



# PRODUCT SAFETY ADVISORY

# **Notice of Potential Unsafe Condition**

Rockwell Automation issues a Product Safety Advisory when it identifies a product(s) anomaly that may potentially cause harm to personnel, capital equipment loss or environmental damage. Immediate action is required as identified below.

# Trusted T8111 TMR Processor When Used in Dual Processor Redundant Configuration May Result in System Shutdown

Reference: 2018-11-001

Date: Preliminary November 2018

Release December 2018

This Product Safety Advisory informs you of a potential anomaly that exists with the Trusted T8111 TMR Processor Module. When used in a dual processor redundant configuration with a second T8111 processor module or a T8110 processor module, the Active processor may go into its shutdown state with the second Standby module not becoming Active. This is due to the Active / Standby link between the two processors becoming synchronized, causing interference with the diagnostics. This may result in a full system shutdown.

**Important** – Due to the potential for high impact on customer processes, this anomaly has been released as a Product Safety Advisory. This is not a safety issue. No potential harm to personnel has been identified.



# Rockwell Automation

### - Product Identification -

The affected product is the Series B Trusted T8111 TMR Processor Module, Catalog Number T8111C, versions O10 and O11, when used in a dual processor redundant configuration with either a T8111 or a T8110 processor module.

**Important** – If you do not use or do not plan to use your Trusted T8111 TMR Processor in a dual processor redundant configuration you are not affected and no action is required on your part. However, Rockwell Automation recommends updating your system modules to the latest firmware release.



The product catalog number and version information can be found on the product nameplate, located on the side of the module. The catalog number is located in the top right corner and the version number is a combination of the HW Issue letter and the S/W Issue number.

In the example shown to the left, the catalog number is T8111C and the version is H/W Issue O and S/W Issue 10, or O10. This example matches the product identification information and is subject to this notification.

Product version information may also be obtained electronically over a network connection. Refer to Rockwell Automation Knowledgebase Article ID 61300, Analysis Tool for Trusted Systems, for additional information.

## - Description -

In a dual processor redundant configuration where one of the two processors is a Trusted T8111 TMR Processor, the Active / Standby link is used to verify that the two processors are both healthy and actively communicating with each other. This makes certain the Standby processor module can take over in the event of a slice failure in the Active processor module (3-3-2-0 Degradation Mode), maintaining high availability. In the T8111 Series B version O10 and O11 releases, the Active / Standby handshaking may become synchronized, such that the two modules are no longer communicating with each other, interfering with diagnostics. The effect on the system depends on the configuration.

- If the Active module is a T8111 and the Standby module is a T8110 or a T8111, the Active T8111 module will shut down to prevent the two processors from both becoming Active, resulting in a full system shutdown.
- If the Active module is a T8110 and the Standby module is a T8111, the Standby T8111 module will shut
  down but the Active T8110 module will continue operating, resulting in a loss of high availability due to the
  loss of the Standby T8111 processor.

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Dual processor configurations consisting of a T8111 processor with either a second T8111 processor module or a T8110 processor module are affected with this anomaly. Dual process configurations consisting of two T8110 processor modules are not affected.

This anomaly will be corrected in the O12 and future releases of T8111 processor firmware.

# - Temporary Workarounds -

Until your processor modules can be updated with corrected firmware, you are advised to remove the Standby processor module.

### - Correction -

Correction requires installation of corrected T8111 processor firmware to version O12 or later. Rockwell Automation is currently working on a correction and will release to the Rockwell Automation Product Compatibility and Download Center (PCDC) when completed.

Rockwell Automation Knowledgebase Article ID 1082968 will be updated when corrected firmware is available for download. If you would like an email notification when firmware correcting this anomaly is available for download and installation, a link has been provided at the end of Article ID 1082968.

Firmware can be field upgraded. If you are unable to upgrade your product firmware or require additional assistance, contact Rockwell Automation Technical Support or your system provider and reference this Product Safety Advisory 2018-11-001.

**Important** – Trusted T8111C hardware is not affected by this anomaly. Product hardware should not be returned on this notification.

