



4.9-5.8 GHz High-Linearity Power Amplifier

SST11CP15

Data Sheet

The SST11CP15 is a versatile power amplifier based on the highly-reliable InGaP/GaAs HBT technology. Easily configured for high-linearity, high-efficiency applications with superb power-added efficiency while operating over the 4.9-5.8 GHz frequency band. The SST11CP15 has excellent linearity while meeting 802.11g spectrum mask at 23dBm. The SST11CP15 also features easy board-level usage along with high-speed power-up/down control through a single combined reference voltage pin and is offered in a 12-contact UQFN package.

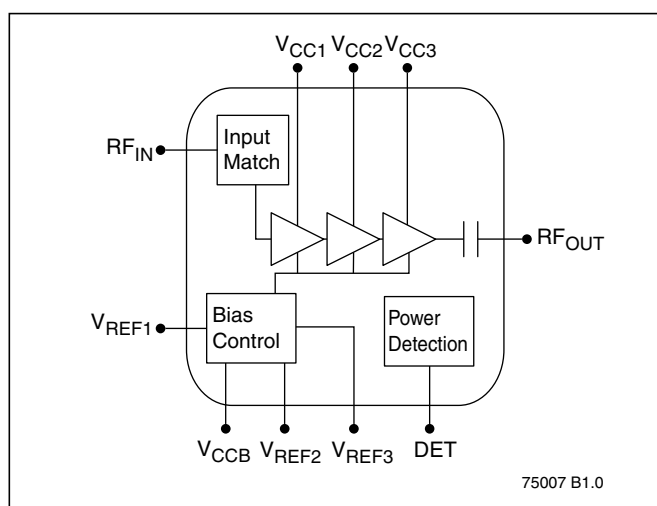
Features

- **Small Package Size**
- **High Linear Output Power:**
 - 802.11a OFDM Spectrum mask compliance up to 23 dBm at 3.3V
 - Added EVM~2.5% up to 18 dBm, typically, across 5.1-5.8 GHz for 54 Mbps 802.11a signal at 3.3V
 - Added EVM~2.5% up to 21 dBm, typically, across the high band for 54 Mbps 802.11a signal at 5V
- **High Power-added Efficiency/Low Operating Current for 54 Mbps 802.11a Applications**
 - ~11% @ $P_{OUT} = 19$ dBm for 54 Mbps
- **Gain:**
 - Typically 26 dB gain across broadband 4.9-5.8 GHz
- **Low Idle Current**
 - ~120 mA I_{CQ}
- **Low Shut-down Current (<1 μ A)**
- **20 dB Dynamic Range On-chip Power Detection**
- **50 Ω On-chip Input Matching and Simple Output Matching**
- **Packages Available**
 - 12-contact UQFN (2mm x 2mm x 0.6mm max thickness)

Applications

- **WLAN (IEEE 802.11a/n)**
- **Japan WLAN**
- **HyperLAN2**
- **Multimedia**

Block Diagram



Product Ordering

Valid combinations for SST11CP15

SST11CP15-QUBE

SST11CP15 Evaluation Kits

SST11CP15-QUBE-K

Note: Valid combinations are those products in mass production or will be in mass production. Consult your SST sales representative to confirm availability of valid combinations and to determine availability of new combinations.



A Microchip Technology Company

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Contact Information

Thank you for your interest in Microchip RF products. The data sheet for this device contains proprietary information. To obtain a copy of the data sheet, contact your local Microchip sales representative or distributor at the link below.

[Global Sales and Distribution](#)

Table 1:Revision History

Revision	Description	Date
A	• Initial release of Product Brief	Jun 2011

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Specifications are subject to change without notice. Refer to www.microchip.com for the most recent documentation. For the most current package drawings, please see the Packaging Specification located at <http://www.microchip.com/packaging>.

Memory sizes denote raw storage capacity; actual usable capacity may be less.

SST makes no warranty for the use of its products other than those expressly contained in the Standard Terms and Conditions of Sale.

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