

Applications

- Transceivers
- Mixed-Mode ICs

PLLs

VCOs

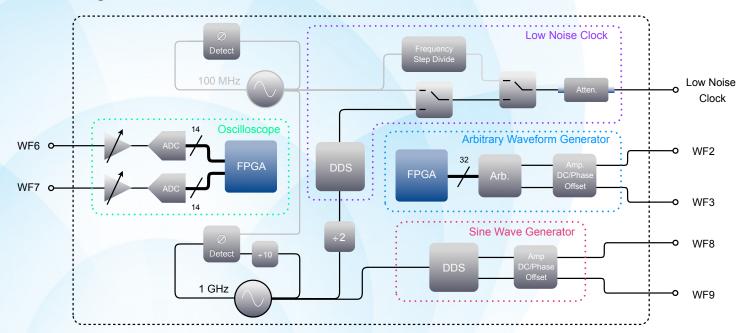
Overview

The RI8585 delivers enhanced waveform and oscilloscope performance over the RI8572 Waveform/Measure instrument and includes an additional, low-noise clock source. The state-ofthe-art PLL supplies an optimal local oscillator reference signal for devices requiring high-fidelity phase noise qualification. The instrument also provides complex sine and arbitrary baseband waveform generation for modulated signal applications as well as a dual-channel digitizer with an embedded FPGA for real-time oscilloscope measurements.



- M-ary QAM, M-PSK, & Custom Baseband Generation
- Continuous & Reciprocal Frequency Counter
- Measure S/N, SINAD, Rise/Fall Times
- Ultra Low-Noise Reference LO

Block Diagram





Cassini Instrument Profile

RI8585 - High Performance Waveform/Measure

Cassini Instrument Profile

Performance

Low-Noise Clock

2011 Holos Glock	
Frequency Options	100 MHz ÷ 2,4,8,16 100 MHz 200 Hz - 400 MHz
Phase Noise ¹	170dBc/Hz 148dBc/Hz 120dBc/Hz
Sine & Arbitrary Wave Generator	
Fraguency Dance	

Frequency Range Clock Rate

1kHz to 90MHz (Sine) | 1Hz to 100MHz (Arb.) 640 MHz (Max) Bit Resolution 16 Bits/Channel

Digitizer

Analog Bandwidth Sample Rate Voltage/Bit Resolution

100 MHz 80 Msps ±0.4V / 14 Bits

Inputs/Outputs

WF7 Digitizer 2

WF3 Arb. Waveform 2

Sine Gen. 2



WF6 Digitizer 1

WF2 Arb. Waveform 1

Low-Noise Clock

WF8 Sine Gen. 1

Cassini Test Systems

A versatile, high-speed, automated test solution for analog, mixed-signal, RF, and millimeter-wave devices.

Cassini provides a modular base architecture that is fully configurable via Test Instrument Modules (TIMs) to meet the needs of any IC, wafer, or module test requirement.

Each TIM contains internally-cooled, RF-shielded measurement instrumentation, signal distribution, and blind mate interfacing to provide targeted test resources and integrate to build up a complete production test platform.

Combined with Roos Instruments' integrated test software, Cassini can be configured to any application for maximum performance, true low cost of test, and the industry's fastest test times.

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¹ Typical performance at 20kHz offset