

PRODUCT SUMMARY

SKY77710 Power Amplifier Module for CDMA (824 MHz–849 MHz)

Applications

- CDMA handsets

Features

- Low voltage positive bias supply 3.2 V to 4.2 V
- Good linearity
- High efficiency
 - 40% @ 27 dBm
- Large dynamic range
- Small, low profile package
 - 3 mm x 3 mm x 0.9 mm
 - 10-pad configuration
- Power down control
- InGaP
- Supports low collector voltage operation
- Digital Enable
- No V_{REF} required
- CMOS compatible control signals
- Integrated Directional Coupler

Description

The SKY77710 Power Amplifier Module (PAM) is a fully matched 10-pad surface mount module developed for Code Division Multiple Access (CDMA) applications. This small and efficient module packs full coverage of the 824–849 MHz bandwidth into a single compact package. Because high efficiencies are attained throughout the entire power range, the SKY77710 delivers unsurpassed talk-time advantages. A directional coupler is integrated into the module to eliminate the need for any external coupler.

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-ohm load is realized off-chip within the module package to optimize efficiency and power performance.

The SKY77710 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 SKY77710 is supplied directly from any suitable battery with an output in the 3.2 to 4.2 volt 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.

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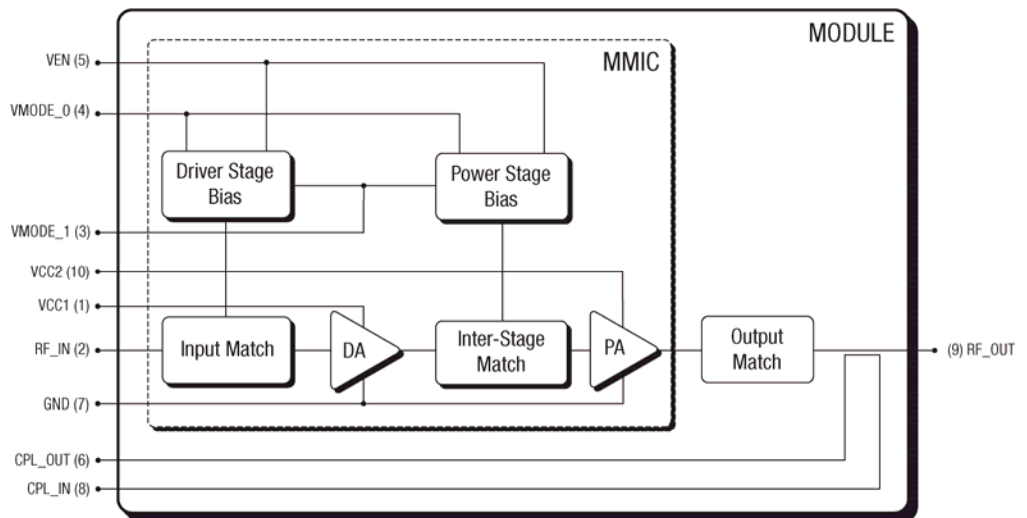



Figure 1. SKY77710 Functional Block Diagram

Ordering Information

Model Number	Manufacturing Part Number	Product Revision	Package	Operating Temperature
SKY77710	SKY77710		MCM 3 mm x 3 mm x 0.9 mm	-20 °C to +85 °C

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