

PRODUCT SUMMARY

SKY66520-11: 3300 to 3800 MHz Wide Instantaneous Bandwidth High-Efficiency Power Amplifier

Applications

- 5G NR and 4G LTE 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: 3300 to 3800 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
- Integrated active bias: performance compensated over temp
- Integrated enable ON/OFF function
- Pin-to-pin compatible PA family supporting major 3GPP bands
- Compact (16-pin, 5 × 5 mm) package (MSL3, 260 °C per JEDEC J-STD-020)

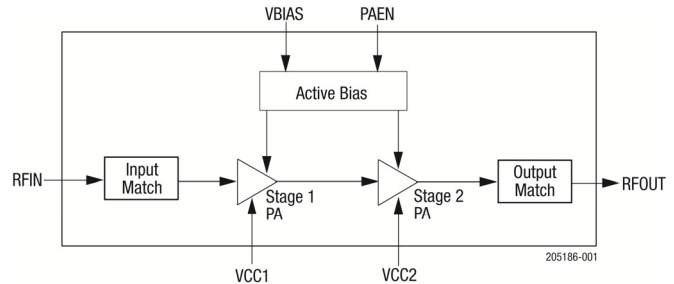


Figure 1. SKY66520-11 Block Diagram

Description

The SKY66520-11 is a 200 MHz wide instantaneous bandwidth, fully input/output matched 30 dBm power amplifier (PA) with high gain, efficiency and linearity. The compact 5 × 5 mm PA is designed for 5G NR and 4G LTE systems operating from 3300 to 3800 MHz. The active biasing circuitry is integrated to compensate PA performance over temperature, voltage, and process variation.

The SKY66520-11 is part of high-efficiency, pin-to-pin compatible PA family supporting major 3GPP bands.

A block diagram of the SKY66520-11 is shown in Figure 1 and Table 1 lists the pin-to-pin compatible parts in the PA family.



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.

Table 1. Pin-to-Pin Compatible PA Family

| Part Number | Frequency (MHz) | 3GPP Band |
|-------------|-----------------|----------------------------|
| SKY66520-11 | 3300 to 3800 | n78, B42, and B43 |
| SKY66523-11 | 3550 to 4200 | n77, n48 |
| 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 |

Ordering Information

| Part Number | Product Description | Evaluation Board Part Number |
|-------------|--|------------------------------|
| SKY66520-11 | 3300 to 3800 MHz Wide Instantaneous High-Efficiency PA | SKY66520-11EK1 |

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