

MODEL 35806S

KEY FEATURES

- R&D/QA evaluation
 - User-friendly GUI
 - Full portfolio of test cases and figures
 - Built-in signal database for production test requirements
- RF ATE automated test
 - Option for integration with Chroma 3680/3380/3300 ATE test solution
 - User-friendly debug tools
 - IoT turnkey test solution
- Software Defined Radio (SDR) architecture with VSG/VSA in one box
- 6GHz Frequency Range
- RF Port: Bi-directional and Tx broadcast function
- Full modulation support
- Arbitrary waveform generator and debug tools
- API for production automation programming
- Vector Network Analyzer capability (S11, S21, S12, S22)
- Noise Figure
- RF capabilities:
 - 8 RF ports
 - IF bandwidth: 200MHz
 - Frequency range: 300 KHz~6000 MHz
- Chroma 3380/3650/3680 digital capabilities:
 - Up to 1Gbps data rate
 - Up to 2048 I/O pins
 - Up to 128 CH DPS
 - Up to 2048 site parallelism

RFIC TEST SET WITH S PARAMETER MODEL 35806S

Chroma 35806S builds on the foundation of the original 35806 and its IoT/Tuner/GNSS applications while adding new features such as S Parameter and Noise Figure. This enables comprehensive testing of components like FEM/PA/Switch/LNA with support for communication standards such as Bluetooth, Wi-Fi, NB-IoT, and GPS/BeiDou (IoT). If you already own a Chroma 3380/3650/3680 digital ATS, simply adding the RF tester 35806S will upgrade it to a versatile RF chip testing solution. Hardware and software are comprehensively integrated between the 35806S and 3380/3650/3680, allowing the equipment to deliver fast and seamless RF ATE testing capabilities.

The 35806S provides a complete solution for IoT connectivity applications. Whether Wi-Fi, Bluetooth, Zigbee, or other standards, the 35806S effortlessly delivers high-quality testing and validation functionality to ensure the reliability and stability of your products in different environments.

The 35806S adopts a future-oriented Software-Defined Radio (SDR) architecture, which offers excellent scalability and adaptability to future wireless testing standards and technologies.

For convenient troubleshooting, the 35806S comes equipped with a comprehensive and easy-to-use toolset for RF/Digital debugging as well as additional support for any other signal generator and debugging tools. 35806S also provides an API for production automation software, allowing for easy integration into existing production lines. Topping it all off, the user-friendly R&D/QA interface facilitates highly intuitive setup and operation.

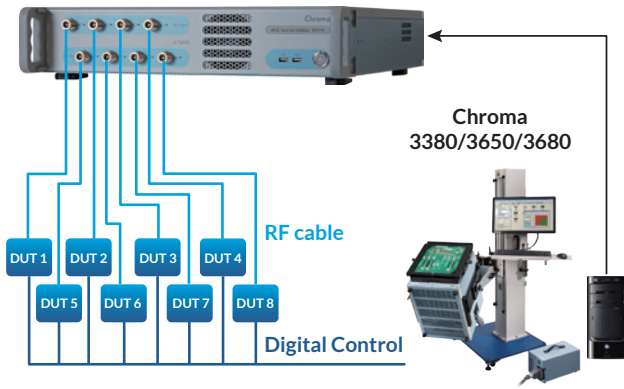
Applications

- IoT connectivity
 - Wi-Fi (802.11 a/b/g/n/ac/ax)
 - Bluetooth/BLE/BT5
 - IoT (Zigbee, Z-Wave, 802.11 j/p/af/ah)
 - LPWAN: NB-IoT, LoRa
- Power amplifier/front-end module
 - PA
 - FEM
 - LNA
 - Switch
- Broadcast receiver
 - TV Tuner
 - DVB Tuner
 - FM Tuner
- Satellite positioning receiver
 - GPS
 - BeiDou
 - Glonass
 - Galileo



