SKY87020-11: Power Management IC for SkyOne® Ultra 2.0 Systems

Applications

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

Features

- Input voltage range: 2.5 V to 5.5 V
- High-efficiency converter:
  - Output voltage range optimized for SkyOne Ultra 2.0 PA operation
- 4.5 V, 3 mA PA bias supply output:
  - IC disable VIN bypass
- 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)

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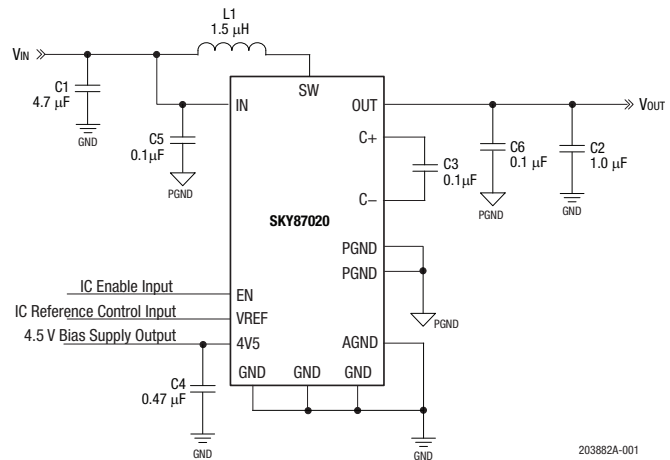

Figure 1. Typical Application Circuit (Programmable Output)

Description

The SKY87020-11 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 SKY87020-11 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 VIN supply is bypassed to the 4V5 output.

The SKY87020-11 is available in a 16-pin, 2.005 mm × 2.005 mm Chip Scale Package (CSP) package.

A typical application circuit is shown in Figure 1.

Ordering Information

Model Name	Manufacturing Part Number	Evaluation Board Part Number
SKY87020-11: Power Management IC for SkyOne® Ultra 2.0 Systems	SKY87020-11-001	SKY87020-11-EVB

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