

PRODUCT SUMMARY

SKY87020-13: Power Management IC for the SkyBlue™ System

Applications

- Smartphones
- 3G/4G multimode front-end modules
- Tablets and eBook readers
- Wireless data cards

Features

- Input voltage range: 2.5 V to 5.5 V
- High-efficiency converter:
 - Output voltage range optimized for SkyBlue™ PA operation
- 4.5 V, 3 mA PA bias supply output
- Over-temperature and short-circuit protection
- Small footprint CSP (16-ball, 2.005 mm × 2.005 mm) package (MSL1, 260 °C per JEDEC J-STD-020)



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.

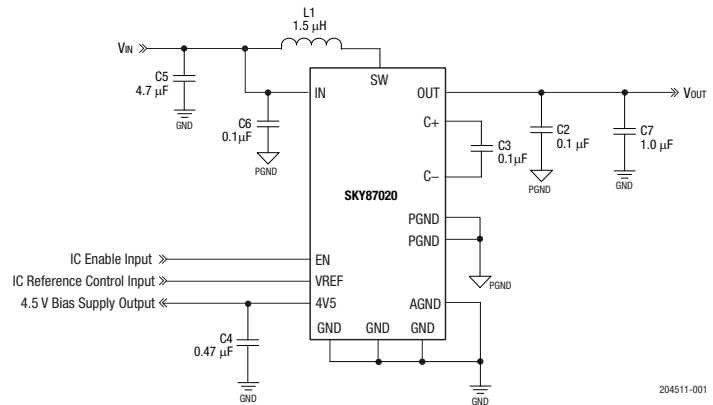


Figure 1. Typical Application Circuit (Programmable Output)

Description

The SKY87020-13 is a high-efficiency RF front-end power management IC for APT RF power amplifier (PA) applications in portable battery powered devices. This IC includes a high-efficiency DC-DC voltage converter with a 4.5 V reference supply to provide a user-programmable RF PA APT supply for a 2.5 V to 5.5 V input range.

The SKY87020-13 also provides an additional 4.5 V bias supply for RF PA operation. This bias voltage output can supply load currents up to 3 mA and is available whenever the device is enabled. When the device is disabled, the 4.5 V bias supply is shut down.

The SKY87020-13 is available in a 16-pin, 2.005 mm × 2.005 mm Chip Scale Package (CSP).

A typical application circuit is shown in Figure 1.

Ordering Information

| Model Name | Manufacturing Part Number | Evaluation Board Part Number |
|--|---------------------------|------------------------------|
| SKY87020-13: Power Management IC for the SkyBlue™ System | SKY87020-13-001 | SKY87020-13-EVB |

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