



3 GHz Frequency Synthesizers with On-Chip VCO

Product Concept

ADF4131/ADF4132/ADF4133/ADF4134

FEATURES

ADF4131: 0.8GHz; ADF4132: 0.9GHz

ADF4133: 1.8GHz; ADF4134: 1.9GHz

+2.3 V to +5.5 V Power Supply

Dual Modulus Prescaler: 32/33

On-Board VCO

Selectable Charge Pump Three-State Mode

3 Wire Serial Interface

Digital Lock Detect

Power Down Mode

APPLICATIONS

Portable Wireless Communications (PCS/PCN, Cordless)

Cordless and Cellular Telephone Systems

Wireless Local Area Networks (WLANs)

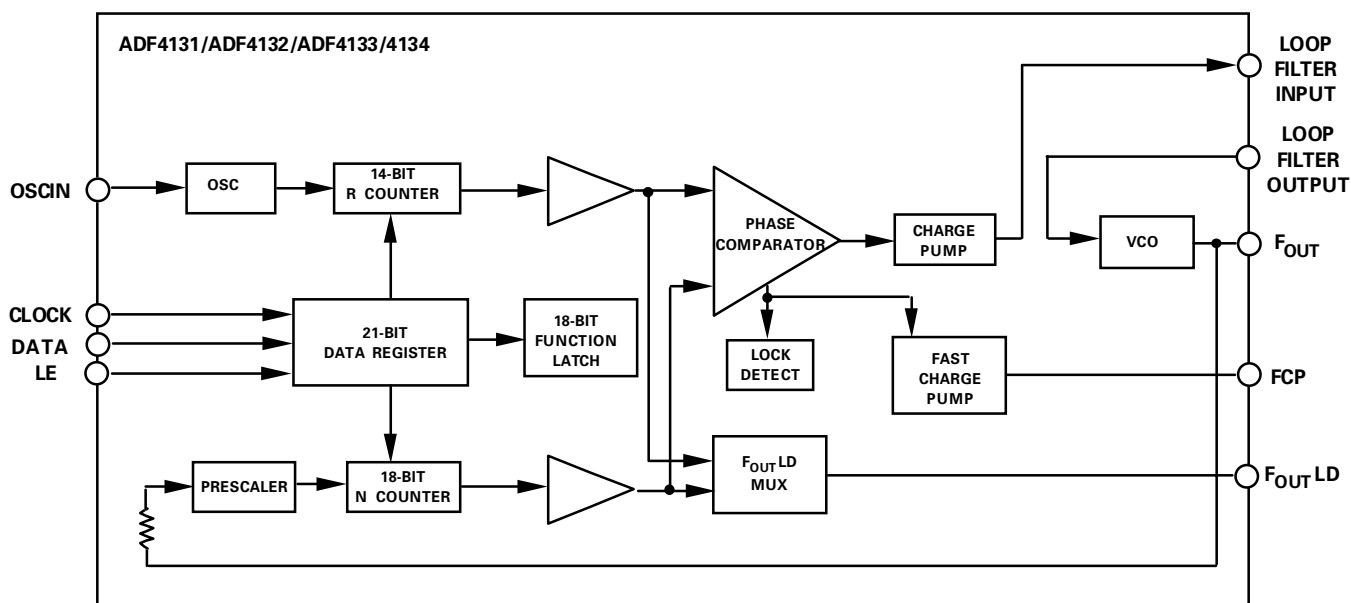
Cable TV Tuners (CATV)

Pagers

GENERAL DESCRIPTION

The ADF413X family are frequency synthesizers with on-board VCO's which can be used as local oscillators in the RF section of a wireless transceiver. The parts contain a 32/33 dual modulus prescaler. They use a digital phase locked loop technique which results in a stable, low noise signal for the local oscillator. The device has a serial 3-wire interface. The part can be operated with a 3V or 5V power supply and can be powered down when not in use.

FUNCTIONAL BLOCK DIAGRAM



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