | i3 Ivy Bridge Mobile Processor (6M Cache, up to 3.30 GHz)
- 2 | 4 Expansion Slots
- Isolated DIO, 16 DI | 16 DO
- Fan-less, -25°C to 70°C Operation Temperature
- QM77 System Chipset
- 2 GbE LAN, 4 COM, 4 USB 3.0 + 2 USB 2.0
- Support 2 SO-DIMM DDR3 or DDR3L, up to 16GB
- 5 Display Support: 2 DP, DVI-D, VGA, LVDS  
3 Independent Displays
- 2 SATA III (6Gbps) 2.5" SSD | HDD
- Intel® AMT 8.0 Support

RCS-7000 series supports 3<sup>rd</sup> Gen Intel® Quad-Core™ series processor (6M Cache, up to 3.30 GHz), DDR3L and DDR3 maximum dual channel 16GB ram, 2 | 4 PCI or PCI-e slots, 32 isolated DIO, 5 display (2 DP, DVI-D, VGA, LVDS), 2 GbE LANs, CFast, two 2.5" SATA 6Gp/s SSD | HDD trays, 4 COM, 4 USB 3.0 ports, JST connector, and 2 miniPCI-express, plus with overvoltage protection and Trusted Platform Module. Using only one Ethernet cable to supply power and transmit and sync data simultaneously, RCS-7000 series is one-of-a-kind dream fan-less embedded system for machine Vision, motion control, outdoor imaging, 3-D imaging, ITS (Intelligent Traffic Solutions), quality control, and medical imaging applications.





- Machine Vision
- AOI
- Intelligent Automation
- Video Analytics

## Specification

### System

Processor	3 <sup>rd</sup> Generation Intel® Core™ i7   i5   i3 Ivy Bridge Processors (6M Cache, up to 3.30 GHz)
Chipset	Intel® Mobile QM77
BIOS	AMI
SIO	IT8783F
Memory	DDR3 1066   1333   1600 MHz, DDR3L 1066   1333 MHz 16GB Max., 2 204-pin SO-DIMM Sockets

### I/O Port

Serial Interface	3 COM RS-232, 1 COM RS-232 / 485 / 422
USB	6 External USB (4 USB 3.0 + 2 USB2.0) + 1 Internal USB 2.0
Isolated DIO	16 DI, 16 DO
LED	Power, SDD, CFast, and WDT LEDs
GPIO	16 GPIO

### Expansion

PCI Express   PCI	RCS-7400: 4 Slots	RCS-7200: 2 Slots
Mini PCIe	1x miniPCIe socket (PCIe +USB+ SIM card socket)	1x miniPCIe socket (PCIe +USB), compatible with mSATA

### Graphics

Chipset	Intel® GMA HD 4000
Display Memory	Shared Memory, Up to 1.7GB
Interface	DB-15 VGA / 1920 x 1200 Max. DVI-D   1920 x 1200 Max. Display Port 1   2560 x 1600 Max. Display Port 2   1920 x 1200 Max. LVDS   Dual Channel 24-bit   1920 x 1200 Max.

### Storage

SATA	2 SATA III 6Gbps 2 SATA II 3Gbps
Storage Expansion	CFast Slot, Push In   Out Ejector

### Audio

Audio Codec	Realtek ALC892, 5.1 Channel HD Audio
Audio Interface	Line-out, Mic-in, Front Audio Header

### Ethernet

LAN1	Intel® 82579LM Gigabit LAN, Wake on LAN, PXE Support ; Intel® AMT 8.0
LAN2	Intel® 82574L Gigabit LAN, Wake on LAN, PXE Support

### Power

Power Input	3-Pin Terminal Block for DC-IN : V+, V-, Frame Ground ATX: 2-Pin Remote Power On   Off Switch DC-IN 6 ~ 36V
Power Input Voltage	AC to DC +24V / 5A, 120W Max. (Optional)
Power Adapter Protection	On-board LT4356 for Power Input High Voltage Surge Protection

### Other

Trusted Platform Module (TPM)	Infineon SLB9635, LPC Interface (Optional)
Watchdog Timer	Reset: 1 to 255 sec / min Per Step
HW Monitor	Temperature   Voltages Auto Throttling Control When CPU Overheats

### Mechanical

Chassis Construction	Aluminum Housing
Size(W x D x H)	RCS-7400: 172mm x 252mm x 210mm (6.8" x 9.9" x 8.3") RCS-7200: 128mm x 252mm x 210mm (5" x 9.9" x 8.3")
Weight	3Kg (6.6 lb)
Mounting	Wall-mount by Mounting Bracket

### Environment

Operating Temperature	-25°C to 70°C (-13°F to 157°F)
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Humidity	10% to 95% Humidity, Non-condensing
Relative Humidity	95% at 70°C
Vibration	Operating: 5Grms @5-500 Hz According to IEC68-2-64
Shock	Operating, 50 Grms, Half-sine 11 ms Duration (w / SSD, According to IEC60068-2-27)
EMC	CE, FCC, RoHS

\*All product specifications and photos are subject to change without prior notice.

## Order Information

Part Number	Description
RCS-7422	Fan-less Robust Computing System with 2 PCI, 2 PCI-e x4, 2 SO-DIMM, 4 COM, 4 USB 3.0, 2 SATA III SSD   HDD, Isolated DIO
RCS-7211	Fan-less Robust Computing System with 1 PCI, 1 PCI-e x16, 2 SO-DIMM, 4 COM, 4 USB 3.0, 2 SATA III SSD   HDD, Isolated DIO
RCS-7220	Fan-less Robust Computing System with 1 PCI-e x4, 1 PCI-e x16, 2 SO-DIMM, 4 COM, 4 USB 3.0, 2 SATA III SSD   HDD, Isolated DIO

Option	Description
i7-3610QE	Ivy Bridge 3 <sup>rd</sup> Gen Intel® Mobile Quad-Core™ i7 Processor
i5-3610ME	Ivy Bridge 3 <sup>rd</sup> Gen Intel® Mobile Core™ i5 Processor
i3-3120ME	Ivy Bridge 3 <sup>rd</sup> Gen Intel® Mobile Core™ i3 Processor
M340S-W28M1	Vecow DDR3 4GB 1333   1066MHz RAM, Micron® Chip, Wide Temperature -40°C ~ +85°C
KVR1333D3S9/8G	Kingston® DDR3 8GB PC1333 RAM
PWA-160W-WT	160W, 24V, 85V <sub>AC</sub> to 264V <sub>AC</sub> Industrial Power Adaptor, Wide Temperature -30°C ~ +70°C
PWA-120W	120W, 24V, 90V <sub>AC</sub> to 264V <sub>AC</sub> Power Adaptor
SCSI-20P-100	20-In SCSI Cable, 1M
TMB-SCSI-20P	Terminal Board with One 20-Pin SCSI Connector and DIN-Rail Mounting

Unit: mm (inch)

