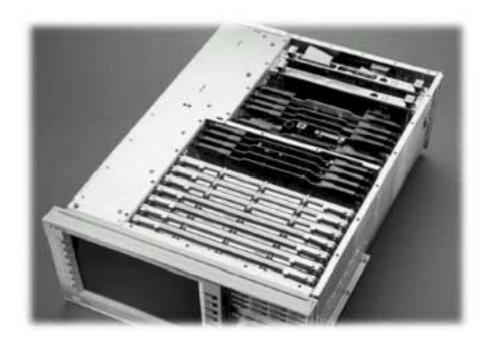
Installation Note

Agilent Technologies 8960 Wireless Communication Test Set Add additional capability to the E5515B or E5515C Kit Part Number: E5515BU-507 and E5515CU-507





E5515-90323

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Agilent Technologies 8960 Wireless Communication Test Set Add additional capability to the E5515B or E5515C Kit Part Number: E5515BU-507 and E5515CU-507

Products Affected: E5515B and E5515C

Serial Numbers: E5515B <GB45040000; E5515C <GB45200000

 Options Required:
 N/A

 Applications Supported:
 All

(X) Personnel Qualified by Agilent Technologies

() Customer

Estimated Installation Time: 2.0 hours
Estimated Verification Time: 0.5 hours

Introduction

NOTE: This kit is designed to be used with the E5515CU-589 kit for instrument that does not have the newer DSP.

Installation includes the following major steps:

- 1. Upgrade Existing Applications.
- 2. Remove Non-compatible Applications
- 3. Disassembly
 - a. Remove the instrument covers.
 - b. Remove the old boards.
- 4. Assembly
 - a. Replace ADC Samplers.
 - b. Install new Boards.
 - c. Install Option Label
- 5. Replace covers.

Installation Kit Parts List

| Item | Qty | Description |
|------|-----|---|
| 1 | 1 | Label |
| 2 | 1 | PROGRAMMED 1818-7730 (only for the <u>E5515CU-507</u> kit) |
| 3 | 1 | DSP Assy |
| 4 | 1 | Installation Instructions (this document) |

Label should have 507 printed on it.

Tools Required

- TORX T-15 and T-20 drivers
- PC with LAN capabilities
- PLCC –Extractor (if E5515C)

Safety Considerations

| WARNING | Before you disassemble the test set, turn the power switch off and unplug the power cord. Failure to unplug the test set can result in personal injury. | |
|---------|--|--|
| CAUTION | Electrostatic discharge (ESD) can damage or destroy electronic components. All work on electronic assemblies should be performed at a static-safe workstation. | |

Install New and Upgrade Existing Applications:

- 1. Upgrade all existing Applications to the latest revision if not compatible (see Table 1) and switch to one of the new revisions. All non-compatible Applications must be upgraded to work with the new boards that are included in this upgrade kit.
- 2. Follow the Firmware installation instructions that come with the Applications.

| E1960A | GSM | NOT SUPPORTED |
|--------|----------------------------|--------------------|
| E1961A | AMPS/136 | A.09.xx or greater |
| E1962B | CDMA 2000 TA | B.08.xx or greater |
| E1963A | W-CDMA TA | A.06.xx or greater |
| E1964A | GPRS TA | NOT SUPPORTED |
| E1966A | 1xEV-DO TA | A.03.xx or greater |
| E1968A | GSM/GPRS/EGPRS TA | A.04.xx or greater |
| E1985A | GSM/GPRS_AMPS/136_W-CDMA | NOT SUPPORTED |
| E1985B | GSM/GPRS_AMPS/136_W-CDMA | B.05.xx or greater |
| E1985C | GSM/GPRS_CDMA2000_AMPS/136 | C.03.xx or greater |
| E1985E | CDMA2000_1xEV-DO | E.02.xx or greater |
| E6590A | GSM/GPRS RF Modem | A.02.xx or greater |
| E6701A | GPRS LA | NOT SUPPORTED |
| E6701B | GSM/GPRS LA | NOT SUPPORTED |
| E6701C | GSM/GPRS LA | C.04.xx or greater |
| E6702A | CDMA 2000 LA | NOT SUPPORTED |
| E6703A | W-CDMA LA | NOT SUPPORTED |
| E6703B | W-CDMA LA | B.02.xx or greater |
| E6785A | GSM/GPRS_W-CDMA LA | NOT SUPPORTED |
| E6785B | GSM/GPRS_W-CDMA LA | B.02.xx or greater |

Table 1

If an application is not in Table 1 then it is already compatible with the upgraded hardware.

Remove Non-compatible Applications:

- 1. Remove all non-compatible Applications from the test set. Removing older Application revisions prevents improper operation of the test set. The test set must be connected to the PC LAN port to use these tools, see Table 1 for compatibility.
 - a. Run the Agilent 8960 File Utility
 - b. Select the Direct Connection (Single test set) button.
 - c. Select the Test Application tab.
 - d. Highlight the old revision(s) of Application(s) and select the Delete From test set button. Do not delete the new and updated applications just loaded.

Disassembly:

Remove outer cover and top cover for the 8960

- 1. Remove handles and rear bumpers.
- 2. Remove the screws on the rear panel holding outer cover.
- 3. Slide outer cover off.
- 4. Remove the 26 screws holding the top cover on and remove the cover.

Remove the old boards

1. Remove the old Protocol Processor, ADC and DSP boards. Refer to the *Replaceable Parts List* (*E5515A/B/C/T*) in the *Troubleshooting and Repair* section of the 8960 Assembly Level Repair area at: www.agilent.com/find/8960toolbox for board location.

Assembly:

Step A) ADC Assembly (for E5515C)

- 1. Move the chip (E5515-87024) from U53 on the ADC. (Refer to Figure 1)
- 2. Install the new chip (E5515-8736) to the U53 location on the ADC. (Refer to Figure 1)
 - a. Make sure the orientation is correct.
- 3. Install the ADC into the J23, J30 and J31 slots of the 8960.

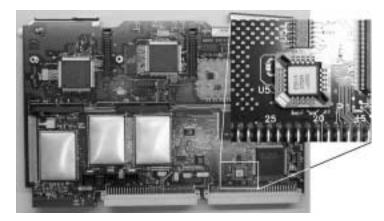


Figure 1

Install DSP Boards

1. Install the DSP Assembly into the J8, J16 slots.

Install Option Label

- 1. Install the option label, 7121-7884, on the back of the instrument.
 - a. Write 507 on the label if blank.
 - b. Don't cover up the old option label if the options on the old label are not also on the new label.

NOTE: If the test set does not power up because of an inoperative processor, replace the processor first; and then use the Agilent 8960 File Utility to re-install the Test Application. Select the TEST SET RECOVERY function on the bottom of the OPTIONS screen. Follow the instructions on the screen.

Replace covers:

- 1. Replace the top cover and secure it with the 26 screws.
- 2. Slide the outer cover on.
- 3. Replace the outer cover screws on the rear panel.
- 4. Attach the rear bumpers and handles.

Questions and concerns: contact Agilent Technologies Support:

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