

Acceptance Test Procedure and Report

for

VMIPCI-5588 Legend A

ASSY. No. 332-02855588-001F

SN: 20496

PASS

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#	Name	Date	signature
Written by	Dan Gilboa	29 June 2015 Updated 1.9.2016	DG
Checked by	Dan Gilboa	29 June 2015 Updated 1.9.2016	DG
Customer			
Order no.			
Tested Dates	10 to 17 November 2017		

Summary

1. The VMIPCI-5588-000C Reflective Memory card was Functional Test by Gilboa Engineering Consulting Ltd (GECL).
2. Test Setup – described in annex 1.
3. Cards used for the setup:
 - a. one with unknown problem
 - b. second with also unknown problem

#	Part number	Serial Number	Suspected defective	Notes
1	VMIPCI-5588 Legend A ASSY. No. 332-02855588-001F	20496	RX & TX Channels	
2	VMIPCI-5588 Legend B ASSY. No. 332-02855588-001G	20920	RX & TX Channels	

4. Summary of tests

#	Test	Tested date	Pass/Fail	Notes
1	Tests Results at arrival (to verify the problems)	11/11/2017	Fail	RX & TX Channels
2	Endurance Test (2 continuous hours):	17/7/2017	Passed	
3	Test After Repair (12 continuous hours):	17/7/2017	Passed	Applied Heatsinks

5. Final results

VMIPCI-5588 Legend A, SN: 20496 - PASSED

Signature:

Alon Gilboa, Manager
 Gilboa Engineering Consulting Ltd.

Date: 17/11/2017

Annex 1 – Test Setup

The VMIPCI-5587A / VMIPCI-5588 test setup comprised from the following parts:

Table 1: VMIPCI 5587A/5588 Test Setup Parts List

#	Parts	Notes
1	2 Computers (with keyboard, mouse, display), running Windows XP, with proper drivers and RFMC Command Line Interpreter.	
2	2 Fiber optics cables (ST-ST, SC-ST,SC-CS multimode, depend on the connectors type of the cards).	ST - for 5588 side SC - for 5587 side
3	Reference known working cards, or cards with TX channel working and the other with RX channel working.	
4	The Cards under tests	VMIPCI-5587A VMIPCI-5588 (any combination)

