# Test Report

TR Nº 057

# **ITG- Integration Test Group**

## PR Electronics

21-September-2004

Elaboration/Revision:

Otavio Cremonez Eufrazio

Approval:

**Modifications History** See Modifications History

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Starting Test Date	Finished Test Date
16-09-2004	21-09-2004

**Tester Name** 

Otavio Cremonez Eufrazio

SMar TR-ITG-056-00 Test Report

#### 1 Goal

This is a Test Report from the Test Case TC-ITG-050-00

## 2 Test Environment

• Pentium IV – 1,7 GHz – 512 MB RAM – Windows XP - Professional

#### 2.1 Software

Syscon
 DFI firmware
 5.23 build 22
 V3.8.1.2

• PR-Electronics DD Rev: 5350 : Version 0201

6350 : Version 0102

## 3 Test Report

	Sta	tus	Tester	
Test case reference	Test	Retest	Name	Trouble Report
TC-ITG-066-00	OK		Otavio	See additional comments 1
		-	,	
1				

## 4 Additional Comments

Item	Tester Name	Additional Comment
01	Otavio	It happened sometimes that we can't write the value "Manual" in the Mode_Blk.Target of the Analog Input block. However it accepted the write request if repeat it once or twice. This defect is not reproducible deterministically

## 5 Enhancement

Item	Tester Name	Additional Comment
1		
2		
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## **6 Modification History**

REV.	ELABORATED	APPROVED	DESCRIPTION:
00	Otavio Cremonez Eufrazio	William Durate Ferraz	First issue.
	20-09-2004	20-09-2004	
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# **Test Case Specification Group**

TC Nº 066

# **ITG- Integration Test**

# Device Stress Test – 0007D0 – 0080 and 0081

13-September-2004

Elaboration/Revision:

Otavio C. E./William D.F.

Approval:

Modifications History:
See Modifications History

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**Device Stress Test - PR Electronics** 

**Test Cases** 

#### Goal

Test all functions and limits of PR Electronics.

#### **References Documents**

No documents to references.

#### **Test Procedures** 3

#### 3.1 FF Strategy

#### 3.1.1 **Block Type Limit**

#### 3.1.1.1 References

The references are the Test Plan.

#### 3.1.1.2 Description

The objective of this procedure is create one block of each type and see the behavior of PR Electronics and Syscon.

#### 3.1.1.3 Pre-conditions

The user should know how to make a ff configuration in SYSTEM302.

#### 3.1.1.4 Procedure

- 3.1.1.4.1 Open Syscon. 3.1.1.4.2 Create a new project, then a new bridge and finally a Pretop 5350. 3.1.1.4.3 Create one block of each type. 3.1.1.4.4 Go online and assign the right ID to the device. 3.1.1.4.5 Press the Toggles Detail On. 3.1.1.4.6 Start a download and check if download finish with no failure. 3.1.1.4.7 Check the macro cycle calculated by Syscon. 3.1.1.4.8 Compare this number with the macro cycle gave by the expression [(no. of devices \* 30) + (no. of external
- links \* 30)] \* 1,2.
- 3.1.1.4.9 Using the FBView check if the number of the Macro Cycle is right during the supervision.
- 3.1.1.4.10 Repeat all the steps to the Pretrans 6350.

#### 3.1.2 Blocks Limit

#### References

The references are the Test Plan.

#### 3.1.2.2 Description

The objective of this procedure is create the maximum number of blocks allowed and see the behavior of PR Electronics and Syscon.

#### 3.1.2.3 Pre-conditions

The user should know how to work SYSTEM302.

#### 3.1.2.4 Procedure

- 3.1.2.4.1 Open Syscon.
- 3.1.2.4.2 Create a new project, then a new bridge and finally a Pretop 5350.
- 3.1.2.4.3 Create blocks as much as the limit of the device.
- 3.1.2.4.4 Go online and assign the right ID to the device.
- 3.1.2.4.5 Press the Toggles Detail On.
- 3.1.2.4.6 Start a download and check if download finish with no failure.
- 3.1.2.4.7 Check the macro cycle calculated by Syscon.
- 3.1.2.4.8 Compare this number with the macro cycle gave by the expression [(no. of devices \* 30) + (no. of external links \* 30)] \* 1,2.
- Using the FBView check if the number of the Macro Cycle is right during the supervision. 3.1.2.4.9

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3.1.2.4.10 Repeat all the steps to the Pretrans 6350.

#### 3.1.3 Link Limit

#### 3.1.3.1 References

The references are the Test Plan.

