

## PRODUCT SUMMARY

# SKY66318-21: 3300 to 3700 MHz Wide Instantaneous Bandwidth High-Efficiency Power Amplifier

## Applications

- Enterprise small cell and massive MIMO
- Driver amplifier for micro base stations and macro base stations
- Supports 4G and 5G Bands B22, B42, n78, and n77 (partial)

## Features

- Wide instantaneous signal bandwidth: 200 MHz
- High efficiency
- High linearity: 3GPP Compliant with 200 MHz 5G, 8.5 dB PAR signal
- High gain
- Excellent input and output return loss to 50 ohm system
- Integrated active bias circuitry to compensate for temperature, voltage, and process variation
- Single supply voltage: 5.0 V
- Pin-to-pin compatible PA family supporting major 3GPP bands
- Compact (16-pin,  $5 \times 5 \times 1.3$  mm) package (MSL3, 260 °C per JEDEC J-STD-020)



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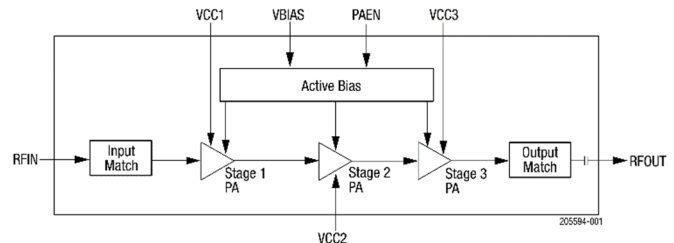


Figure 1. SKY66318-21 Block Diagram

## Description

The SKY66318-21 is a highly efficient, wide instantaneous bandwidth, fully input/output matched power amplifier (PA) with high gain and linearity. The compact  $5 \times 5$  mm PA is designed for 5G NR and 4G LTE systems operating from 3300 to 3700 MHz. Active biasing circuitry is integrated to compensate for temperature, voltage, and process variation.

The SKY66318-21 is part of a high-efficiency, pin-to-pin compatible PA family supporting major 3GPP bands.

A block diagram of the SKY66318-21 is shown in Figure 1.

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)	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

## Ordering Information

Part Number	Product Description	Evaluation Board Part Number
SKY66318-21	3300 to 3700 MHz Wide Instantaneous High-Efficiency PA	SKY66318-21EK1

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