

850 – 950 MHz RF Front End

Check for Samples: [CC1190](#)

FEATURES

- Seamless Interface to Sub-1 GHz Low Power RF Devices from Texas Instruments
- Up to 27 dBm (0.5 W) Output Power
- 6 dB Typical Sensitivity Improvement with CC11xx and CC430
- Few External Components
 - Integrated PA
 - Integrated LNA
 - Integrated Switches
 - Integrated Matching Network
 - Integrated Inductors
- Digital Control of LNA and PA Gain by HGM Pin
- 50-nA in Power Down (LNA_EN = PA_EN = 0)
- High Transmit Power Efficiency
 - PAE = 50% at 26 dBm Output Power
- Low Receive Current Consumption
 - 3 mA for High Gain Mode
 - 26 μ A for Low Gain Mode
- 2.9 dB LNA Noise Figure, Including Switch and External Antenna Match
- RoHS Compliant 4-mm \times 4-mm QFN-16 Package
- 2 V to 3.7 V Operation

APPLICATIONS

- 850 - 950 MHz ISM Bands Wireless Systems
- Wireless Sensor Networks
- Wireless Industrial Systems
- IEEE 802.15.4 Systems
- Wireless Consumer Systems
- Wireless Metering (AMR/AMI) Systems
- Smart Grid Wireless Networks

DESCRIPTION

CC1190 is a cost-effective and high-performance RF Front End for low-power and low-voltage wireless applications at 850 - 950 MHz.

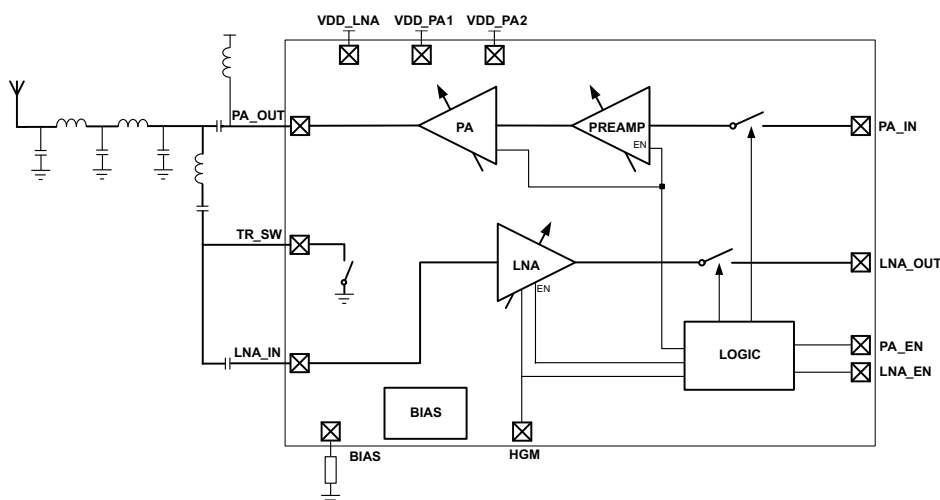
CC1190 is a range extender for the sub-1 GHz low-power RF transceivers, transmitters, and System-on-Chip devices from Texas Instruments.

CC1190 integrates a power amplifier (PA), a low-noise amplifier (LNA), switches, and RF matching for the design of a high-performance wireless systems.

CC1190 increases the link budget by providing a power amplifier for increased output power, and an LNA with low noise figure for improved receiver sensitivity.

CC1190 provides an efficient and easy-to-use range extender in a compact 4-mm \times 4-mm QFN-16 package.

CC1190 BLOCK DIAGRAM



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