

# Important Product Information PACSystems\* RX3i

IC695CHS007

RX3i Universal Backplane

GFK-2716C

April 2018

The PACSystems\* RX3i 7-slot Universal Backplane is the smallest member of the RX3i Universal Backplane family. With its dual-purpose backplane, the RX3i Universal Backplane supports both PCI-based backplane (IC695) and serial backplane (IC693 and IC694) I/O and option modules. It also supports Series 90-30 I/O and option modules. The compact size of the 7-slot rack makes it ideal for applications where space is a significant constraint, or the number of I/O modules in a single location is small.

Slot 0, the slot furthest to the left (Figure 1), supports the IC695 power supply only. Slots 1–5 support both PCI-based and serial backplane modules. Slot 6 provides a PCI connector only and can therefore only accept IC695 single-width modules.

Features of the Universal Backplane include:

- Terminal Strip on the left end (Figure 1) for Isolated +24V input
- Backplane grounding point
- An integral grounding bar for connecting module/shield grounds
- Printed slot numbers that are mirrored in the Proficy Machine Edition (PME) hardware configuration.
- Support for all RX3i-compatible modules, except the IC695LRE001 Serial Bus Transmitter. Refer to the *PACSystems RX3i System Manual*, GFK-2314, for lists of supported modules.

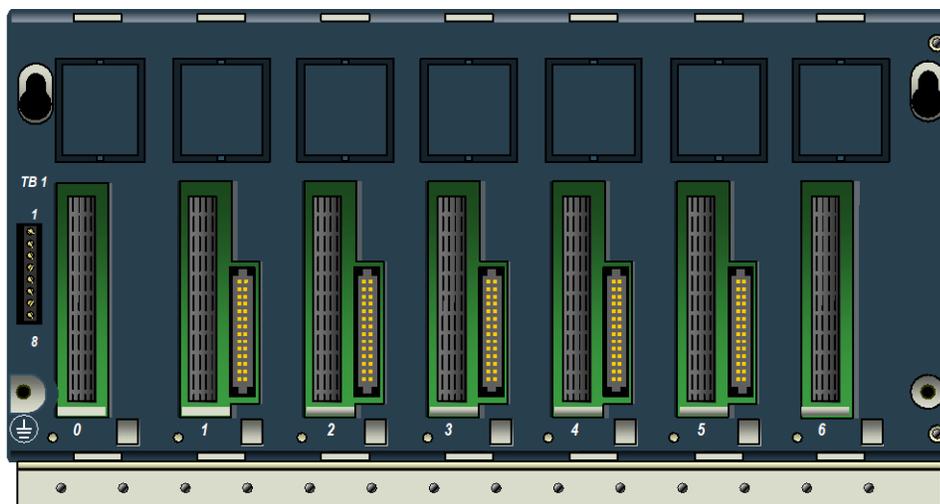


Figure 1: IC695CHS007 Universal Backplane showing slots 0 through 6

For product installation, mounting, clearances and operation, refer to the *PACSystems RX3i System Manual*, GFK-2314:

[https://digitalsupport.ge.com/communities/en\\_US/Documentation/PACSystems-RX3i-System-Manual-GFK-2314-en-US](https://digitalsupport.ge.com/communities/en_US/Documentation/PACSystems-RX3i-System-Manual-GFK-2314-en-US).

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## **Installation Location**

This product is intended for use with the RX3i system. Its components are considered open equipment (having live electrical parts that may be accessible to users) and must be installed in an ultimate enclosure that is manufactured to provide safety. At a minimum, the enclosure shall provide a degree of protection against solid objects as small as 12mm (fingers, for example). This equates to a NEMA/UL Type 1 enclosure or an IEC60529 IP20 rating providing at least a pollution degree 2 environment. For details about installing RX3i rack systems, refer to the *PACSystems RX3i System Manual*, GFK-2314.

