Deep Traces Storage & Debugging Solution

Features
◆ Large local Memory size : 1 GB equivalent to 4 MB per acquisition channel
◆ High data bandwidth : up to 10 Gbits/sec on total channels
◆ Extended Pin-out (220 data bits) for interfacing instrumented design
◆ 100 MHz on 128 channels State Analysis
◆ USB 2.0 compatible

Benefits
◆ Store large amount of data outside your DUT and free your FPGA resources
◆ Capture and acquire synchronous traces on 220 channels
◆ Work in non intrusive mode by routing only signal probes from your FPGA design to TemStorage™
◆ Manage TemStorage™ device as easily as any other IP you use in your DiaLite project

The External Memory for FPGA Internal Signals Capture & Storage

Overview
TemStorage™ is the solution for storing large amount of data coming from a FPGA you are debugging.
Delivering up to 10 Gbits/sec data bandwidth and 1 GB of internal memory, TemStorage™ allows to capture and to store extended test sequences and to export them to DiaLite™ Instrumentation through a USB interface for viewing and analysis. Bus larger than 200 signals can be stored with a frequency up to 100 MHz. Perfectly integrated into DiaLite™ environment, TemStorage™ is seen as a dedicated IP and can be connected to other accessible Debug IPs.
TemStorage™ is seen as a memory device IP, just like any other IP in your DiaLite™ project. But you can also customize and tune the TemStorage™ parameters with available library to match your memory and instrumentation needs.
TemStorage™ also allows a non intrusive mode where the test IP is embedded into TemStorage™ and not into the FPGA under test. Only internal signals are probed from the user design to TemStorage™.

Architecture

FPGA DUT Interface (220 channels)

USB Interface

DDR2 Memory

Memory Manager

Local Bus Manager

IP Libraries

USB Controller
Specifications

Configuration
USB 2.0 compatible
USB Cable: Shielded, USB 2.0 compatible, 1 meter
Power Supply Vcc: 5V
IO Voltage: Adjustable from 1.3 to 3.3V (by step of 0.1 V)
IO Current: 8 mA (Source/Sink)
Operating (Temp/humidity): 0°C to 50°C/5 to 90%
Storage (Temp/humidity): -5°C to 70°C/0 to 95%

Connectivity
PC side: 1 USB 2.0 Cable Connector with Type A slot
UUT side: 7 x Mictor 38 Female connectors
7 x HE40 Male connectors

Software Environment
Operating Systems: Windows 2000 / Windows XP / Linux
Traces stored into TemStorage™ can be viewed into DiaLite™ instrumentation software
TemStorage™ is delivered without DiaLite™. For more information on DiaLite™, please visit the following link: http://temento.com/solutions/fpga.php

Ordering Information
◆ TEMSTORAGE™: TEM-STO (includes the USB2.0 cable)
Options/Spare Parts:
◆ TEMTAG™ USB A-B: TEM-USB/C
1 meter USB2.0 shielded cable slot A / slot B
◆ TEMCABLE™ EXP402: TEM-EXP402
0.5 meter HE40 Female / HE40 Female

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 http://www.temento.com/