

PRODUCT SUMMARY

SKY66052-11: 3300 to 4200 MHz Wide Instantaneous Bandwidth High-Gain Linear Driver Amplifier

Applications

- Driver amplifier for massive MIMO, macro base stations, and micro base stations
- Supports 3GPP Bands B42, B43, n77, and n78
- 4G LTE and 5G NR TDD systems

Features

- Adjustable gain from 30 dB to 36 dB
- Wide instantaneous signal bandwidth: 200 MHz
- High linearity: -40 dBc open loop ACLR at +10 dBm (100 MHz 5G, 8.5 dB PAR signal)
- High linear output power up to +19 dBm
- Fast turn-on time: 0.6 usec typical
- Internally matched input and output return loss to 50 Ω system
- Integrated active bias: performance compensated over temp
- Integrated enable On/Off function: PAEN = 1.8 V logic
- Single supply voltage: 5.0 V
- Compact (16-pin, 3 $\times$ 3 $\times$ 0.85 mm) package (MSL3, 260 $^{\circ}$ C per JEDEC J-STD-020)



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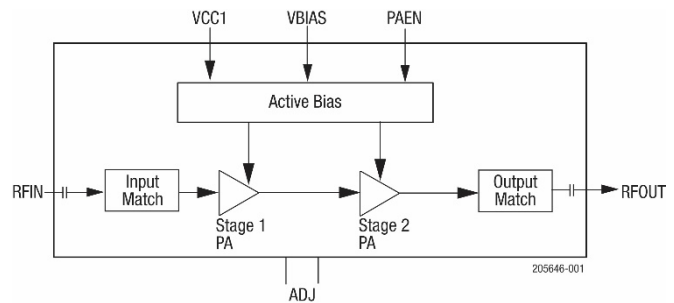


Figure 1. SKY66052-11 Block Diagram

Description

The SKY66052-11 is a wide instantaneous bandwidth, fully input/output matched driver amplifier with high gain and linearity. The gain can be adjusted from 30 dB to 36 dB with a simple attenuation network. The compact 3 $\times$ 3 mm driver is designed for 4G LTE and 5G NR TDD systems operating from 3300 to 4200 MHz. The active biasing circuitry is integrated to compensate amplifier performance over temperature, voltage, and process variation.

A block diagram of the SKY66052-11 is shown in Figure 1. The SKY66052-11 is part of a pin-to-pin compatible family of driver PAs. Refer to Table 1.

Table 1. Pin-to-Pin Compatible Driver PA Family

Part Number	Frequency (MHz)	3GPP / 5G Band	Gain
SKY66041-11	2300 to 2700	B7, B38, B40, B41, n41	30
SKY66051-11	2300 to 2700	B7, B38, B40, B41, n41	> 35
SKY66042-11	3300 to 4100	B42, B43, n77, n78	30
SKY66052-11	3300 to 4200	B42, B43, n77, n78	> 35

Ordering Information

Part Number	Product Description	Evaluation Board Part Number
SKY66052-11	3300 to 4200 MHz Wide Instantaneous Bandwidth High-Gain Linear Driver Amplifier	SKY66052-11EK1 (3300 to 4200 MHz)

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