E5061A-04A

S E R V I C E N O T E

Supersedes:
E5061A-04

E5061A ENA-L RF Network Analyzer, 300 kHz to 1.5 GHz

Serial Numbers: JP1KLxxxxx,
MY44100102 to MY44101115,
SG44100102 to SG44100154

A2 receiver board fails System Dynamic Range specification due to a very few clock signal generation component might not work properly.

To Be Performed By: Agilent-Qualified Personnel

Parts Required:

P/N	Description	Qty.
E5062-69011	A2 Receiver 50 Ohm (Exchange)	1
E5062-62011	A2 Receiver 50 Ohm	1
E5062-69012	A2 Receiver 75 Ohm (Exchange)	1
E5062-62012	A2 Receiver 75 Ohm	1

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION: **MODIFICATION RECOMMENDED**			
ACTION CATEGORY:	[ ] IMMEDIATELY X ON SPECIFIED FAILURE [ ] AGREEABLE TIME	STANDARDS: LABOR: 2.0 Hours	
LOCATION CATEGORY:	[ ] CUSTOMER INSTALLABLE [ ] ON-SITE X SERVICE CENTER	SERVICE INVENTORY: X RETURN [ ] SCRAP [ ] SEE TEXT	USED PARTS: X RETURN [ ] SCRAP [ ] SEE TEXT
AVAILABILITY: PRODUCT'S SUPPORT LIFE		AGILENT RESPONSIBLE UNTIL: May 2008	
AUTHOR: jm PRODUCT LINE: WN ADDITIONAL INFORMATION:			

Agilent Technologies

July 31, 2006

Situation:

A very few of clock signal generation component in the receiver board might not work properly and as a result, the noise floor increases although the IFBW is set to narrower bandwidth.

The typical phenomenon is that the system dynamic range exceeds the following specification right after the E5061A power is turned on, especially in a low temperature environment.

System dynamic range	Specification	Supplemental information
300 kHz to 3 GHz, IF bandwidth = 3 kHz	90 dB	95 dB
300 kHz to 3 GHz, IF bandwidth = 10 Hz	115 dB	120 dB

Solution/Action:

Replace A2 receiver module.

(For 50 Ohm Option; Opt. 150 and Opt. 250)

P/N	Description	Qty
E5062-69011	A2 Receiver 50 Ohm (Exchange)	1
E5062-62011	A2 Receiver 50 Ohm	1

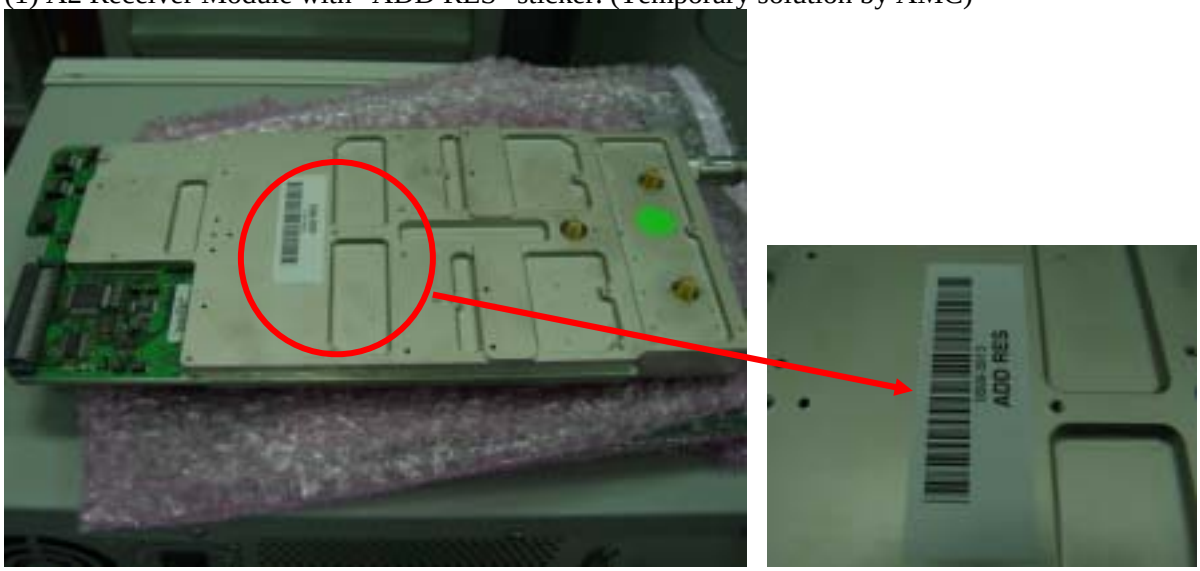
(For 75 Ohm Option; Opt. 175 and Opt. 275)

P/N	Description	Qty
E5062-69012	A2 Receiver 75 Ohm (Exchange)	1
E5062-62012	A2 Receiver 75 Ohm	1

How to identify "good" A2 Receiver Module for this issue
For temporary solution, A2 Receiver Module is reworked by AMC or by CM.
Then for permanent solution, PCA in A2 Receiver Module is revised.