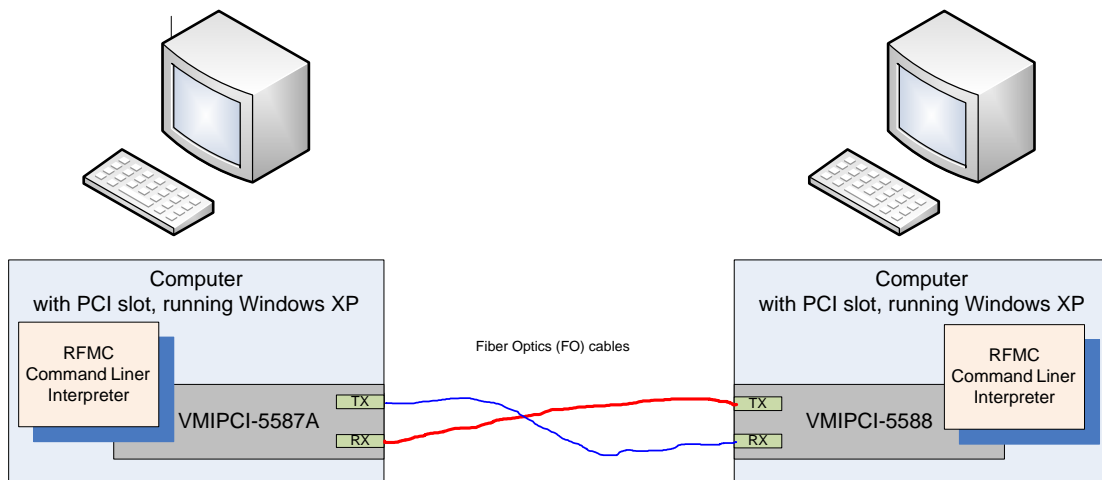
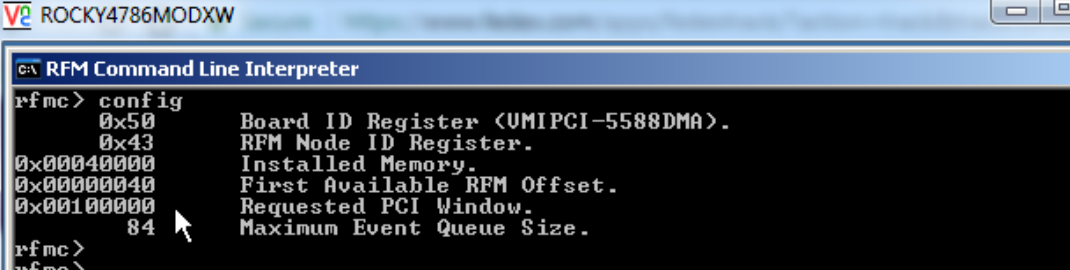
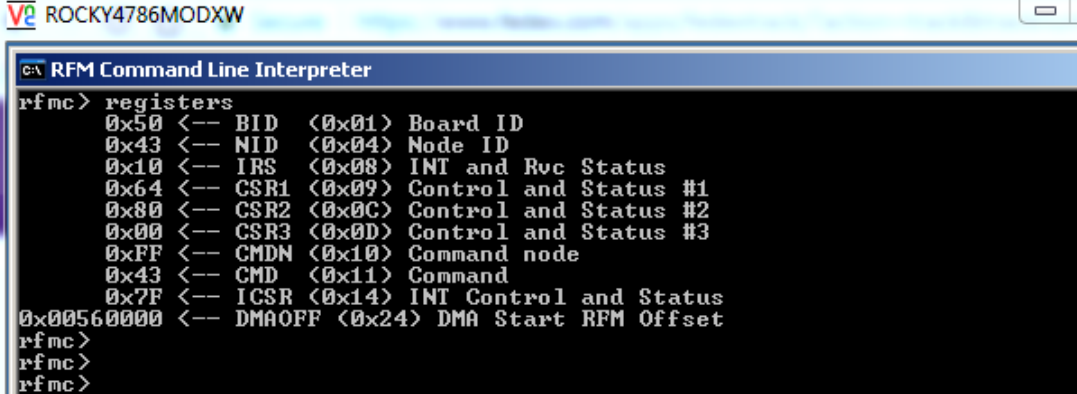
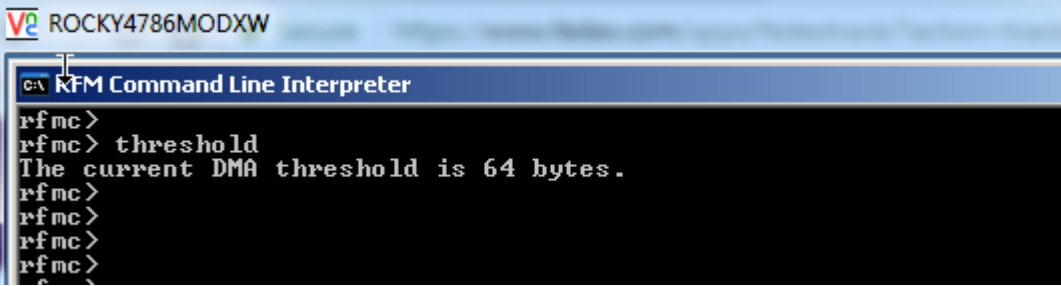
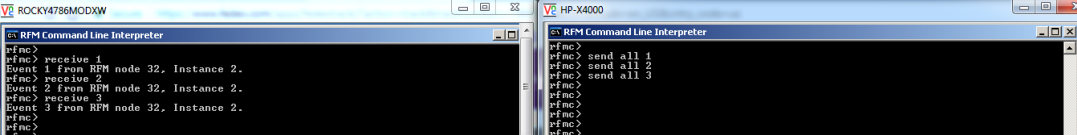


