

PRODUCT SUMMARY

SKY66188-11: 758 to 803 MHz Linear Power Amplifier

Applications

- 3G/4G LTE Band 28 small cell
- Active distributed antenna system
- Cellular repeaters
- Driver amplifier

Features

- High gain: 37 dB (unconditionally stable)
- High linearity: +23 dBm with –50 dBc ACLR @ 85°C (WCDMA Test Model 1 with 64 DPCH)
- RF input and output internally matched to 50 Ω
- Excellent output return loss: <–15 dB
- Integrated active bias: performance compensated over temp
- PA On/Off function: 4.0 μ s switching time
- Integrated coupler for output power monitoring
- Single supply voltage: 3.3 V
- Minimal external components
- Pin-to-pin compatible PA family supporting all 3GPP bands
- Small 5 x 5 mm, 28-pin package (MSL3, 260 °C per JEDEC J-STD-020)



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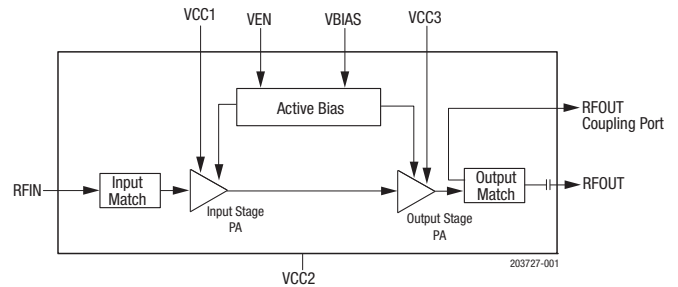


Figure 1. SKY66188-11 Linear PA Block Diagram

Description

The SKY66188-11 is a high-linearity power amplifier (PA) with fully matched input/output and high gain. The compact 5 x 5 mm PA is designed for FDD 3G/4G LTE small cell base stations operating from 758 to 803 MHz. The active biasing circuitry is integrated to compensate PA performance over temperature, voltage, and process variation as well as an internal coupler for power monitoring.

The SKY66188-11 requires minimal external components and is part of a high-linearity, pin-to-pin compatible PA family supporting all 3GPP bands.

A block diagram of the SKY66188-11 is shown in Figure 1. The device package and pinout for the 28-pin device are shown in Figure 2. Table 1 lists the pin-to-pin compatible parts in the PA family.

Table 1. Pin-to-Pin Compatible PA Family

| Part Number | Frequency (MHz) | LTE Band |
|-------------|-----------------|--------------------------|
| SKY66181-11 | 1805 to 1880 | 3 |
| SKY66184-11 | 2110 to 2170 | 1, 4, and 10 |
| SKY66185-11 | 851 to 894 | 5, 6, 18, 19, 26, and 27 |
| SKY66186-11 | 728 to 768 | 12, 13, 14, and 17 |
| SKY66187-11 | 2620 to 2690 | 7 |
| SKY66188-11 | 758 to 803 | 28 |
| SKY66189-11 | 1930 to 1995 | 2 and 25 |

Ordering Information

| Model Name | Manufacturing Part Number | Evaluation Board Part Number |
|------------------------|---------------------------|------------------------------|
| SKY66188-11: Linear PA | SKY66188-11 | SKY66188-11-EK1 |

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