

PRODUCT SUMMARY

SKY77192-14 Power Amplifier Module for CDMA2000 (450–460 MHz)

Applications

- Digital cellular (CDMA2000)
- Wireless Local Loop (WLL)

Features

- Low voltage positive bias supply: 3.2 V to 4.2 V
- Good linearity
- High efficiency: 40% at 29 dBm
- Large dynamic range
- 10-pad package, 4 × 4 × 0.9 mm
- Power down control
- InGaP
- Supports low collector voltage operation
- Digital Enable
- No V_{REF} required
- CMOS compatible control signals

Description

The SKY77192-14 Power Amplifier Module (PAM) is a fully matched 10-pad surface mount module developed for Code Division Multiple Access (CDMA2000) handsets and Wireless Local Loop applications. This small and efficient module packs full coverage of the 450 ~ 460 MHz bandwidth into a single compact package. The SKY77192-14 meets the stringent CDMA2000 linearity requirements to and exceeding 29 dBm output power.

The single Gallium Arsenide (GaAs) Microwave Monolithic Integrated Circuit (MMIC) contains all active circuitry in the module. The MMIC contains on-board bias circuitry, as well as input and interstage matching circuits. Output match into a 50 Ω load is realized off-chip within the module package to optimize efficiency and power performance.

The SKY77192-14 PAM is manufactured with Skyworks' InGaP GaAs Heterojunction Bipolar Transistor (HBT) BiFET process that provides for all positive voltage DC supply operation while maintaining high efficiency and good linearity. Primary bias to the SKY77192-14 is supplied directly from any three-cell Ni-Cd, a single-cell Li-Ion, or other suitable battery with an output in the 3.2 V to 4.2 V range. No VREF voltage is required. Power down is accomplished by setting the voltage on VENABLE to zero volts. No external supply side switch is needed as typical "off" leakage is a few microamperes with full primary voltage supplied from the battery.



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
SKY77192-14 Power Amplifier Module	SKY77192-14	EN20-D176-001 V3 Rev. A

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