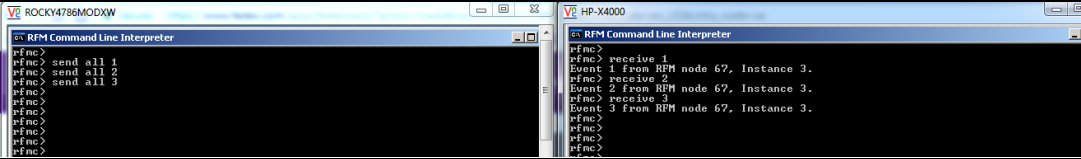

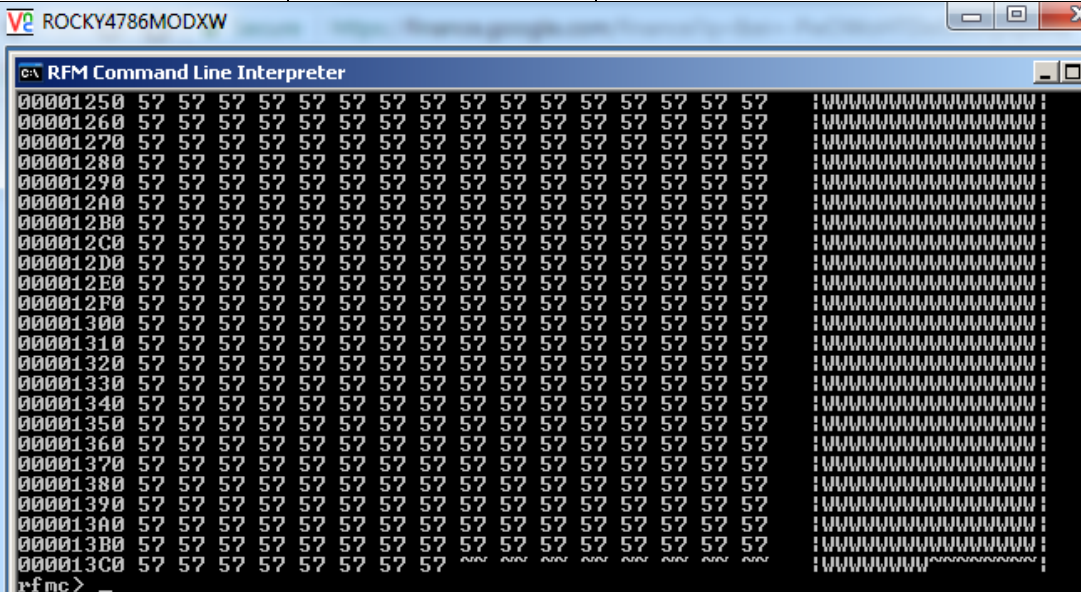
Figure 1: VMIPCI 5587A/5588 Test Setup

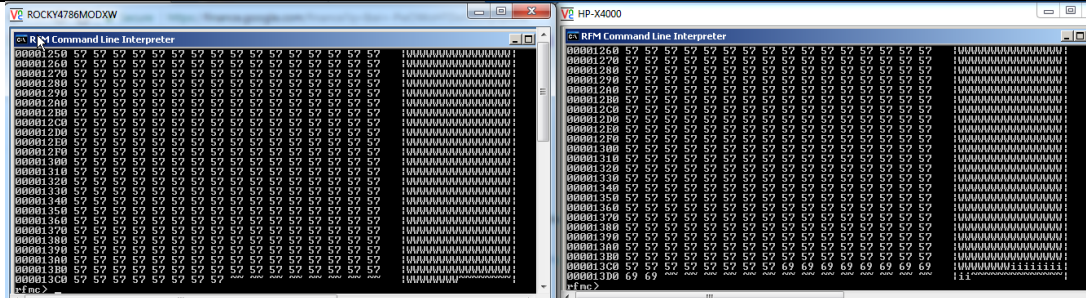
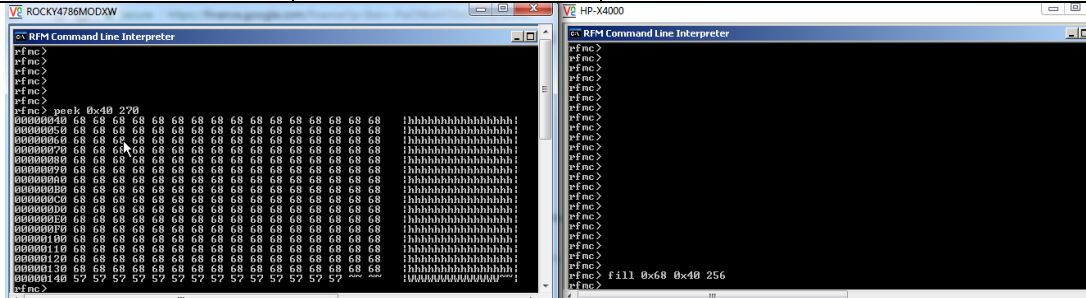
Annex 2 – Test List and Results

