E4430B-11

S E R V I C E N O T E

Supersedes:
NONE

ESG "B" Signal Generator E4430B

Serial Numbers: [0000A00000 / 9999Z99999]

Defective Waveform Sequence SRAM on the Dual Arbitrary, UND board (A5) and iDEN Dual Arbitrary, Special Option H60 board causes waveform become distorted when playback.

To Be Performed By: Agilent-Qualified Personnel

Parts Required:

P/N	Description	Qty.
E4400-60753	Replacement kit, UND SRAM ICs	1

ADMINISTRATIVE INFORMATION

<table>
<tr><td colspan="4">SERVICE NOTE CLASSIFICATION:
MODIFICATION RECOMMENDED</td></tr>
<tr><td colspan="2">ACTION CATEGORY: :
[ ] IMMEDIATELY
X ON SPECIFIED FAILURE
[ ] AGREEABLE TIME</td><td colspan="2">STANDARDS
LABOR: 1.0 Hours</td></tr>
<tr><td>LOCATION CATEGORY:
[ ] CUSTOMER INSTALLABLE
[ ] ON-SITE
X SERVICE CENTER</td><td>SERVICE INVENTORY:
X RETURN
[ ] SCRAP
[ ] SEE TEXT</td><td>USED PARTS:
[ ] RETURN
X SCRAP
[ ] SEE TEXT</td><td></td></tr>
<tr><td colspan="2">AVAILABILITY: PRODUCT'S SUPPORT LIFE</td><td colspan="2">NO CHARGE AVAILABLE UNTIL: EOS</td></tr>
<tr><td colspan="2">AUTHOR: PY</td><td colspan="2">PRODUCT LINE: PL15</td></tr>
<tr><td colspan="4">ADDITIONAL INFORMATION: Parts and labor for this repair is at Agilent expense.</td></tr>
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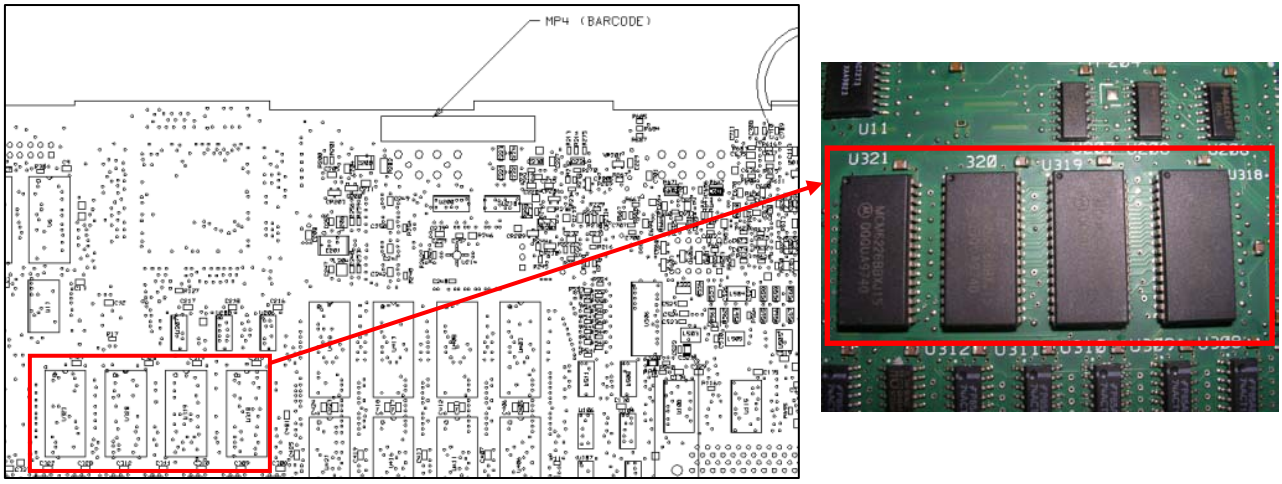
Agilent Technologies

Situation:
The ESG-B D/DP Family of Signal Generators has been experiencing failures in the UND (E4400-60187) and Option H60 (E4400-60186) board assemblies. This is due to a failure of the waveform sequence SRAM ICs. There are total 4 affected waveform sequence SRAM ICs on the UND and Option H60 assembly, designator U318, U319, U320, U321. The failure will cause the waveform playback become distorted. This may happen immediately after Arbitrary Function is turned on, or after it has been play-backed for a short period of time. This potentially happened when large waveform files are being playback. All ESG-B D/DP units with the symptoms mentioned above required the waveform sequence memory chips to be replaced. The kit, E4400-60753 contains 4 pieces of the SRAM ICs.

Solution/Action:
The resolution plan consists of the following:-

1. Repair on failure.
2. Prevent future occurrences due to a defective waveform sequence memory chips (U318, U319, U320, U321) by replacing the 4 affected chips.
3. Locate the U318, U319, U320 and U321 which are located at the bottom side of the UND or H60 board.



4. Replaced the affected components. **Caution:** Please use the appropriate soldering tools and you must be certified to perform the soldering to prevent any quality or reliability issue due to soldering workmanship.
5. Once the affected components had been replaced, perform:-
   i) Dual Arb Waveform Generator Check. This test can be performed by using the TME software or the ESG-B Classics Software, and
   ii) If customer waveform is stored in the NVARB RAM, playback the waveform and observed on the oscilloscope for any waveform distortion.