

PRODUCT SUMMARY

SKY77166 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 across wide dynamic range
- Dual-mode operation
- 10-pad package:
4 x 4 x 1.15 mm
- Power down control
- Low power state control
- CDMA2000

Description

The SKY77166 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 SKY77166 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 within the module, which includes onboard bias circuitry as well as input and interstage matching circuits. Output match into a 50-ohm load is realized off-chip within the module package to optimize efficiency and power performance. This device is manufactured with Skyworks' GaAs Heterojunction Bipolar Transistor (HBT) process that provides for all positive voltage DC supply operation while maintaining high efficiency and good linearity.

Primary bias to the SKY77166 is supplied directly from a three-cell Ni-Cd, a single-cell Li-Ion, or other suitable battery with an output in the 3.2 to 4.2 volt range. Power down is accomplished by setting the voltage on the low current reference pin 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.

NEW Skyworks offers lead (Pb)-free, RoHS (Restriction of Hazardous Substances)-compliant packaging.

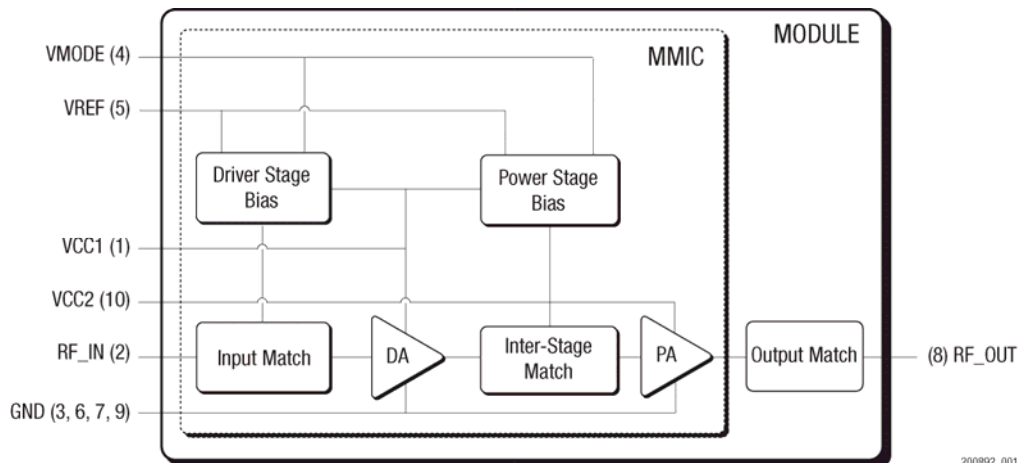


Figure 1. Functional Block Diagram

Ordering Information

Model Number	Manufacturing Part Number	Product Revision	Package	Operating Temperature
SKY77166	SKY77166		MCM 4 x 4 x 1.15 mm	-30 °C to +85 °C

Revision History

Revision	Level	Date	Description
A		April 18, 2008	Initial Release

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