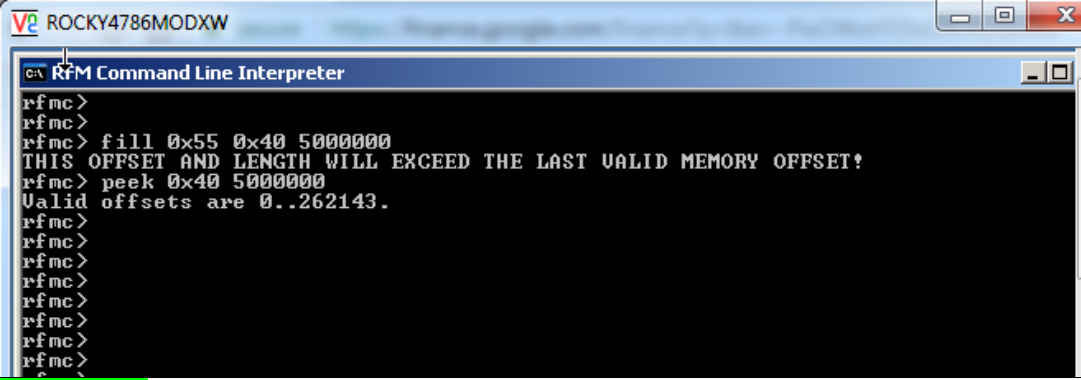
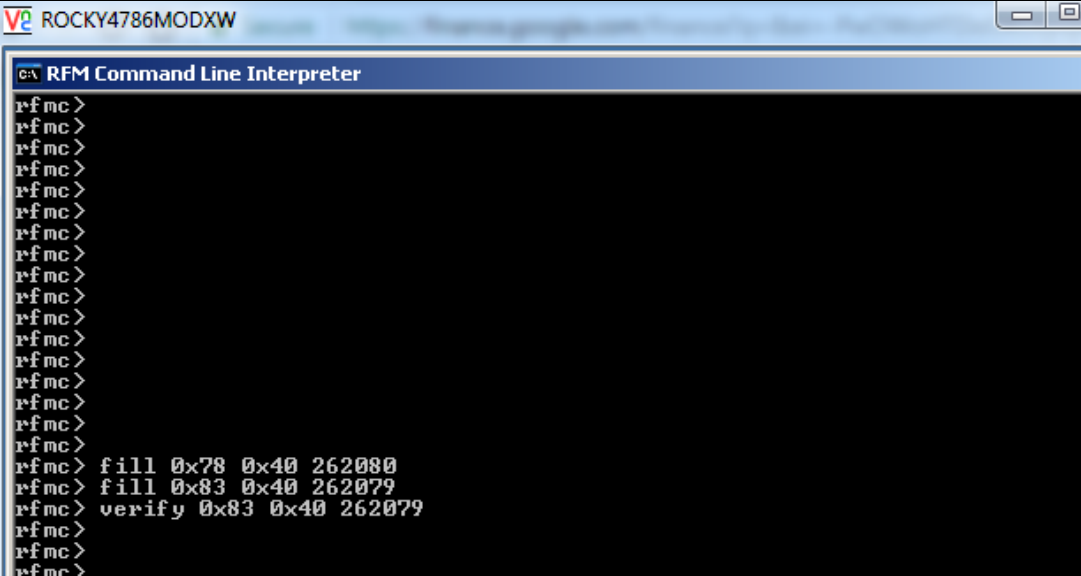
Table 2: VMIPCI 5587A/5588 Test List

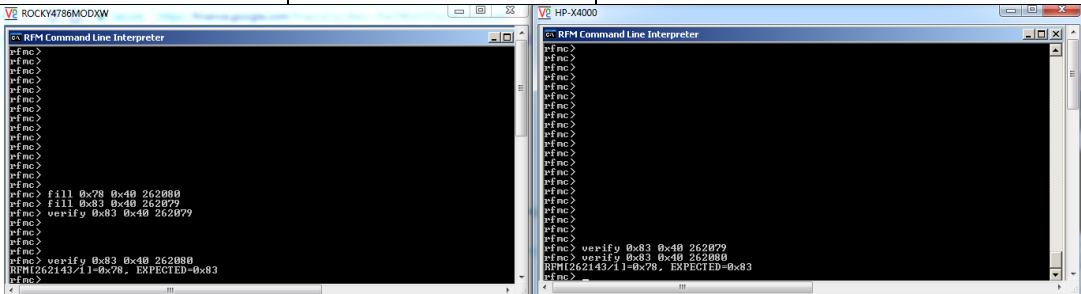
#	Test Description	Test details	Expected results/output	Notes
1	Device Manager (Windows XP)	Check device manager, under Network adapters, the RFM should appear	The RFM board is recognized properly	
	Result: PASS			
2	Command Line Interpreter: config	Display RFM board configuration information	0x50 Board ID Register (VMIPCI-5588) 0x43 RFM Node ID Register 0x00040000 Installed Memory 0x00000040 First Available RFM Offset 0x00100000 Requested PCI Window 84 Maximum Event Queue Size	
				
