

# RASIC<sup>™</sup> - RTN7700 SiGe Automotive Radar VCO for 77GHz

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THE RTN7700 IS A SILICONGERMANIUM (SIGE) VCO for automotive Long- and Mid-Range Radar (LRR/MRR) applications in the frequency range of 76-77GHz. It is the first world-wide available SiGe VCO based on 200 GHz fT B7HF200. It includes on-chip pre-scalers as well as sensors for output power and temperature.

The RTN7700 delivers outstanding performance in both output power and signal to noise ratio (S/N) and is automotive qualified according to AEC-Q100.

ADDITIONAL derivates with different mixer configurations are available.

#### Features

- High output power at 77GHz with power control
- On-chip test-logic (Tx dividers, temperature sensor, power sensor)
- Delivery is unpackaged bare-die

#### Key Benefits

- Built in AEC-Q100 qualified SiGe process
- Minimum number of components needed to build complete 77GHz RF frontend
- Power- and Temperature-Sensors allow in-operation monitoring

### Product Summary

RTN7740 (bare die)	Min	Тур	Max	Comment
Supply current		400mA		Depending on active divider ratios
Output power		+11dBm		@ each transfer mixer pad RF2/RF3

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## Block Diagram RTN7700



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Order Number: