

Description

The F0472 is an integrated dual-path RF front-end consisting of an RF switch and two gain stages with 6dB gain control used in the analog front-end receiver of an Active Antenna System (AAS). The F0472 supports frequencies from 2.3GHz to 2.7GHz.

The F0472 provides 34dB gain with \pm 15dBm OP1dB, and 1.2dB noise figure (NF). Gain is reduced 6dB in a single step with a maximum settling time of 35ns. The device uses a single 3.3V supply and 130mA of I_{DD}.

The F0472 is offered in a $5\times5\times0.8$ mm, 32-pin package with 50Ω input and output amplifier impedances for ease of integration into the signal path.

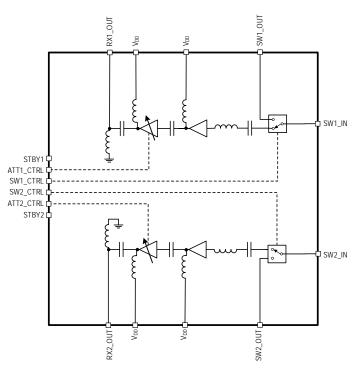
Typical Applications

- Multi-mode, multi-carrier receivers
- 4.5G (LTE Advanced)
- 5G NR bands n38, n40, n41

Features

- Gain
 - 34dB typical in High Gain Mode
 - 28dB typical in Low Gain Mode
- 1.2dB typical NF
- OP1dB
 - +15dBm typical in High Gain Mode
 - +14dBm typical in Low Gain Mode
- 50Ω single-ended input / output amplifier impedances
- $I_{DD} = 130 \text{mA}$
- Independent Standby Mode for power savings
- Supply voltage: +3.15V to +3.45V
- 5 × 5 mm, 32-VFQFPN package
- -40°C to +105°C exposed pad operating temperature range

Block Diagram





Ordering Information

Orderable Part Number	Package	MSL Rating	Shipping Packaging	Temperature
RA81F0472STGNH#KB0	5 × 5 × 0.8 mm 32-VFQFPN	TBD	Tray	-40° to +105°C
RA81F0472STGNH#BB0	5 × 5 × 0.8 mm 32- VFQFPN	TBD	Tape and Reel	-40° to +105°C
RTKA81F0472ST000RU	Evaluation Board			

Revision History

Revision Date	Description of Change	
May 19, 2020	Initial release.	

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