

**Applications**

- Power Supply
- Parametric Measure
- DUT Control
- Digital Logic

**Overview**

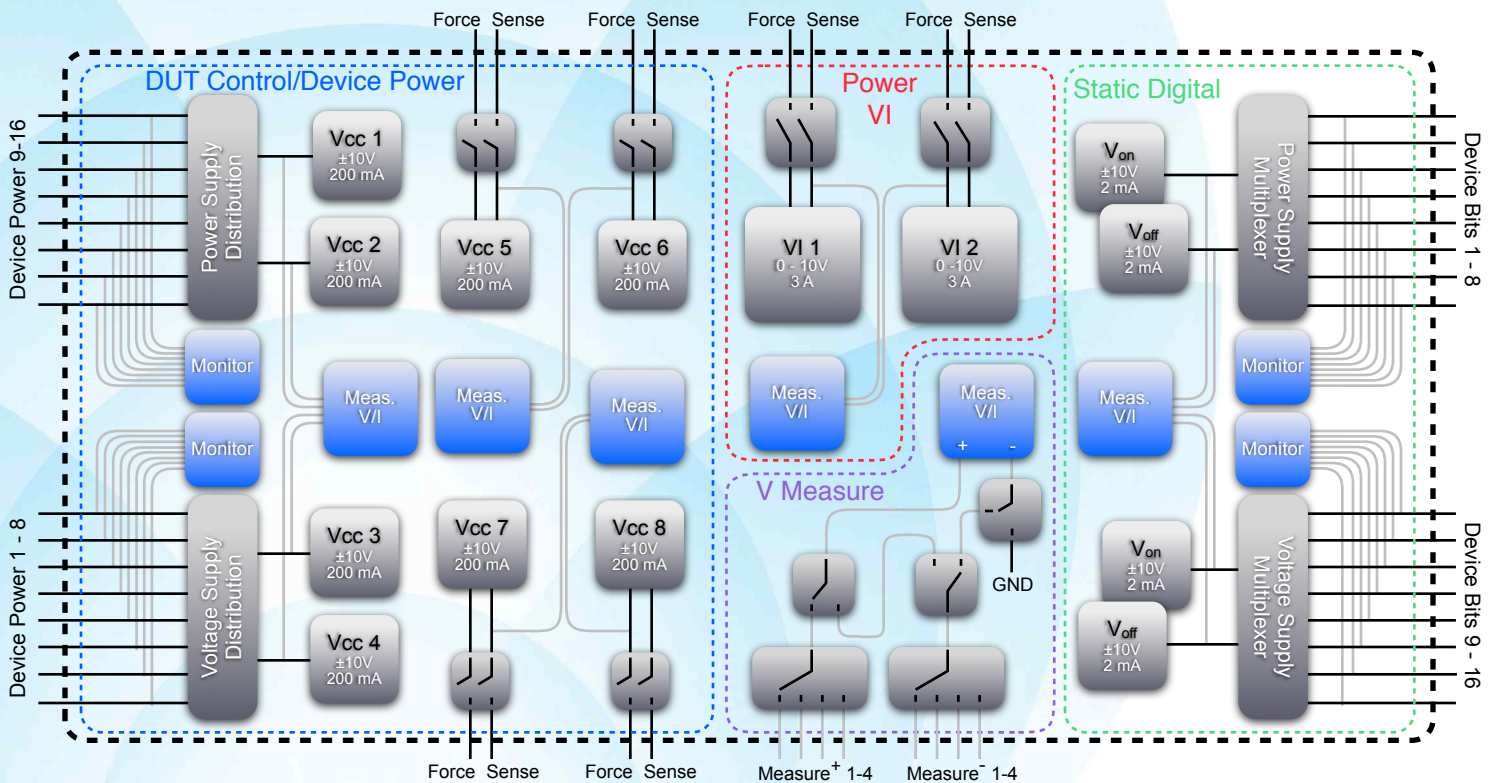
The RI8546C Device Power Instrument supplies precision adjustable voltage and current, digital pin driving, and parametric DC measurement capabilities. Two high-current power supplies, eight mid-range current supplies, and four low current supplies deliver fast settling DC supply for optimal performance in RF test applications. Eight voltage measure inputs can be configured for differential device applications or ground-referenced measurements. The internal digital architecture supports native SPI and I<sup>2</sup>C protocols in addition to digital pin voltage and current monitoring.



**Key Features**

- *2 x 3 A High Power Supplies, 8 x 200 mA Supplies, 16 Static Digital with Parametric Measure*
- *Protocol-Aware Digital Pin Programming*
- *8 Precision Voltage Measure Inputs*

**Block Diagram**



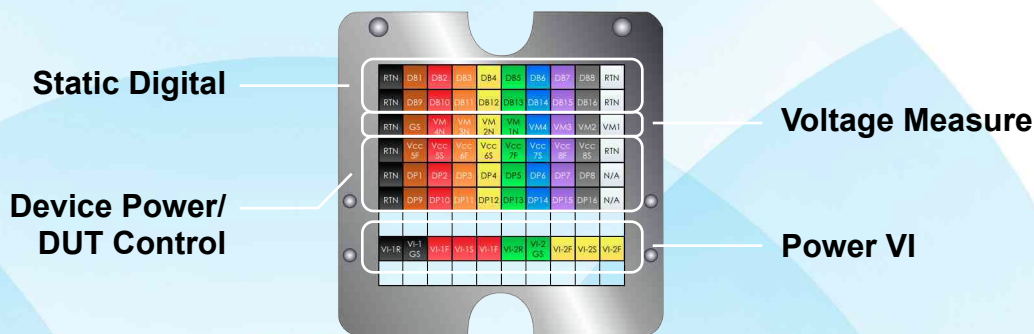
## Performance

Source	Device Power / DUT Control		High Power		V Measure		Static Digital	
	Range	±10 V	±200 mA	0 to 10 V	2.5 A (max) 3 A (pulsed)	±10 V	±2 mA	±10 V
Resolution	0.3 mV	10 µA	10 mV	-	5 mV	1 µA	5 mV	-

Measure					Protocol			
	Range	±10 V	250 mA to 0.250 mA	0 to 10 V	30 mA to 3A	±10 V	±2 mA to ±2 µA*	SPI
Resolution	0.3 mV	36 nA	10 mV	44 µA	1.5 mV	290 µA to 12 pA*	I <sup>2</sup> C	60 kbits / 2.5 Mbits

\* Range/Resolution limits set by instrument mode

## Inputs/Outputs



## 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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