

# Single Chip Navigation Receiver RFIC

## RS9020 description

The RS9020 is a single chip GNS receiver RFIC. It allows the reception of multi-standard satellite navigation systems at the frequency bands occupied by GPS, Galileo and Glonass navigation systems.

The RS9020 single chip navigation receiver RFIC requires no external passive networks to suppress the undesired spurious and image frequencies.

## RS9020 applications

- Navigation systems
- Wireless systems

## Frequency bands

System	Frequency (MHz)	Band
GPS	1176.45	L5
	1227.6	L2
	1575.42	L1
Galileo	1176.45	E5A
	1207.14	E5B
	1191.8	E5A and E5B
	1278.75	E6
	1575.42	E1
GLONASS	1602 (k=0)	L1
	1246 (k=0)	L2

## Contact

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## RS9020 features

- GPS, Galileo and Glonass navigation systems
- Single chip GNS receiver RFIC
- Flexible power management scheme
- 4MHz and 24MHz IF bandwidths
- 2-bit ADC interface (MAG / SIG)
- Analog IF interface
- Internally matched LNA
- Integrated IF filter
- 70dB AGC circuit
- Flexible reference frequency
- Noise figure < 4dB
- Area: 5 mm<sup>2</sup>
- Supply voltage: 1.8V
- SPI control interface

## Block diagram

