



PACSystems* RXi-XP IPC

Highest Performance Industrial PC with Expandability

Connecting machines, people, and data utilizing the Industrial Internet and turning big data into actionable information requires high-performance computing technology that is rugged, flexible and upgradable.

GE Intelligent Platforms has combined its expertise in designing high-performance embedded computing platforms with our more than 30 years of experience in industrial control to create a uniquely powerful industrial computing platform – the RXi-XP IPC.

The RXi-XP IPC industrial computing platform delivers compact, rugged, high performance computing capabilities to run HMI, historian, and analytics applications right at the machine to enable improved real-time control of operations and better integration into plant- wide systems.

The RXi-XP IPC provides the highest performance available in the RXi family with the added expandability of 2 to 4 PCI slots, 1 mini PCI Express slot and CFast storage.

High-Performance Computing

The RXi-XP IPC incorporates the latest technologies to deliver high-performance computing for an industrial environment.

GE selected the latest Intel processors based on their unmatched performance. The RXi-XP IPC has 8 GB of ECC RAM, 5 Gigabit Ethernet interfaces, and industrial grade high-speed HDDD storage (or optional SSD disk storage) to complete the high-performance design.

These high performance specifications make the RXi-XP IPC the perfect platform for running GE's Proficy* software applications or other industrial applications right at the machine, even in the harshest environments.

The RXi-XP IPC provides additional application flexibility with both mini PCI Express and low profile PCI Express slots. This expandability combined with the highest performance CPUs delivers truly high performance computing.

Greater Uptime

All aspects of the RXi-XP IPC have been engineered for reliability in harsh environments, from the use of all industrial grade components to its fanless design. The core of the RXi-XP IPC architecture is GE's rugged COM Express modular CPU platform. GE incorporates patented thermal monitoring technology with sophisticated passive cooling techniques to provide the highest-performance, fanless industrial computing platform that can operate in extended temperature ranges.

Enhanced Productivity & Lower TCO

The RXi-XP IPC combines high performance with reliability, enhancing productivity and reducing cost of ownership.

The RXi-XP IPC delivers on the promise of low TCO through features such as compact size, reduced maintenance, low power consumption, and ease of future performance upgrades enabled by our innovative rugged COM Express CPU architecture.

FEATURE	BENEFIT
Dual core 2.5GHz Intel® i7, Quad core 2.1 GHz Intel i7	<ul style="list-style-type: none"> Delivers high performance computing for applications that need to load, manipulate and store large amounts of data, or to handle multiple communication ports in real-time
Fanless operation	<ul style="list-style-type: none"> A robust, reliable solution with no moving parts and minimized dust contamination
5 Gigabit Ethernet ports (four with Time SYNC IEEE1588 and 802.1AS)	<ul style="list-style-type: none"> Network implementation flexibility Multiple high-speed Ethernet links for communication-centric applications with support for deterministic transfer of data/commands
2 or 4 PCI Expansion slots	<ul style="list-style-type: none"> Allows you to add new functionality on demand to support specific application needs



RXi-XP IPC – Highest Performance Industrial PC with Expandability

Specifications

Processor

- Intel Core i7 processor dual and quad core, up to 2.5GHz

Memory

- Up to 8 GB DDR3 ECC – with Intel Core i7

Non-Volatile Memory

- 512 kByte nv-SRAM (flat memory)
- Storage for process relevant data

2.5 inch SATA Interface

- Optional internal 2.5" SATA hard disk or 2.5" SATA Solid State Drive (SSD) – user accessible
- Usage of SSD for shock and vibration immunity as well as extended temperature applications
- CFast Card Slot
- CFast slot with external access
- CFast card, bootable
- Operates in parallel with optional onboard HDD/SSD

Ethernet

- 5 Ethernet (10, 100, 1000 Mbit) ports
- 10/100/1000BaseT auto-negotiation support Time SYNC (IEEE1588 and 802.1AS) based on Intel 82574IT

Wireless Communication

- WLAN optional via internal Mini PCIe card site

Video/Graphics Interface

- Display Port
- VGA Port

USB Interface

- 4 USB 2.0 Standard Size ports – External
- 1 USB 2.0 Standard Size ports – Internal

