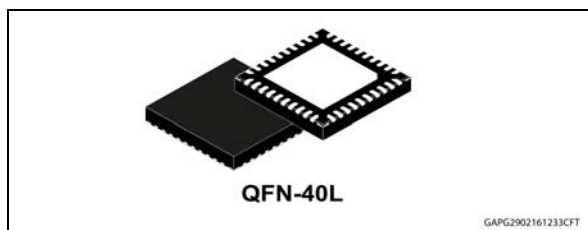


24-GHz Transceiver MMIC for Automotive Radar Sensor

Data brief



Features



- AEC Q100 qualified
- Single-channel transmitter Pout: 13 dBm
- On-chip low phase noise VCO
- Three single-ended input RX channels
- Low noise figure NFssb: 11 dB
- High conversion gain: 60 dB
- IF variable gain function
- IF switchable bandpass filters
- Rail-to-rail single-ended IF output
- Divider output at 750 MHz and 1.5 MHz / 23 kHz
- On-chip power and temperature sensors
- 3.3 supply voltage
- 4-pin SPI for chip configuration
- QFN 6x6 mm² and 40 leads - wettable flanks

Applications

ISM automotive radar applications.

Description

STRADA431 is a fully integrated 24 GHz transceiver for ISM automotive radar applications.

It embeds 24 GHz frequency generation, a power amplifier, and three receivers with IF filters and variable gain functions.

It also contains voltage regulators to supply the internal core and it is fully configurable via a simple SPI interface.

STRADA431 is fabricated in 0.13 μm SiGe:C technology and assembled in QFN-40L 6x6 mm², 0.5 mm pitch package with wettable flanks feature.

Table 1. Device summary

Package	Order code	
	Tray	Tape and reel
QFN-40L	STRADA431	STRADA431-TR

1 Revision history

Table 2. Document revision history

Date	Revision	Changes
19-Feb-2016	1	Initial release.
15-Mar-2017	2	Updated : Features on page 1 , change of low noise value and change of high conversion gain value.

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