

# Appendix A4: MCPS2135 System Checkout

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## MCPS System Checkout

In some cases, it may be desirable to perform a system checkout prior to installation to insure proper operation. The following procedure is included here only for reference. Accurate specification verification is not guaranteed when using this procedure.

## Equipment Required

- HP4432 Signal Generator
- Sorenson DHP40-250 DC Power Supply
- HP8561A Spectrum Analyzer
- HP436 Power Meter
- HP8481A Power Head
- 750W, 30 dB Attenuator
- Digital Volt Meter (DVM)

## Setup Procedure

1. Connect Sorenson DHP-40-250 DC power supply to DC input as outlined in Section 3.4.
2. Connect HP4432 CDMA Signal Generator to RF input. Set RF level to –30 dBm. Set I/Q input to internal CDMA generator, IS-97 with EQ, 9 Walsh Codes.
3. Connect Attenuator to RF Output
4. Connect HP8481A Power Sensor to Attenuator output.
5. Connect HP8561A Spectrum Analyzer to Sample Port Output. Set ATTN=10 dB, RBW=30kHz, VBW=10kHz, Vid. Avg.=100, SPAN=10MHz.

## Performance Checkout Procedure

1. Set current limit on Sorenson power supply to appropriate level as listed in Table 2.
2. Set DC voltage to  $27 \pm 1V$ .
3. With no RF applied, verify that idle current is approximately  $13A \times$  number of MCPA RF modules.
4. Apply RF signal, and slowly increase power to maximum rated power as listed in Appendix A2.
5. Verify that the total DC current is approximately that listed in Table 2.
6. Perform ACPR measurement. Verify that mask specification exceeds specification listed in Appendix A2.