Serial Communications

- RXi XP 2 Slot: 2x RS232 (can be customized to RS422/485)
- RXi XP 4 Slot: 2x RS232, 2x RS422/485

Expansion

- Internal Mini PCIe card site (e.g. for WLAN, GPRS, etc)
- 2 to 4 Full size PCI Expansion slots

LED

- Power, SATA, Ethernet (Link / Activity)
- Battery Status, Over-temperature

Others

- Timer (IO Hub integrated): Legacy PC AT; High Precision Event Timer
- Watchdog (IO Hub integrated)
- Temperature sensors: Intel on-die TDS – Software readable (-15°C to +105°C)
- Internal box temperature with status LED for over-temperature
- Real Time Clock: RTC 146818 compatible, Li-battery
- Battery: Access of the device for exchange

Power

- Input: 24V DC (±25%) with protection

Environmental

All values under typical conditions without added expansion slot cards.

Extended temperature variants are available upon request.

The maximum extended temperature ranges mentioned in the table below are achievable with a specific choice of CPU and storage, and without extension cards installed in the system.

For detailed information please read the manual.

Range	Operating	Storage
Standard	Refer to Ordering Information table ¹	-40°C to +85°C
Extended	Up to -20°C to 60°C are achievable on request. With special SSDs and components even -30°C and -40°C are achievable on request.	-40°C to +85°C

¹ Temperature rating requires vertical orientation of the heat sink fins. Extended temperature variants available upon request.

	Operating	Storage
Humidity	5-95% @ +40°C	5-95% @ +40°C
Altitude	15000 ft. (4.5 km)	40000 ft. (12 km)

BIOS

- AMI via SPI interface

Dimensions (H x W x D)

- 207 x 252 x 121 mm (2-slot) and 207 x 252 x 158 mm (4-slot)

Mechanical

- Rugged aluminum housing for optimal thermal management and durability
- Protection against particles based on IP20
- Flat and Slim (Book) mounting orientation options

Software Support

- Microsoft® Windows® 7 Professional 64-Bit
- Linux, Kernel 2.6.32
- VxWorks 6.9 with Intel Core i7 processor

Safety

- Designed to meet standard UL1950, CE class A, FCC-A
- Designed to meet marine class A

Ordering Information

PART NUMBER	DESCRIPTION	OPERATING TEMPERATURE
RXE2N0F7H132A	RXi XP 2 Slot 2.5 GHZ, 8 GB, WIN7, 320 GB HDD	0°C to +60°C
RXE2N0F7G132A	RXi XP 2 Slot 2.5 GHZ, 8 GB, WIN7, 128 GB SSD	0°C to +60°C
RXE2N0Q7H132A	RXi XP 2 Slot QUAD 2.1 GHZ, 8 GB, WIN7, 320 GB HDD	0°C to +55°C
RXE2N0Q7G132A	RXi XP 2 Slot QUAD 2.1 GHZ, 8 GB, WIN7, 128 GB SSD	0°C to +55°C
RXE4N0F7H134A	RXi XP 4 Slot 2.5 GHZ, 8 GB, WIN7, 320 GB HDD	0°C to +60°C
RXE4N0F7G134A	RXi XP 4 Slot 2.5 GHZ, 8 GB, WIN7, 128 GB SSD	0°C to +60°C
RXE4N0Q7H134A	RXi XP 4 Slot QUAD 2.1 GHZ, 8 GB, WIN7, 320 GB HDD	0°C to +55°C
RXE4N0Q7G134A	RXi XP 4 Slot QUAD 2.1 GHZ, 8 GB, WIN7, 128 GB SSD	0°C to +55°C

Accessories

ICRXIACMP02	10 pcs Flat Mounting Kit
ICRXIACMP05	1 pcs Flat Mounting Kit
ICRXIACRM05	1 pcs Flat DIN Rail Kit
ICRXIACMP06	1 pcs Slim 70 Mount Kit RXE

GE Intelligent Platforms Contact Information

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Global regional phone numbers are listed by location on our web site at www.ge-ip.com/contact

www.ge-ip.com