## **Installation in Hazardous Areas**

The following information is for products bearing the UL marking for Hazardous Areas or ATEX marking for explosive atmospheres:

### **CLASS 1 DIVISION 2 GROUPS ABCD**

- This equipment is an open-type device and is meant to be installed in an enclosure suitable for the environment that is only accessible with the use of a tool.
- Suitable for use in Class I, Division 2, Groups A, B, C and D Hazardous Locations, or nonhazardous locations only.



**Warning** – EXPLOSION HAZARD - SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2.



**Warning** – WHEN IN HAZARDOUS LOCATIONS, TURN OFF POWER BEFORE REPLACING OR WIRING MODULES.

### **ATEX Zone 2**

This module must be mounted in an enclosure certified in accordance with EN60079-15 for use in Zone 2, Group IIC and rated IP54. The enclosure shall only be able to be opened with the use of a tool.

**Important Product Information**

**Current Release**

Part Number	Date	Comments
IC695CHS007-DA	April 2018	Added capacitors near the reset pin of several slots to eliminate noise spikes.

**Release History**

Catalog Number	Date	Description
IC695CHS007-CA	April 2015	The catalog number is being bumped for manufacturing reasons. There is no other change in the delivered product.
IC695CHS007-BA	March 2012	Mechanical enhancements for improved module-to-connector engagement with the backplane PCI connector, as described below.
IC695CHS007-AA	March 2011	Initial release.

**Operating Notes**

Effective with IC695CHS007-BA, IC695CHS012-DA and IC695CHS016-DA, the product was enhanced with the following mechanical design changes:

- 1) Added an upper ledge with a radius to the backplane extrusion. For PCI-based (IC695) RX3i modules, this upper ledge helps align the module vertically as it is being inserted into the backplane. This reduces the likelihood of experiencing bent or recessed module backplane connector pins when inserting PCI-based modules into the backplane.

Note that the ledge with the enhanced radius reduces, but does not eliminate, the likelihood of experiencing bent or recessed mating pins on PCI-based modules. To avoid damaging mating module pins, continue to exercise proper care and follow the installation instructions in the *PACSystems RX3i System Manual*, GFK-2314, when inserting modules into an RX3i universal backplane.

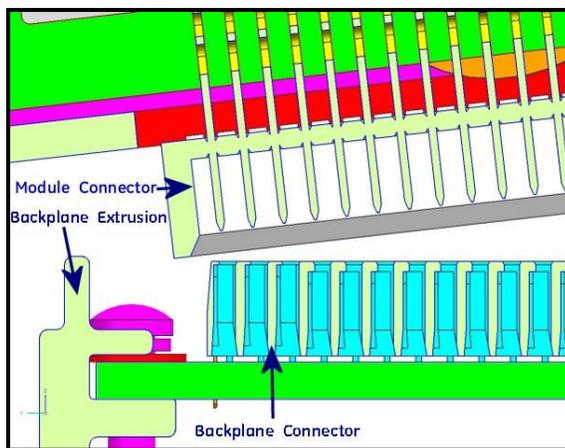


Figure 2: Prior Design

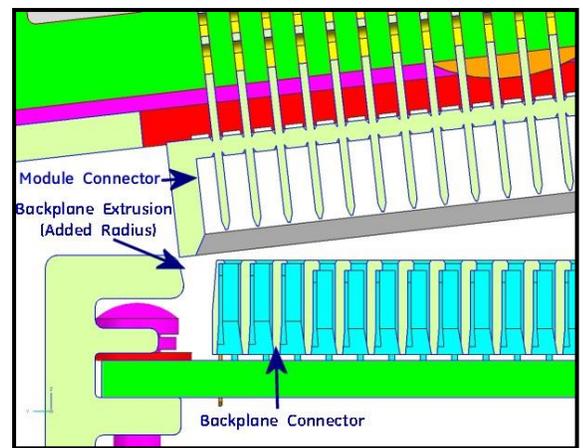


Figure 3: Enhanced Design

- 2) Backplane PWA and backplane connectors were moved 0.015 inch (3.81mm) closer to the front of the backplane. This increases the mechanical module-to-backplane engagement, providing for better connectivity.