#### 3.1.3.2 Description

The objective of this procedure is create the maximum number of links allowed and see the behavior of PR Electronics and Syscon.

#### 3.1.3.3 Pre-conditions

The user should know how to work SYSTEM302.

3.1.3.4	Procedure
3.1.3.4.1	Open Syscon.
3.1.3.4.2	Create a new project, then a new bridge and finally a PR Electronics.
3.1.3.4.3	Create some blocks.
3.1.3.4.4	Create another device (anyone).
3.1.3.4.5	Create some blocks.
3.1.3.4.6	Make a total of 50 internal links.
3.1.3.4.7	Go online and assign the right ID to the device.
3.1.3.4.8	Press the Toggles Detail On.
3.1.3.4.9	Start a download and check if download finish with no failure.
3.1.3.4.10	Check the macro cycle calculated by Syscon.
3.1.3.4.11	Compare this number with the macro cycle gave by the expression [(no. of devices * 30) + (no. of externa
	links * 30)] * 1,2.
3.1.3.4.12	Using the FBView check if the number of the Macro Cycle is right during the supervision.
3.1.3.4.13	Repeat the steps 3.1.3.4.1 to 3.1.3.4.5
3.1.3.4.14	Create 50 links (17 external links (publisher), 12 external links (subscriber) and 21 internal links).
3.1.3.4.15	Go online and assign the right ID to the device.
3.1.3.4.16	Press the Toggles Detail On.
3.1.3.4.17	Start a download and check if download finish with no failure.
3.1.3.4.18	Check the macro cycle calculated by Syscon.
3.1.3.4.19	Compare this number with the macro cycle gave by the expression [(no. of devices * 30) + (no. of external links * 30)] * 1.2

### 3.1.4 Block Type Test

#### 3.1.4.1 References

3.1.3.4.21

The references are the Test Plan.

#### 3.1.4.2 Description

The objective of this procedure is test the functionality of each block.

3.1.3.4.20 Using the FBView check if the number of the Macro Cycle is right during the supervision.

#### 3.1.4.3 Pre-conditions

The user should know how to work SYSTEM302

Repeat all the steps to the Pretrans 6350.

The user	The user should know how to work \$151 EM302.			
3.1.4.4	Procedure			
3.1.4.4.1	Open Syscon.			
3.1.4.4.2	Create a new project, then a new bridge and finally a Pretop 5350.			
3.1.4.4.3	Create one block.			
3.1.4.4.4	Go online and assign the right ID to the device.			
3.1.4.4.5	Press the Toggles Detail On.			
3.1.4.4.6	Start a download and check if download finish with no failure.			
3.1.4.4.7	Check the macro cycle calculated by Syscon.			
3.1.4.4.8	Compare this number with the macro cycle gave by the expression [(no. of devices * 30) + (no. of external			
	links * 30)] * 1,2.			
3.1.4.4.9	Using the FBView check if the number of the Macro Cycle is right during the supervision.			
3.1.4.4.10	Check if all parameters is ok and the Syscon is showing all values.			
3.1.4.4.11	Check all parameters making some writings and changing some values (only in the RW parameters).			
3.1.4.4.12	Check if these changes result in what were expect.			
3.1.4.4.13	Repeat the steps 3.1.4.4.3 to 3.1.4.4.12 to all blocks supported.			

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Test Cases

3.1.4.4.14 Repeat all the steps to the Pretrans 6350.

## 3.2 Operational Characteristics

## 3.2.1 Temperature Reading

### 3.2.1.1 References

The references are the Test Plan.

#### 3.2.1.2 Description

The objective of this procedure is test the temperature reading of the device.

#### 3.2.1.3 Pre-conditions

The user should know how to work SYSTEM302.

3.2.1.4	Procedure
3.2.1.4.1	Open Syscon.
3.2.1.4.2	Create a new project, then a new bridge and finally a Pretop 5350.
3.2.1.4.3	Create a Resource, Transducer, Analog Input and a PID block.
3.2.1.4.4	Go online and assign the right ID to the device.
3.2.1.4.5	Press the Toggles Detail On.
3.2.1.4.6	Start a download and check if download finish with no failure.
3.2.1.4.7	Using the Demo Kit, simulate some temperatures values
3.2.1.4.8	Check if it is consistent with the block reading.
3.2.1.4.9	Repeat all the steps to the Pretrans 6350.

## **Modification History**

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00	Otavio Cremonez Eufrazio May 05, 2004		First issue
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