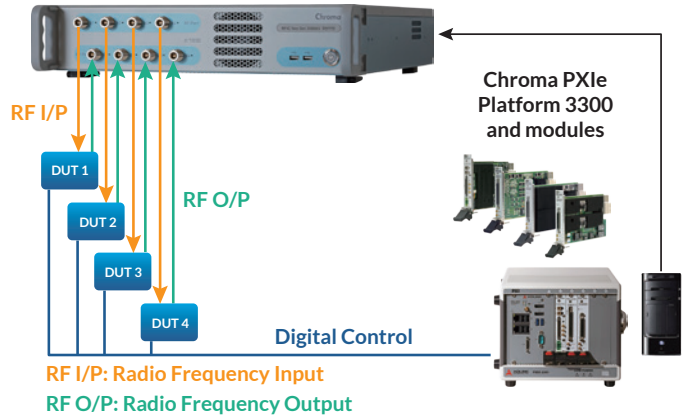
USE CASE 1

IoT wireless communication chip - RF TR X test



USE CASE 2

Power amplifier and front-end module application - RF input/RF output



SPECIFICATIONS

| | |
|--|---|
| Model | 35806S |
| Vector Signal Analyzer (VSA) RF Performance | |
| Parameter | Value |
| Input Frequency Range | 300KHz~6GHz @ VSA ; 400MHz~6GHz @ S Parameter |
| IF Bandwidth | 200 MHz |
| Max. Input Power | +30dBm peak, +25 dBm average |
| Noise Floor | -150 dBm/Hz typical |
| Input Power Accuracy @(+20 to -75 dBm) | ± 0.75dB (± 0.5 dB typical) |
| Phase Noise | < -100dBc: 1KHz offset @ 2.4GHz ; < -9.5dBc: 1KHz offset @ 5.8GHz |
| LO Leakage (after self-calibration) | < -50dBc |
| Sideband Image (IQ-imbalance) @ after self-calibration | < -50dBc @ 2.4GHz, -10dBm ; < -50dBc @ 5.8GHz, -10dBm |
| Third Order Inter-modulation Distortion (IMD3) | < -70dBc @ -10dBm |
| Input Return Loss | > 12dB 10MHz~6GHz |
| ADC Resolution | 16 bits |
| Sample Rate | 160MS/s |
| Initial Achievable Accuracy | ± 50 ppb max. (OCXO) @ 25°C, after 60 minutes warm up |
| Temperature Stability | ± 20 ppb max. (OCXO) @ 0°C~50°C |
| Aging | ± 1 ppb/day max. (OCXO) ; ± 100 ppb/yr max. (OCXO) |
| Operating Temperature | 0°C~50°C |
| Operating Voltage | +100 V~+240 V |
| Warm-up Time | > 30 minutes |
| Vector Signal Generator (VSG) RF Performance | |
| Parameter | Value |
| Output Frequency Range | 1 MHz~6GHz @ VSG ; 400MHz~6GHz @ S Parameter |
| IF Bandwidth | 200MHz |
| Max. Output power @ CW | +5dBm |
| Min. Output power @ CW | -130.00dBm @ 2400~2484MHz and 5000~6000MHz |
| Power Accuracy @ (0 to -95dBm) | ± 0.75 dB (± 0.5dB typical) |
| Phase Noise | < -100dBc: 1KHz offset @ 2.4GHz ; < -95 dBc: 1KHz offset @ 5.8GHz |
| LO Leakage (DC offset) @ after self-calibration | < -50dBc @ 2.4GHz, -10dBm ; < -50dBc @ 5.8GHz, -10dBm |
| Sideband Image (IQ-imbalance) @ after self-calibration | < -50dBc @ 2.4GHz, -10dBm ; < -50dBc @ 5.8GHz, -10dBm |
| Third Order Inter-modulation Distortion (IMD3) | < -60dBc @ -10dBm (two -13dBm Tone) |
| Return Loss | > 12dB 10MHz~6GHz |
| DAC Resolution | 16 Bits |
| Sample Rate | 960 MS/s |
| Initial Achievable Accuracy | ± 50ppb max. (OCXO) |

* All specifications are subject to change without notice.

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Search Keyword

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