

PRODUCT SUMMARY

SKY66298-11: 900 to 990 MHz High-Efficiency 4 W Power Amplifier

Applications

- FDD and TDD 2G/3G/4G LTE systems
- 3GPP band 8 small cell base stations
- Driver amplifier for micro and macro base stations
- Active antenna array and massive MIMO

Features

- High efficiency: PAE = 40% @ +28 dBm
- High linearity: +28 dBm with < -50 dBc linearized ACLR (20 MHz LTE, 8.5 dB PAR signal)
- High gain: 34 dB
- Excellent input and output return loss: to 50 Ω system
- Integrated active bias: performance compensated over temp
- Integrated enable On/Off function: PAEN = 1.7 to 2.5 V
- Single supply voltage: 5.0 V
- Pin-to-pin compatible PA family supporting all 3GPP bands
- Compact (16-pin, 5 × 5 × 1.3 mm) package (MSL3, 260 °C per JEDEC J-STD-020)



Skyworks Green™ products are compliant with all applicable legislation and are halogen-free. For additional information, refer to *Skyworks Definition of Green™*, document number SQ04-0074.

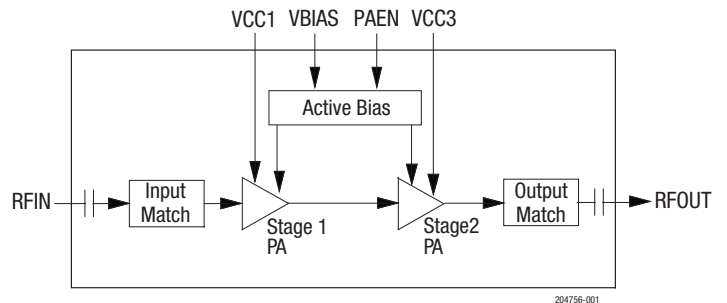


Figure 1. SKY66298-11 Block Diagram

Description

SKY66298-11 is a high-efficiency fully input/output matched power amplifier (PA) with high gain and linearity. The compact 5 × 5 mm PA is designed for FDD and TDD 2G/3G/4G LTE small cell base stations operating from 900 to 990 MHz. The active biasing circuitry is integrated to compensate PA performance over temperature, voltage, and process variation.

The SKY66298-11 is part of high efficiency, pin-to-pin compatible PA family supporting all 3GPP bands. Table 1 lists the pin-to-pin compatible parts in the PA family.

A block diagram of the SKY66298-11 is shown in Figure 1.

Table 1. Pin-to-Pin Compatible PA Family

Part Number	Frequency (MHz)	3GPP Band
SKY66296-11	700 to 800	Band 12, 13, 14, 17, 29, and 44
SKY66289-11	791 to 821	Band 20
SKY66295-11	800 to 900	Band 5, 18, 19, 20, 26 and 27
SKY66298-11	900 to 990	Band 8
SKY66291-11	1805 to 1880	Bands 3 and 9
SKY66299-11	1900 to 2000	Band 2, 25, 33, 36, and 37
SKY66294-11	2000 to 2300	Band 1, 4, 10, and 23
SKY66292-11	2300 to 2400	Band 30 and 40
SKY66297-11	2490 to 2690	Band 7, 38, and 41
SKY66293-11	3400 to 3600	Band 22 and 42
SKY66288-11	5150 to 5925	LTE-U

Ordering Information

Model Name	Manufacturing Part Number	Evaluation Board Part Number
SKY66298-11: 900 to 990 MHz High-Efficiency 4 W Power Amplifier	SKY66298-11	SKY66298-11-EVB

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