

PRODUCT SUMMARY

SKY66523-11: 3550 to 4200 MHz Wide Instantaneous Bandwidth High-Efficiency Power Amplifier

Applications

- 5G NR enterprise small cell
- Driver amplifier for micro base stations and macro base stations
- 5G massive MIMO Driver

Features

- Wide instantaneous signal bandwidth: 200 MHz
- Wide operational bandwidth: 3550 to 4200 MHz
- High output power: 30 dBm with 200 MHz signal
- High linearity: 3GPP compliant with 200 MHz 5G, 8.5 dB PAR signal
- High efficiency
- High gain: 33 dB
- Integrated active bias: performance compensated over temp
- Integrated enable ON / OFF function
- Pin compatible PA family supporting major 3GPP bands
- Compact (16-pin, 5 × 5) package (MSL3, 260 °C per JEDEC J-STD-020)



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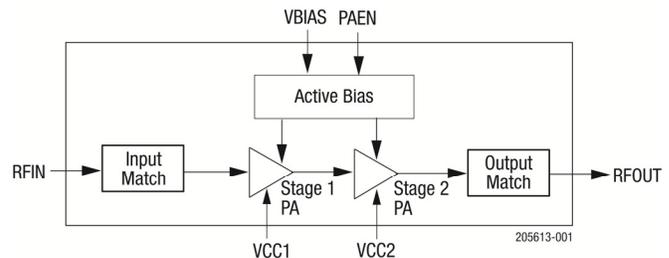


Figure 1. SKY66523-11 Block Diagram

Description

The SKY66523-11 is a 200 MHz instantaneous bandwidth, fully input/output matched 30 dBm power amplifier (PA) with high gain and linearity. The compact 5 × 5 mm PA is designed for 5G NR systems operating from 3550 to 4200 MHz. The active biasing circuitry is integrated to compensate PA performance over temperature, voltage, and process variation.

The SKY66523-11 is part of high-efficiency, pin compatible PA family supporting major 3GPP bands.

A block diagram of the SKY66523-11 is shown in Figure 1. The device package and pinout for the 16-pin device are shown in Figure 2. Table 1 lists the pin compatible parts in the PA family. Signal pin assignments and functional pin descriptions are described in Table 2.

Table 1. Pin Compatible PA Family

Part Number	Frequency (MHz)	3GPP Band
SKY66312-11	2300 to 2400	Bands 30 and 40
SKY66317-11	2496 to 2690	Bands 7, 38, and 41
SKY66318-11	3300 to 3600	Bands 22, 42, n77, and n78
SKY66318-21	3400 to 3700	Bands 22, 42, n77, and n78
SKY66320-11	3550 to 3800	Bands 43, 48, and n77
SKY66319-11	4400 to 5000	Band n79
SKY66520-11	3300 to 3800	n78, B42, and B43
SKY66523-11	3550 to 4200	n77, n48

Ordering Information

Part Number	Product Description	Evaluation Board Part Number
SKY66523-11	3550 to 4200 MHz Wide Instantaneous BW High-Efficiency PA	SKY66523-11EK1

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