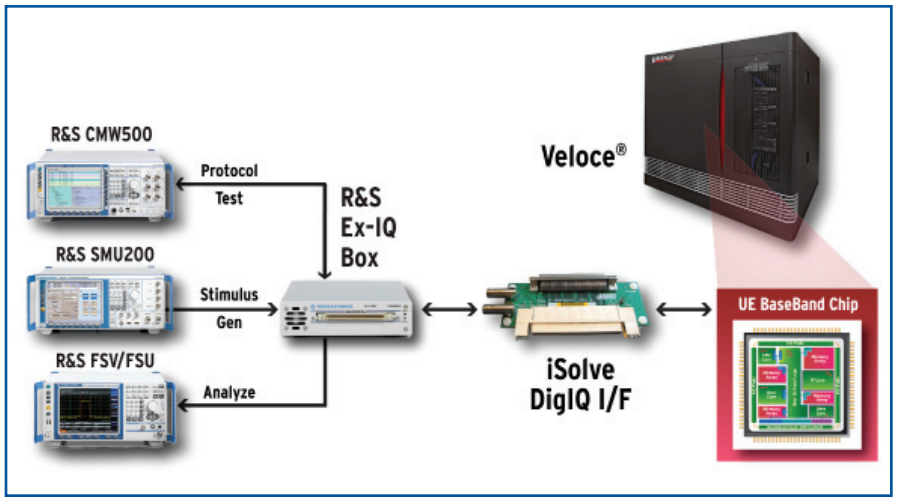
Hardware-Based
Functional Verification

# iSolve DigIQ Interface

D A T A S H E E T




*iSolve DigIQ Interface delivers a flexible, high-performance connection for verifying wireless communication SoCs using Veloce and Rohde & Schwarz test and measurement equipment.*

iSolve™ DigIQ Interface provides a fast route to pre-silicon testing of today's complex wireless communication chips for users of the Mentor Graphics Veloce™ family of emulators and Rohde & Schwarz test and measurement equipment. This easy-to-use solution enables verification at thousands of times the speed of pure logic simulation, significantly reducing verification times and regression testing and, thus, increasing design productivity.

*Connecting to R&S CMW500 Protocol Tester*
As a bridge between Veloce emulators and the Rohde & Schwarz CMW500 series testers, the iSolve DigIQ Interface allows designers of user equipment (UE) chipsets to verify the interaction of software with hardware and perform conformance testing for the LTE and UMTS protocols, prior to committing to silicon.

*Connecting to R&S SMU Generator and FSV/FSU Analyzer*
Wireless designers can perform pre-silicon verification and analysis of any baseband chip using the iSolve DigIQ Interface between a Veloce emulator and an R&S SMU 200 vector signal generator and FSV/FSU analyzer — supporting multiple radio standards for the verification of cellular devices.

## FEATURES AND BENEFITS

- LTE and UMTS protocol testing
- Stimulus generation and analysis of multiple radio standards
- Test software against emulated hardware to ensure conformance to standards before committing to silicon
- Powerful protocol logging and analysis for easy debugging
- C++ interface for creation of user test scenarios
- Connect to user protocol stack in all phases of development
- Digital IQ interface to hardware emulation

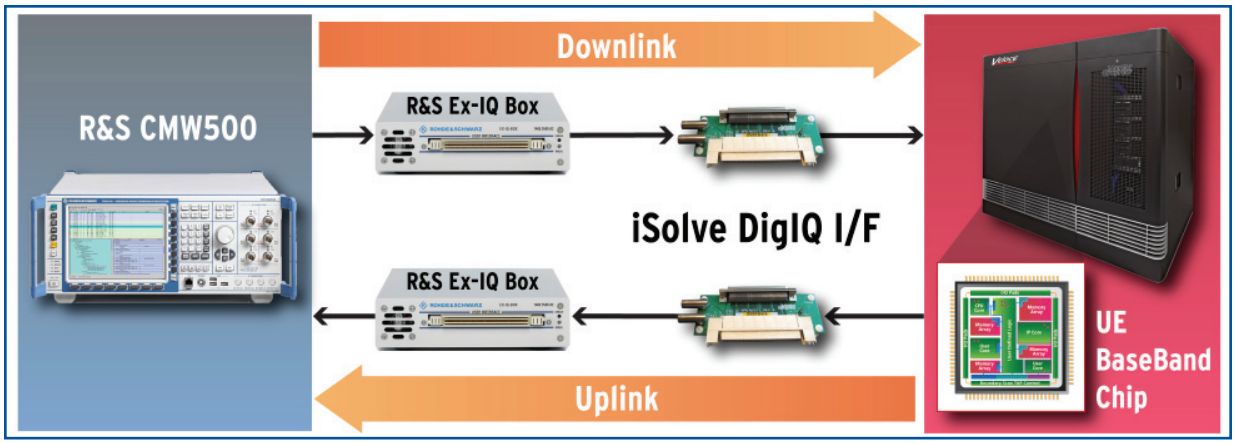
## PRODUCT SPECIFICATIONS

- Platforms: Veloce Solo, Quattro, Grande, and Maximus
- T&M Equipment: Rohde & Schwarz CMW500 wideband radio communication tester, SMU200 vector signal generator, and FSV/FSU analyzer
- Protocol Test: LTE and UMTS (CMW500)
- Radio Standards: GSM/EDGE, 3GPP, CDMA, TETRA, WLAN
- Performance: Up to 1.5 MHz in Veloce emulation



