

SKY77652-31 NR Power Amplifier Module for ENDC Applications

Applications

- 5G NR handsets requiring 5G re-farm bands support for ENDC
 - 5G Bands n1, n2, n3, n7, n25, n30, n66
 - LTE Bands B1, B2, B3, B4, B7, B25, B30, B40, B41, B66

Features

- 50Ω input and output impedances, integrated DC blocking on all ports
- Fully programmable Mobile Industry Processor Interface (MIPI[®]) control
- Optimized for APT DC/DC operation
- Small, low profile package:
 - 3.65 mm x 4.0 mm x 0.75 mm
 - 28-pad configuration

5G Features

- Optimized for Average Power Tracking system
- Meets 3GPP 5G NR linearity and EVM requirements



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.

Description

The SKY77652-31 is a Power Amplifier Module (PAM) that supports 5G handsets and operates efficiently in NR mode when ENDC is required. The PAM consists of PA blocks for mid-bands and high-bands, a logic control block for multiple power control levels, and band enable functions. RF I/O ports are internally matched to 50Ω to minimize the number of external components. Extremely low leakage current maximizes handset standby time. The InGaP/GaAs die and passive components are mounted on a multi-layer laminate substrate and the assembly encapsulated in plastic overmold.

5G NR

The SKY77652-31 meets spectral linearity requirements of NR modulation with DFT and CP OFDM modulations with up to 256 QAM constellations. The PAM supports various resource block allocations within 3GPP defined transmission bandwidth with good power-added efficiency. Figure 1 shows the SKY77652-31 functional block diagram.

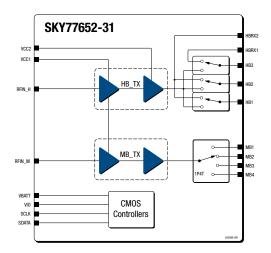


Figure 1. Functional Block Diagram

Ordering Information

Part Number	Part Description	Evaluation Board Part Number
SKY77652-31	NR Power Amplifier Module for ENDC Applications	SKY77652-31EVB

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