## - Requested Customer Action -

Rockwell Automation requests you take the following actions:

- Check if you have a product affected by this Product Safety Advisory. Refer to the Product Identification and Description sections of this document for product identification assistance.
- Continue to check incoming shipments for potentially affected product. Product in transit or in non-Rockwell Automation inventory may continue to contain potentially affected product for a period of time after the publication of this document.
- If you need additional assistance, please contact your system provider or Rockwell Automation Technical Support. See Appendix A for local telephone numbers. Customers without TechConnect contracts should reference this Product Safety Advisory when calling.
- Customers with TechConnect contracts may be able to <u>chat online</u> with support representatives. Reference this Product Safety Advisory when connected to a support engineer.

The most current version of this Product Safety Advisory is posted on the Rockwell Automation Support Center, <a href="http://www.rockwellautomation.com/knowledgebase">http://www.rockwellautomation.com/knowledgebase</a>, as ID number <a href="1082968">1082968</a>. Additional languages may also be available at the end of this article attached as downloadable PDF documents.



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If this Product Safety Advisory does not affect you because you do not have the products any longer, or if you are a Distributor, Rockwell Automation asks that you forward a copy of this notice, with any identifying documentation, immediately to the person or company that now has the product. We also ask that you contact Rockwell Automation Technical Support and provide the location of the affected units.

We appreciate your immediate cooperation. If you have any questions, please contact us.

Sincerely,

**ROCKWELL AUTOMATION** 

You can register for Automatic Product Safety Advisories and Product Notices from Rockwell Automation by email. Go to the Support web page at <a href="http://www.rockwellautomation.com/support">http://www.rockwellautomation.com/support</a> and click the *Visit the Technical Support Center* link. Sign in with your Tech Connect Account or free Rockwell Automation Member Account and you can subscribe to important product updates, including Product Safety Advisories and Product Notices.

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# Appendix A Regional Technical Support Information

The following list can help you to contact the correct technical support center for your location. If your country is not listed, you can find a customer support number for your location on <a href="http://www.rockwellautomation.com/support/">http://www.rockwellautomation.com/support/</a> by clicking Get Support Now, selecting your country, and clicking the Phone/OnSite Support tab.

Region / Country	Phone Number ( ) International Code
Asia/Pacific	()
Australia	1 800 762 593
China	400 620 6620
Hong Kong	+852 2887 4666
India	1 800 2000 121
Japan	03 3206 2785
Korea	(82) 2 2188 4400
Malaysia	1 800 80 4851
New Zealand	0800 27 27 25
Taiwan	080 902 0908
Thailand	(66) 2936 1500
Caribbean	
All Countries (English)	(1) 440 646 3223
All Countries (Español)	(1) 440 646 3650
Central America	
Argentina	800.666.0320
Belize	(1) 440 646 3650
Bolivia	(54) 800 10 0632
Brazil	(55) 11 5189 9500
Chile	800.53.0012
Colombia	01.800.700.2107
Costa Rica	0800.013.1215
Ecuador	58.212.949.0611
El Salvador	(52) 55 5246 2010
Guatemala	1.800.288.0108
Honduras	(52) 55 5246 2010
Mexico	001.888.365.8677
Nicaragua	(52) 55 5246 2010
Panama	001.800.203.3475
Paraguay	(54) 11 5554 4000
Peru	0800.535.36
Suriname	(1) 440 646 3650
Uruguay	(54) 11 5554 4000
Venezuela	800.1.00.3062

Region / Country	Phone Number ( ) International Code
Europe	
Austria	(49) 211 41553 664
Belgium	(32) 2 716 8411
Czech Republic	(420) 28401 5911
Denmark	(45) 43 466 006
Finland	(358) 958 447 419
France	(33) 825303132
Germany	(49) 211 41553 664
Hungary	(420) 28401 5911
Ireland	(44) 01908 635245
Italy (Brescia, Milano e Padova)	(39) 199 11 99 00
Italy (Bologna,Firenze,Napoli,	(20) 100 11 00 22
Roma e Torino) Morocco	(39) 199 11 99 22
Netherlands	(33) 825303132 (31) 10 266 55 80
Poland	(48) 22 32 60 707
	(1) 440 646 3223
Portugal Slovakia	(420) 284015911
Spain	(34) 902 30 93 30
Sweden	(46) 46 19 93 91
Switzerland (German)	(41) 0844 84 84 11
Switzerland (French)	(41) 0844 84 84 12
Switzerland (Italian)	(41) 0844 84 84 13
United Kingdom	(44) 01908 635245
North America	(77) 01300 000240
Canada	(1) 440-646-3223
United States	(1) 440-646-3223

If you have a TechConnect Contract, please use the telephone number supplied to you with the contract.