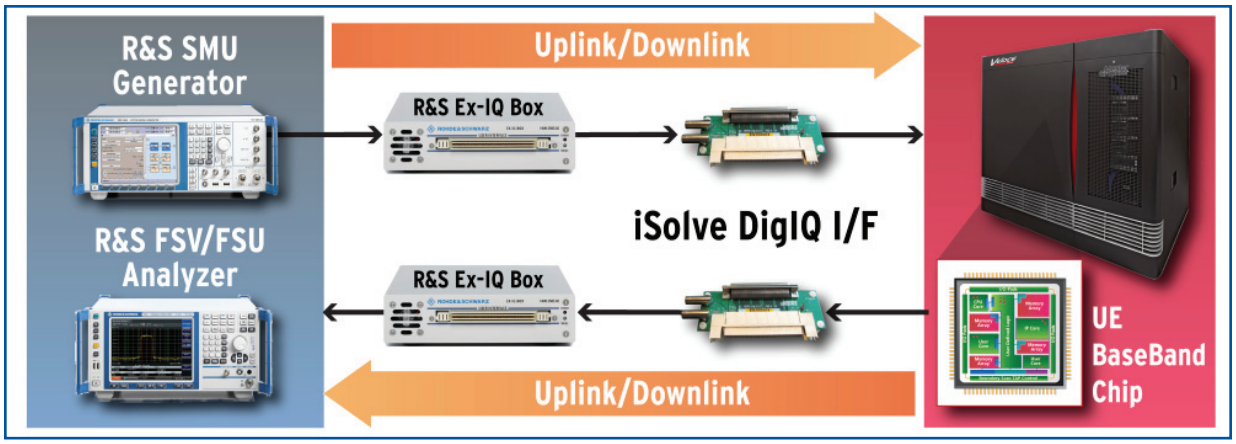
Mentor Graphics®

The Veloce-R&S CMW500 protocol testing solution allows up to four uplink and downlink communication channels between the test and measurement equipment and the emulated design.




*iSolve DigIQ Interface provides a convenient connection between an R&S CMW500 tester and a Veloce emulator for hardware-assisted pre-silicon conformance and protocol testing.*

Connecting the Veloce emulator to the R&S SMU200 vector signal generator and FSV/FSU analyzer increases flexibility for pre-silicon verification of multiple radio standards, including GSM/EDGE, 3GPP, CDMA, TETRA, and WLAN.




*iSolve DigIQ Interface connects Veloce to powerful R&S test equipment for the pre-silicon testing of multiple radio standards.*

With the iSolve DigIQ Interface, wireless communication SoC designers can take advantage of the best-in-class emulation and wireless test equipment from Mentor Graphics and Rohde & Schwarz.

**Visit our website at www.mentor.com/emulation for more information.**

©2011 Mentor Graphics Corporation, all rights reserved. Mentor products and processes are registered trademarks of Mentor Graphics Corporation. All other trademarks mentioned in this document are the trademarks of their respective owners.

**Corporate Headquarters**
**Mentor Graphics Corporation**
8005 SW Boeckman Road
Wilsonville, OR 97070-7777
Phone: 503.685.7000
Fax: 503.685.1204

**Sales and Product Information**
Phone: 800.547.3000
sales_info@mentor.com

**Silicon Valley**
**Mentor Graphics Corporation**
46871 Bayside Parkway
Fremont, CA 94538 USA
Phone: 510.354.7400
Fax: 510.354.7467

**North American Support Center**
Phone: 800.547.4303

**Europe**
**Mentor Graphics Deutschland GmbH**
Arnulfstrasse 201
80634 Munich
Germany
Phone: +49.89.57096.0
Fax: +49.89.57096.400

**Pacific Rim**
**Mentor Graphics (Taiwan)**
Room 1001, 10F
International Trade Building
No. 333, Section 1, Keelung Road
Taipei, Taiwan, ROC
Phone: 886.2.87252000
Fax: 886.2.27576027

**Japan**
**Mentor Graphics Japan Co., Ltd.**
Gotenyama Garden
7-35, Kita-Shinagawa 4-chome
Shinagawa-Ku, Tokyo 140-0001
Japan
Phone: +81.3.5488.3033
Fax: +81.3.5488.3004

MGC 02-11 1028920-w