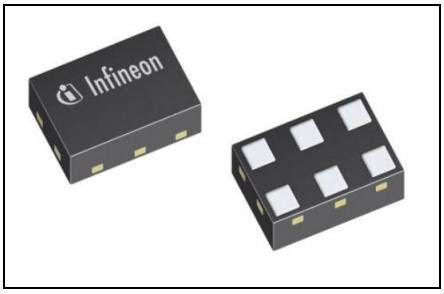
BGC100GN6

Switchable Wideband Directional Coupler IC

Features



- Fully integrated coupler in RF CMOS
- Bi-directional coupler
- Fitted for feedback receivers to accomplish closed loop power control and antenna tuning
- Wide frequency range: 0.6 to 2.7 GHz
- Designed for low insertion loss and high directivity
- Supports all cellular standards: GSM /WCDMA / HSPA+ / FDD-LTE / TDLTE / TD-SCDMA / CDMA
- Integrated low-pass filter for 5GHz WiFi jammers suppression
- GPIO controlled
- Small form factor 1.1mm x 0.7mm
- RoHS and WEEE compliant package
- Product validation: Qualified for industrial applications according to the relevant tests of JEDEC47/20/22

Description

The BGC100GN6 bi-directional coupler IC is designed for 2G/3G/4G RF front end applications. The device contains a bidirectional coupler operating in one or multiple bands within 0.6 to 2.7 GHz frequency range. The coupled output contains a low-pass filter for 5 GHz ISM blockers suppression. The coupler offers low insertion loss and high directivity.

The coupler is controlled via a GPIO pin. No external power supply blocking or RF decoupling capacitors are required. The BGC100GN6 is a fully integrated device deploying Infineon high volume RF-CMOS technology. The device has a very small size of only 1.1 x 0.7mm^2 and a maximum heigth of 0.4 mm.

Block diagram and ordering information

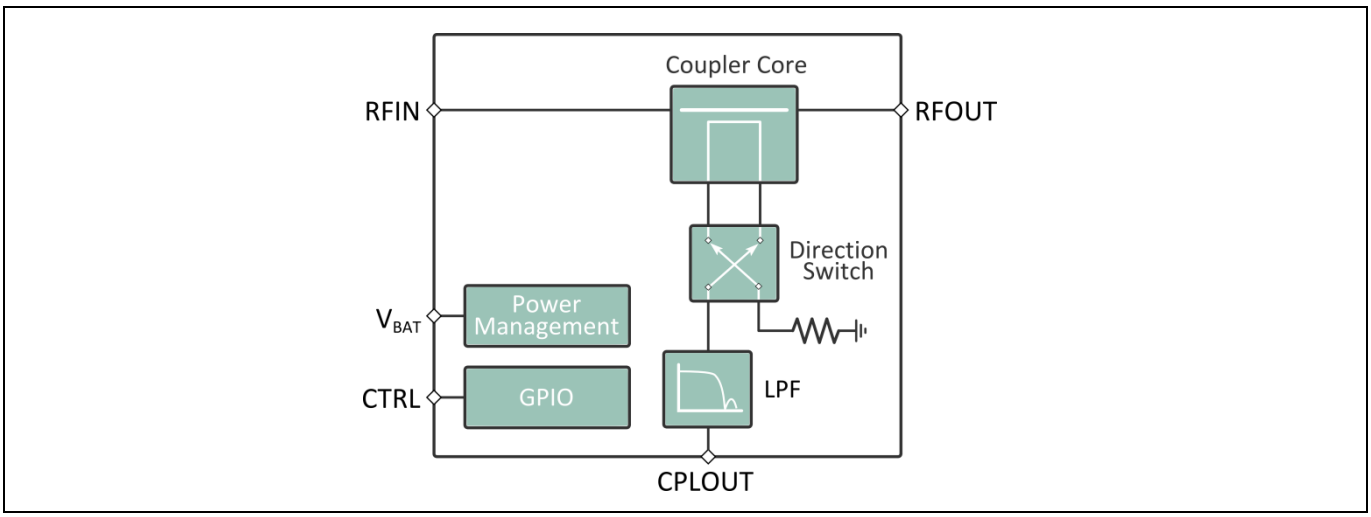


Figure 1 BGC100GN6 Block diagram

Table 1 Ordering Information

Type	Package	Marking
BGC100GN6	TSNP-6-2	2

WEEE Compliant Package

Halogen-Free PB Free

RoHS

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