	Result: PASS			
3	Command Line Interpreter: registers	Show the registers values	rfmc>registers 0x50 <--BID (0x01) Board ID 0x43 <--NID (0x04) Node ID 0x10 <--INT INT and Rvc Status 0x64 <--CSR1 Control and Status #1 0x80 <--CSR2 Control and Status #2 0x00 <--CSR3 Control and Status #3 0xFF <--CMDN Command node 0x43 <--CMD Command 0x7F <--ICSR INT Control and Status 0x00560000 <--DMAOFF DMA Start RFM Offset	

#	Test Description	Test details	Expected results/output	Notes
				
	Result: PASS			
4	Command Line Interpreter: threshold	Show the current threshold value	rfmc>threshold The current DMA threshold is 64 bytes.	
				
	Result: PASS			
5	Command Line Interpreter: Led Led on Led off Led blink	Display or set LED state	LED OFF LED ON LED OFF LED BLINK	The LED should be OFF The LED should be ON The LED should be OFF The LED should blink 10 times
	Result: PASS			
6	Command Line Interpreter: Receive 1 Receive 2 Receive 3	Waiting for event from other card.	Example: receive 2 Event 1 from RFM node 3, Instance 100.	The "receive" command should be set before the other card send "send x" command
				

#	Test Description	Test details	Expected results/output	Notes
	Result: PASS			
7	Command Line Interpreter: send all 1 send all 2 send all 3	Sending event to other cards (all)	Example: rfmc>send all 2	The "receive x" command should be set on the other card before the "send x" command
				
	Result: PASS			
8	Command Line Interpreter: fill pattern first [length]	Filling the RFM with values	Example rfmc> fill 0x57 0x40 5000	
				
9	Read own written data from the RFM: peek first [length]	Reading the RFM from own filling command	peek 0x40 5000	
				
	Result: PASS			

#	Test Description	Test details	Expected results/output	Notes
10	Checking that the data was transmitted to the other card RFM: The other card perform PEEK command: peek first [length]	Checking that the RFM was transmitted.	peek 0x40 5010	in this case you will see that the last 10 bytes (block length of 5010 was requested) are different and not override by the pervious Fill command.
				
	Result: PASS			
11	Checking the RFM block transmitted by other cards: peek first [length]	Checking the RX channel, receiving RFM for different card.	Other card filling the RFM: Fill 0x68 0x40 256 Own card: PEEK 0x40 270	in this case you will see that the last 14 bytes (block length of 270 was requested) are different (value of 0x57 from previous fill command) and not override by the current Fill command.
				
	Result: PASS			
12	Maximum memory size: 256Kbyte (note: the VMIPCI-5587A that were tested was 4Mbyte)	Ask for PEEK more than 256Mbyte.	The memory range address is: 0 to 262143 If block of more than 256Kbyte is requested, the response is the address range: Valid offsets are 0..262143	

#	Test Description	Test details	Expected results/output	Notes
				
	<p>Result: PASS</p> <p>Verifying correctness of the Entire memory block.</p> <p>VMIPCI-5588 Memory size: 256K = 262143. Allowed length = 262143 – 64 +1 = 262080</p>			
13	Command Line Interpreter: fill pattern first [length]	Filling the RFM with values to the maximum memory block size	Filling the entire memory block with known value rfmc> fill 0x78 0x40 262080	Filling the entire memory block but without the last cell, with known value rfmc> fill 0x83 0x40 262079
14	Command Line Interpreter: Verify [length]	Compare the contents of an RFM block against a specified value.	Example rfmc> verify 0x83 0x40 262079	
				
	<p>Result: PASS</p>			
15	Command Line Interpreter: Verify [length]	Compare the contents of an RFM block against a specified	Example rfmc> verify 0x83 0x40 262080	

#	Test Description	Test details	Expected results/output	Notes
		value.	Length of verifying block is longest by 1, so the last cell will have different value (as was Witten in step 13a).	
				
	Result: PASS			
16	Test with the other VMIPCI-5588 card: Command Line Interpreter: Verify [length]	Compare the contents of an RFM block against a specified value.	<p>Example</p> <pre>rfmc> verify 0x83 0x40 262079</pre> <p>Same reading block length as the written value</p> <pre>rfmc> verify 0x83 0x40 262080</pre> <p>Length of verifying block is longest by 1, so the last cell will have different value.</p>	
				
	Result: PASS			