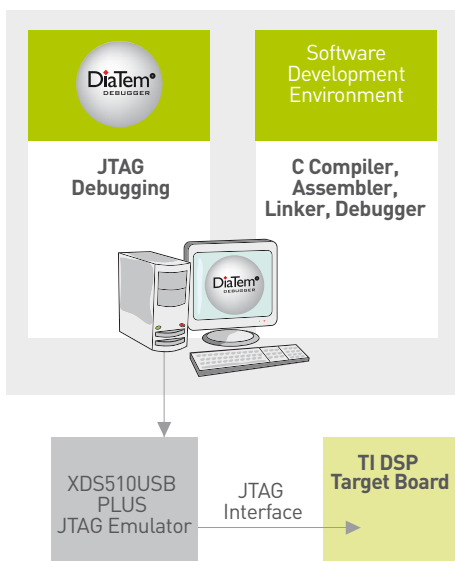


DIATEM[®] DEBUGGER SPECTRUM DIGITAL EMULATORS SPECIAL EDITION

SPEED-UP BOARD BRING-UP BY ADDING A JTAG TOOL TO YOUR SPECTRUM DIGITAL EMULATOR



OVERVIEW

The DiaTem debugger is a HIGH PRODUCTIVITY tool that will allow the designer to accelerate the bring up phase of a TI DSP target board by providing an efficient means to verify the signal integrity of signals on devices in the JTAG scan chain.

DIATEM DEBUGGER USAGE

Based on IEEE 1149.1 JTAG standard, the DiaTem Debugger provides an easy to use GUI that steps the user through the process of bringing up a TI DSP target board and getting the design to the state where you know the board and its components are installed correctly. With the processor interconnect verified, you can start software development through with a Spectrum Digital XDS510USB JTAG emulator.

USING THE DIATEM DEBUGGER WITH XDS510USB PLUS JTAG EMULATOR

The DiaTem Debugger runs on a host PC or laptop and interfaces to the TI DSP target board via the XDS510USB PLUS JTAG emulator. After launching the DiaTem Debugger you can verify and test that your JTAG scan chain works correctly. A tool box enables you to detect and diagnose any problems on the JTAG scan chain. In the second step you can run an automatic test pattern generator to check the interconnect infrastructure insuring the DSP component pins are free from shorts. In addition you can verify that peripheral components like memories are connected correctly to the DSP and free from opens. With this level of confidence you can now start using the XDS510USB to load and test software.

→ BENEFITS

- Fully compatible with Spectrum Digital's XDS510USB PLUS JTAG Emulator
- Allows operation without training or learning curve
- Speeds up debug and identification of faults
- Remove all assembly related variables from debug correlation
- Secures use of "C" routines or emulator for debug completion
- Preserves upgrade path to full JTAG test of TI DSP target boards and systems

THE DIATEM DEBUGGER TOOLSET

The DiaTem Debugger Tools Set Provides the Following:

- A Boundary Scan Chain checker and Boundary Scan Chain debug wizard tools
- An interactive Debugger to allow the user to check and/or force logic levels on any pins of a JTAG compliant device
- A NET navigator provides cross checking between JTAG cells, device pins and NET name for accurate debug operations
- A large set of automatic test pattern generators can be used to control connectivity between JTAG and Non-JTAG components (for standard devices like memories and peripherals) WITHOUT any programming or test development by detecting opens and shorts
- An intuitive graphical GUI that quickly allows the user to define which tests to run
- An immediate test appliance for rapid iterations (no compilation or link times)
- Full compatibility with DiaTem JTAG testers, providing up-grade paths towards full board
- JTAG test coverage

DIATEM® DEBUGGER SPECTRUM DIGITAL EMULATORS SPECIAL EDITION

→ THE DIATEM DEBUGGER TOOLSET

MODULES	FUNCTIONAL DESCRIPTION
System Builder	Describe graphically boards and systems, import BSDL and EDIF netlist.
JTAG Tool box	Advanced debugging functions to check conformance of TCK, TMS, TDI, TDO and TRST signals.
ATPG type 1 Infrastructure	Checks and verify that the scan chain is functional and JTAG devices correspond to the design specifications.
Interactive Debugger	DiaTem Interactive Debugger enables the user to diagnose the system and to isolate interconnect faults or failing devices by reading and driving logic levels on any JTAG pin.
Net Navigator	Enables to display cross reference tables between net names, pins numbers and JTAG cells. Allows search by type of nets, names and type of cells.
ATPG Type 2 Interconnect	Automatically tests the interconnections between BSCAN testable pins from the sole netlist information.
ATPG Type 3 Memory clusters	Automatically test the interconnection of JTAG devices with SRAM, SDRAM, DDR2, FLASH, NAND FLASH (multiplexed) Asynchronous FIFO and SPI serial flash.



DiaTem Debugger & XDS510USB PLUS JTAG Emulator

→ UPGRADE PATH TO DIATEM STUDIO

Purchasing the DiaTem debugger enables you to easily get the upgrade to any DiaTem Studio Stations. Both scalable and flexible, DiaTem Studio has been designed to cover overall board product life cycle with DiaTem Engineering, DiaTem Industrialization, DiaTem Production, and DiaTem Repair.

→ DIATEM ENGINEERING

Engineering Station allows designers and test engineers to verify and to debug boards and systems using the full potential of the benefits brought by Boundary scan and the JTAG (IEEE 1149.1) standard. It includes the functionalities used by DiaTem Debugger extended to the capability to create your own clusters, to build functional tests using TCL language, to program any kind of flash memory, CPLDs or FPGAs.

European Headquarters / Corporate Headquarters

TEMENTO SYSTEMS SA
INNOVALLÉE
176, RUE LAVOISIER - BP42
MONTBONNOT - 38334 SAINT ISMIER CEDEX

Tel +33 (0)4 56 52 60 00
Fax +33 (0)4 56 52 60 01

For pricing and availability, please contact our sales network

E-mail: sales@temento.com

For technical info, please contact our customer service

E-mail: support@temento.com

For more info on Temento Systems solutions, please visit our web site:

www.temento.com

Temento Systems S.A. is a registered Trademark. All other Trademarks and registered trademarks are the property of their respective owners.
© 2007 Temento Systems S.A. • Printed in France • P/N : 4001 S09 01 00