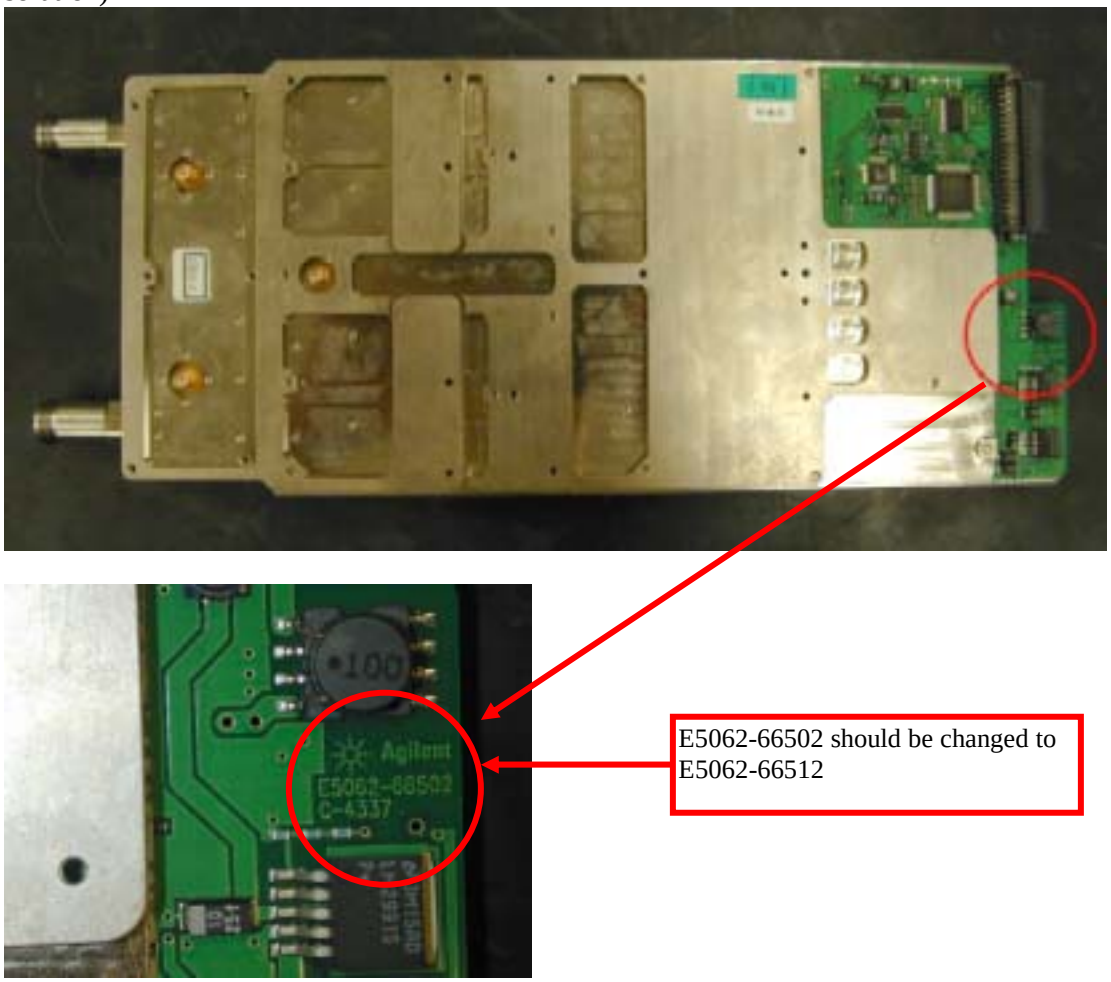
Any of these three cases are "good" A2 receiver module, otherwise return the "bad" module to factory through exchange program.

(1) A2 Receiver Module with "ADD RES" sticker. (Temporary solution by AMC)



(2) A2 Receiver Module with BARCODE which date code suffix is -**200607**-xxxxx or later (Temporary solution by CM)

(3) PCA in A2 Receiver Module is changed from E5062-66502 to **E5062-66512.** (Permanent solution)



Procedures:

For the detailed Replacement Procedure and Post-Repair Procedures, please see Service Guide of E5061A/E5062A.

[Replacement Procedure]

Chapter 6: Replacement Procedure -> A2 Receiver Board Replacement

[Post-Repair Procedure]

Chapter 7: Post-Repair Procedures -> Table 7-1 A2 Receiver Board.

- Frequency Reference Adjustment
- Local Output Power Adjustment
- Source Output Power Adjustment
- Receiver IF Range Adjustment
- Receiver Ports Characteristics Adjustment

- Diagnostic Test

- Frequency Accuracy Test
- RF Output Level Accuracy and Flatness Test

- RF Output Level Linearity Test
- Trace Noise Test
- Crosstalk & System Dynamic Range Test
- Dynamic Accuracy Test
- Uncorrected System Performance Test

Retrofit Time:

Assembly Time: 0.5 hour
Adjustment Time: 0.75 hour
Performance Tests Time: 0.75 hour
Total Time: 2.0 hours

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