

MODIFICATION RECOMMENDED –
CORRECTS MANUFACTURING OR DESIGN DEFECTS

E5062A-04A

S E R V I C E N O T E

Supersedes:
E5062A-04

E5062A ENA-L RF Network Analyzer, 300 kHz to 3 GHz

Serial Numbers: JP1KLxxxxx,
MY44100102 to MY44101554
SG44100101 to SG44100124.

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: | <input type="checkbox"/> IMMEDIATELY <input checked="" type="checkbox"/> ON SPECIFIED FAILURE <input type="checkbox"/> AGREEABLE TIME | STANDARDS: LABOR: 2.0 Hours | |
| LOCATION CATEGORY: | <input type="checkbox"/> CUSTOMER INSTALLABLE <input type="checkbox"/> ON-SITE <input checked="" type="checkbox"/> SERVICE CENTER | SERVICE INVENTORY: <input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT | USED PARTS: <input checked="" type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT |
| AVAILABILITY: | PRODUCT'S SUPPORT LIFE | AGILENT RESPONSIBLE UNTIL: March 2007 | |
| AUTHOR: jm | | PRODUCT LINE: WN | |
| ADDITIONAL INFORMATION: | | | |

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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 E5062A 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)

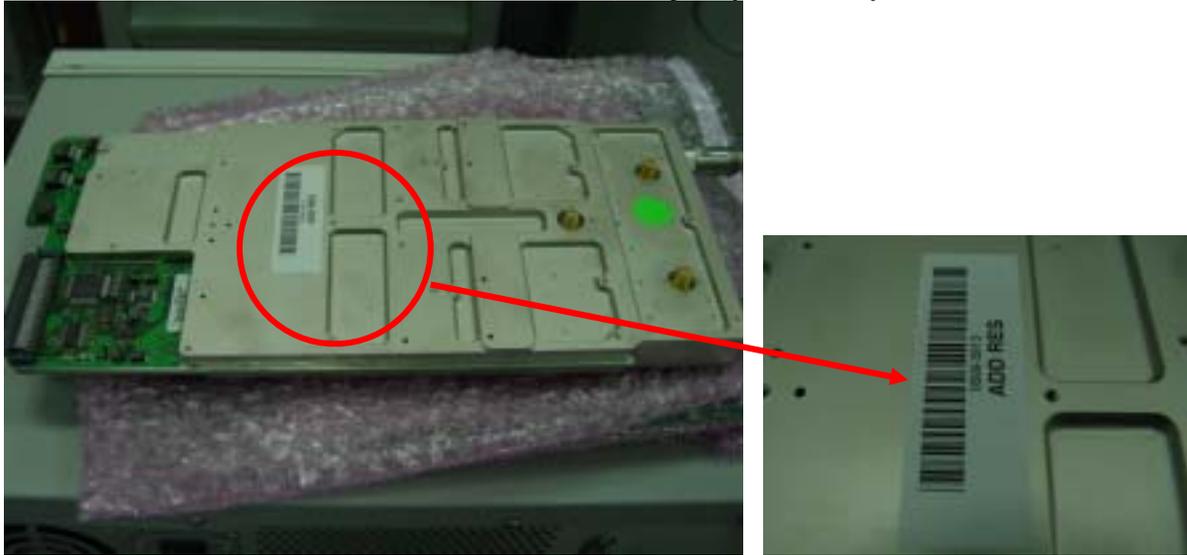
| P/N | Description | Qty |
|-------------|-------------------------------|-----|
| E5062-69012 | A2 Receiver 75 Ohm (Exchange) | 1 |
| E5062-62012 | A2 Receiver 75 Ohm | 1 |

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.

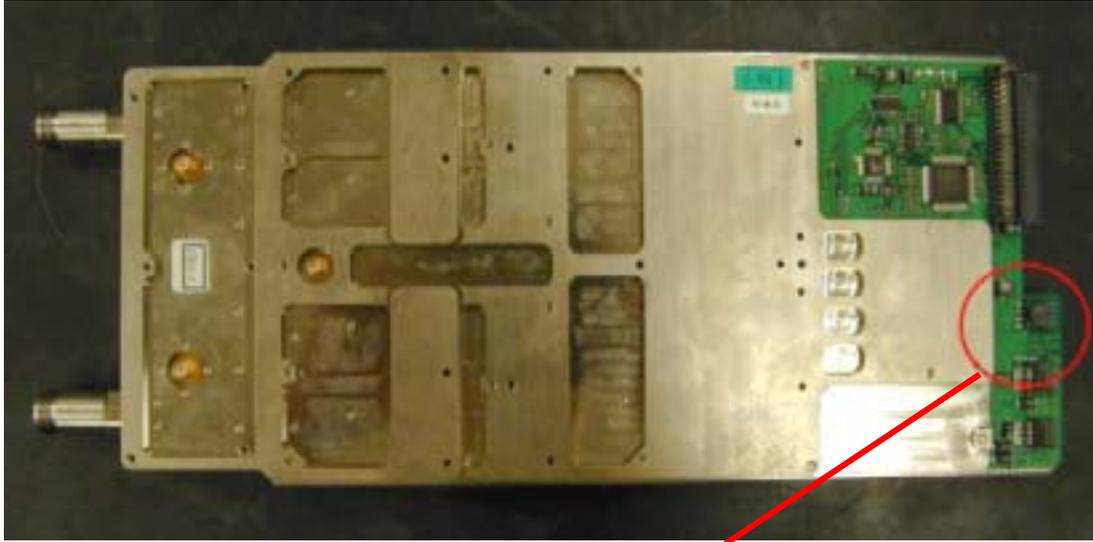
(1) A2 Receiver Module with “ADD RES” sticker. (Temporary solution by AMC)



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



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



E5062-66502 should be changed to E5062-66512

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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