34952A-01

# Modification Recommended Service Note

Supersedes: NONE

# 34952A Multifunction Module with 32-bit DIO, 2-ch D/A and Totalizer

Serial Numbers: MY56480060 - MY56480409

**The Problem** – Configured digital input channels are unable to read values correctly from digital output channels

# Parts Required:

P/NDescriptionQty.34952-60001Multifunction Module with 32-bit DIO, 2-ch D/A and Totalizer1

# ADMINISTRATIVE INFORMATION

ACTION CATEGORY:	[X] ON SPECIFIED FAILURE [[]] AGREEABLE TIME	STANDARDS LABOR: 0.5 Hours			
LOCATION CATEGORY:	<ul> <li>[]] CUSTOMER INSTALLABLE</li> <li>[]] ON-SITE (active On-site contract required)</li> <li>[X] SERVICE CENTER</li> <li>[]] CHANNEL PARTNERS</li> </ul>	SERVICE: [[]] RETURN USED [[]] RETURN INVENTORY: [X] SCRAP PARTS: [X] SCRAP [[]] SEE TEXT [[]] SEE TEXT			
AVAILABILITY: PRODUCT'S SUPPORT LIFE		NO CHARGE AVAILABLE UNTIL: 14 August 2020			
[[]] Calibration Required [X] Calibration NOT Required		PRODUCT LINE: PLGM AUTHOR: SL			

ADDITIONAL INFORMATION:



# Situation:

Instruments within the serial number range may be unable to perform digital input read correctly from digital output channels. Affected units will intermittently fail to read back the same byte value sent on an adjacent byte. This is due to the change of a new processor for the PCA board.

# Solution/Action:

- 1. Verify that your unit(s) corresponds to the above model and serial number.
- 2. Using the 34952A module together with the 34952T terminal block, connect the test fixture on the terminal block as shown in figure below.



- 3. Download the zip folder from the link: http://www.keysight.com/main/redirector.jspx?action=ref&strnid=00&cname=EDITORIAL&ckey =2301607&cc=US&lc=eng&NEWCCLC=USeng.
- 4. Launch the runtime test program "34952A Read-Write Test.vxe".
- 5. A pop-up will appear to prompt for input of your unit's IO address (LAN/ USB/ GPIB-USB). The default address is GPIBO::9::INSTR. Copy the VISA address of your connection from Keysight Connection Expert and paste into the column, specify the number of loops you want the program to run, then click Start.

34952A Read-Write Test	- □ >	<					
34952A Read-Write Test							
Loop	DUT	1					
3							
START							
Current Loop							
	Text Input	×					
	Enter IO Address:	nter IO Address:					
1000 Feil Counter	GPIB0::9::INSTR						
1002 Fair Counter	OK Cancel						
0							
1001 Fail Counter	1003 Fail Counter						
0	0						

- 6. Once the program starts running, the module's model number and serial number will appear in the DUT column.
- 7. If your unit is affected, the test results of 1001/1002/1003/1004 Fail Counter will be non-zero, as shown in the figure (left) below. Otherwise, the test results will be all zero, as shown in the figure (right) below.

34952A Read-Write Test	–	< 🗾 🕅 :	34952A Read-Write Test	- 🗆 ×	
34952A Read	d-Write Test		34952A Read-Write Test		
Loop 34	DUT 952A,MY56480273	3	Loop 34	DUT 952A,MY56480383	
STAI	RT		START		
Current Loop 3	Loop x 256		Current Loop 3	Loop x 256	
1002 Fail Counter 765	1004 Fail Counter 765		1002 Fail Counter	1004 Fail Counter	
1001 Fail Counter 765	1003 Fail Counter 765		1001 Fail Counter 0	1003 Fail Counter 0	

8. For users encountering failed counters, please contact the nearest Keysight Technologies' Customer contact at <u>www.keysight.com/find/contactus</u>, to have your unit exchanged.

# **Revision History:**

Date	Service Note Revision	Author	Reason for Change
14 Aug 2019	01	SL	As Published

#### FAIL

#### PASS