

PRODUCT SUMMARY

SKY77632 Multiband Power Amplifier Module for Hexa-Band (I, II, III, IV, V, VIII) WCDMA / HSDPA / HSUPA / HSPA+ / LTE

Applications

- Multiband 3G handsets
- WCDMA/ HSDPA/ HSUPA/ LTE-modulated handsets for Bands I, II, III, IV, V, VIII

Features

- Pad compatible with Skyworks SKY77629-21
- 50 ohm input and output impedances, integrated DC blocking on all ports
- Separate single-ended WCDMA inputs and outputs
- CMOS-compatible, two-wire MIPI logic inputs (SCLK, SDATA)
- Low capacitance VCC interface for 3G/4G supports Envelope Tracking compatibility
- Small, low profile package:
 - 7 mm x 5 mm x 0.9 mm
 - 42-pad configuration

3G FEATURES:

- WCDMA mode supports output power, bandwidth for bands I, II, III, IV, V, VIII (and sub-bands IX, X, XVIII, XIX, XXVI) through an integrated band-select switch
- Digital bias optimization through RFFE interface for best efficiency/linearity tradeoff
- Compatible with envelope tracking system

4G FEATURES:

- Optimized for Average Power Tracking system
- LTE supports output power bandwidth bands 1, 2, 3, 4, 5, 8 (and sub-bands 9, 10, 18, 19, 20, 26)

Description

The SKY77632 is a multiband Power Amplifier Module (PAM) that supports 3G/4G handsets and operates efficiently in WCDMA, and LTE modes. The PAM consists of a separate WCDMA blocks operating in low and high bands, a logic control block for multiple power control levels, and band enable functions in both cellular and UMTS. RF I/O ports are internally matched to 50 Ω 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.

The SKY77632 is pad-compatible with Skyworks SKY77629-21 which can provide flexibility for band requirements of variants.

WCDMA: The SKY77632 uses an enhanced architecture to: support WCDMA, High-Speed Downlink Packet Access (HSDPA), High-Speed Uplink Packet Access (HSUPA), and LTE modulations; cover multiple bands for 3GPP, including bands I, II, IV, V, and VIII; operate at different power modes. The module is fully controllable via MIPI interface.

LTE: The SKY77632 meets spectral linearity requirements of LTE modulation with QPSK/16QAM up to 20 MHz bandwidth, including various resource block allocations, with good power-added efficiency



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.



Ordering Information

Product Name	Order Number	Evaluation Board Part Number
SKY77632 Multiband Power Amplifier Module	SKY77632	EN40-D715-001

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