

ABSTRACT

RF Oscillator Technique for Built-in Tune, Test, and Calibration of a Transceiver

Methods and various structures provide for loopback tuning, testing, and calibrating of a transceiver, including: supplying RF drive to both a transmitter and a receiver of the transceiver from one oscillator; applying a modulation waveform to a transceiver block of the transceiver to produce an amplitude-modulated signal; converting a sideband of the amplitude-modulated signal to a baseband signal having a frequency suitable for processing by a receiver digital block, where processing the baseband signal produces a digital output; and performing tuning, testing, and calibrating of the transceiver block, based at least in part on the digital output.

(Figure 1)