

Information Only Service Note

Supersedes: None

M9803A PXIe Vector Network Analyzer

Serial Numbers: ALL

False alarm on self-test failure on firmware revision of A.13.40.02 - DDR3 memory removal

Parts Required:

P/N Description Qty.

None

ADMINISTRATIVE INFORMATION

[[]] Calibration Required [X] Calibration NOT Required PRODUCT LINE: WN AUTHOR: ls

ADDITIONAL INFORMATION:



Situation:

Keysight M980xA (x= 0/1/2/3/4/5/6/7/8) Vector Network Analyzer (VNA) firmware revision A.13.40.02 will report self-test failure on newer batch of VNAs with shipment date of early 2022 and onwards.

Background

The on board DDR 3 memory in VNA is not in use since its release. With the removal of DDR 3 memory IC on newer M980xA VNA, right after firmware is launched, false alarm (self-test failure) will be reported as shown. This has no impact to VNA performance and specifications. Similarly, firmware will report a false failure in Operator check. Shown are the error messages example on VNA firmware UI.

Impacted firmware revision: A.13.40.02 Non impacted firmware revision: A.13.70.02 and newer.

Sell-le:	σι	-								1		
Svo	R	FOn	UpdateOn	IntRef	Se Se	lit test fall	ure. Modu	ile test				
File Instrum	oort VNA at slot 1 ent Response	Stimulus						- 🗆 X				
			0dB/ 0.00dB					Instrument				
50		Jogim TO.C						Prev Next				
40								Trace Channel				
40												
30								Display Setup				
								Response Meas Format				
20												
10								Scale Math				
								Avg BW Cal				
0								Marker Search				
-10								Stimulus				
								Freq Power				
-20								Sweep Trigger				
-30								Utility Save				
			(01/06 16:07:06) 6-161					Basel Macro	_			
-40		0	(01/26 16:27:26) Self to M9804A (Chassis 1, Slo	est failure: Module test t 17)								
-50			Clear Inactive Error Records									
1	>Ch1: Start	t 9.0	Show all error message	records								
	IntTrig Hold		Message Module test,				8	LCL 2022/01/28-18:27				
	10.		4								_	
_	ecords.txt - I									-		×
	Format V		p 27:26) Self te	st failure. M	Module tes	+						
			lot 17); Activ		louure ces							

Self-test

Operator C	Check					
0dBm		Tr 2 a2,2 Log	M 10.00dB/ 0.	00dBm		
		Self tests	×			
			ure: Module test hassis 1, Slot 17)			
		R	ок			
				1:PASS 2:PASS		
					Sto	p 30.3247 MHz

Solution/Action:

Since this DDR3 memory is not in use, newer firmware revision no longer consider it as the failure. Keysight recommends keeping VNA firmware up-to-date whenever it is possible.

For users with firmware revision of A.13.40.02,

Update firmware to revision A.13.70.02 or newer to resolve this false alarm on self-test.

For users with firmware revision of A.13.70.02 or newer, No action is necessary.

M980xA Vector Network Analyzer Firmware Update (Keysight.com) https://www.keysight.com/my/en/lib/software-detail/instrument-firmware-software/pxieusb-vectornetwork-analyzer-firmware-update-64-bit-3027357.html

Note: VNA firmware update can be easily performed by user on the intended controller PC/ embedded controller. User does not need to return controller or VNA to Keysight service center.

~ End~

Revision History:			
Date	Service Note Revision	Author	Reason for Change
9-Feb-2022	M9803A-03	ls	As Published