PRODUCT SUMMARY

SKY77818 Penta-Band Power Amplifier Module for FDD/TDD LTE (Tx Bands 7, 30, 38, 40, 41)

Applications

- Multi-band 4G handsets
- Long Term Evolution (LTE)
  - Up to 20 MHz bandwidth/ 100 resource blocks

Features

- Average Power Tracking (APT) for TDD/FDD bands
- 50 ohm input/output impedance with internal DC-blocking
- Fully programmable Mobile Industry Processor Interface (MIPI®)digital control
- Continuous bias control for 3G/4G PA High Power Mode via MIPI/RFFE interface
- Low Supply voltage
- Low voltage support (0.6 V) for APT applications
- Low Leakage current in power-down mode
- Integrated TDD Tx-Rx switch for single SAW architecture
- Small, low profile package
  - 4.0 x 3.0 x 0.85 mm
  - 24-pad configuration

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Description

The SKY77818 Penta-Band Power Amplifier Module (PAM) is a fully matched, 24-pad surface mount module developed for 4G LTE applications. The PAM consists of PA blocks, input and output matching circuitry to 50 Ω, a MIPI standard logic control block for multiple power control levels, and output / input switch control in a single 4.0 mm x 3.0 mm x 0.85 mm package.

The SKY77818 enhanced architecture covers multiple bands and meets the spectral linearity requirements of LTE QPSK and 16QAM modulations with up to 20 MHz bandwidth and up to 100 resource block allocations. Varying the input power controls the output power, and V_{APT} is adjusted using a DCDC converter to maximize efficiency for each power level. Extremely low leakage current maximizes handset standby time.

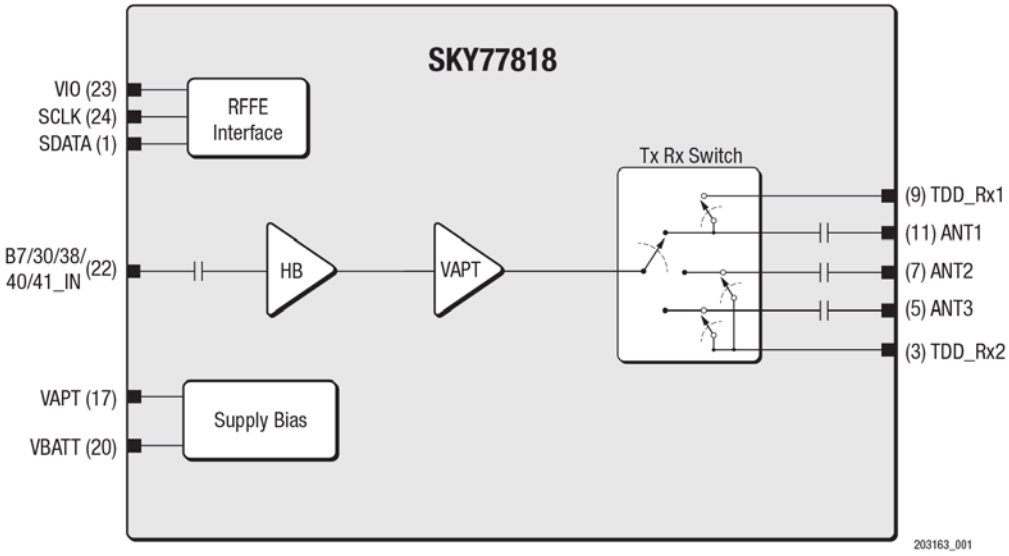


Figure 1. SKY77818 Functional Block Diagram

Ordering Information

Product Name	Order Number	Evaluation Board Part Number
SKY77818 Penta-Band Power Amplifier Module	SKY77818-21	N/A

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