Qi Medium Power Receiver Simulator

Qi Configurable Receiver for Debug, Verification, and Testing of Qi Transmitters

APPLICATION

Product developers looking to quickly characterize and test Qi medium power wireless transmitter functionality. The Receiver Simulator provides a variety of test modes for assessing transmitter performance. It is useful for system debugging, product demonstrations, Qi pre-compliance testing, production testing, and as a general purpose Qi receiver.

FEATURES

- Fully functional Qi medium power (15 Watt) receiver
- Stand alone, easy to use device in rugged enclosure
- +12VDC +/- 5%, 1.25A max output (Vout subject to change)
- Selectable comm. tests and modulators
- LEDs for device status
- Test points for bridge voltage and digital comm. data
- Selectable internal loads up to 2.0W in 0.25W steps
- Screw terminals for connecting external loads up to 15.0W
- Factory calibrated to improve received power accuracy
- Over reports received power by +200 mW (for FOD)

TEST MODES

- Standard Qi compatible medium power receiver
- Various test modes using DIP switches
  - No comm. or undefined or invalid comm. Packets
  - Invalid data bit rates or checksum
  - Invalid packet order or timing
  - Invalid WPC spec version
  - Multiple power control hold-off packets
  - Control error packets at minimum intervals
  - Repeated negative control error packets
  - EPT packets with reason codes
  - Negotiation Requests
  - FOD Calibration Phase
  - No power packets

MODULATORS AND LOADS

- Selectable AC capacitive, AC resistive, and DC resistive modulators
- Selectable 0.0W to 2.0W internal loads in 0.25W steps
- External loads up to 15.0W can be connected (internal load disabled)