



RXi-142 HPCi

Controller platform

Technological innovation and improvements are an integral part of new platform introduction of Power Conversion products. New product features are being developed based on customer experience in order to improve product performance, availability and reliability. The new RXi-142 hardware and HPCi controller platform will replace our RXi-042 in all new product and upgrade paths for legacy hardware replacements.

RXi-142 CONTROLLER

The RXi-142 controller has been developed to meet Power Conversion stringent requirements for Drive & Automation applications across all business segments. The RXi-142 features flexible architecture, advanced HPCi platform & high reliability computing. The RXi-142 is the 2nd generation of the RXi family following the RXi-042 and shares many components, features and functionalities with its predecessor for troubleshooting and maintaining legacy MV7/SD7 drive controls.

UPGRADE PATH FOR LEGACY RXi-042

The RXi-142 shares the same mechanical chassis, footprint and dimensions as RXi-042. There will be a visible label to distinguish between 042 and 142.

There are 3 significant developments:

- New Intel dual core CPU
- Migration to the newer VxWorks® 7 Operating System running with a new version of HPCi firmware and tools
- Enhanced Cyber security to comply with IEC62443-4-2



Customers are advised to use the latest HPCi V7.x to take advantage of the latest cyber enhancements.

Migration of Rxi-042 to RXi-142 will depend on HPCi firmware installed on site:

- RXi-142 can replace existing RXi-042 hardware running HPCi V5.7 or higher without changes to the software
- Installations running HPCi <V5.7 may need to upgrade HPCi drivers/libraries to run on the RXi-142

Our Service team can help with more specific queries.



GE VERNOVA

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FIELD EXPANSION CARDS

Power Conversion, a GE Vernova business aims to protect Customer investment in critical installations. Hence, all PCI expansion cards used on the RXi-042 can be used on the RXi-142 subject to software compatibility outlined on the previous page.

Moreover, the RXi-142 introduces new PCIe variants to ensure provision of updated technology and long-term customer support.

REFERENCE PART NUMBERS AND FEATURE SET

All RXi-142 configurations have:

- 5x GbE LANs, 4x USB, and 1 display Port
- 24 VDC Input, Reset Watchdog, RTC and Temperature Sensor
- Suitable for Flat (wall) & Bookshelf mounting orientation
- Operational Temperature range of 0- 60° C at 2000m Above Sea Level

BENEFITS

Scalable & improved performance

- Scalable CPU performance @ 1.6 GHz & 2.9 GHz
- Performance improvement vs RXi-042 due to more efficient CPU architecture & faster clock speed
- Cyber security meets IEC62443-4-1, IEC62443-4-2 to SL1 & IEC 62443-2-4 to ML3
- 0, 2 or 4 PCI or PCIe slots

Flexible functionality

- 5 x Ethernets 10/100/1000BASE-T
- Up to 4 RS232 or opto-coupled 422/485 ports
- Internal and external USB ports (2.0/3.0)
- Flat and Bookshelf mounting
- SATA interface for 2.5"SSD & CFAST slot

Cost savings

- Easier Migration and requalification
- CPU with longer life cycle on COM Express compliant technology

High reliability

- Rugged Aluminum enclosure with special thermal design, fan-less operation & overheat protection
- High speed NV-RAM & all-soldered components

CONTACT US

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REFERENCE PART NUMBERS AND FEATURE SET

RXi-042 MPN	RXi-142 MPN Equivalent	CPU on RXi-142	Expansion slots PCI/PCIe	RS232 Ports	RS422/485 optocoupled	Added PCI cards	NVSRAM on PCI riser card
04220FL11232A	14220CA11232A	Intel dual-core G3902E@1.6GHz +4GB RAM	2xPCI	2	None	None	512 kB
04240FD11234A	14240DB11234A	Intel i3-7100E dual-core @2.9GHz +4GB RAM	4xPCI	2	2	None	512 kB
04220FD11232A	14220DB11232A	Intel dual-core G3902E@1.6GHz +4GB RAM	2xPCI	2	None	None	512 kB
N/A	14250CA11232A	Intel dual-core G3902E@1.6GHz +4GB RAM	2xPCI 2xPCIe	2	None	None	512 kB
N/A	14260DB11234A	Intel dual-core G3902E@1.6GHz +4GB RAM	None	2	2	None	512 kB
04200WL11201A 04200WL21201A	14200WA21201A*	Intel dual-core G3902E@1.6GHz +4GB RAM	2xPCI	1	1xRS422	None	None
04220GL11204A 04220GL21204A	14220GA21204A*	Intel dual-core G3902E@1.6GHz +4GB RAM	2xPCI	2	2	None	None
04220HL11204A 04220HL21204A	14220HA21204A*	Intel dual-core G3902E@1.6GHz +4GB RAM	2xPCI	2	2	1xPCI Serial16+	None
04220KL11204A 04220KL21204A	14220kA21204A*	Intel dual-core G3902E@1.6GHz +4GB RAM	2xPCI	2	2	2xPCI Serial16+	None

- Other RXi-142 configurations may be possible.
- Part numbers and features are correct at time of publication and may change without notice.
- *Targeted for Marine applications