

JTAG BUS DRIVER CABLE

The Universal Interface solution between the UUT and your Host PC

OVERVIEW

TemCable is the multipurpose solution for interfacing your UUT to your Test Environment with a high level of signal integrity and very high speed transmission. TemCable gets rid of signal noise and line transmission delays problems. It provides two independent JTAG channels allowing you to :

- Connect FPGA devices or PCB boards
- Load your design and program your target
- Access and Debug your instrumented design with DiaLite™ environment
- Test and Verify your boards with DiaTem Studio™

You won't have to think of difficult interface configuration to your UUT. TemCable will do it for you ! TemCable is able to drive JTAG signals of the Pod in a voltage swing ranging from 1.8 V to 5.0 V. Cables with flying JTAG wires are also provided to ease the connection of your UUT test pins to the active Pod of TemCable. TemCable immediately shows you the power status and the JTAG signals traffic activity with 5 LEDs available on each side of the cable.

TemCable is available in four versions that cover all your application needs ranging from unitary debug to production and maintenance tests :

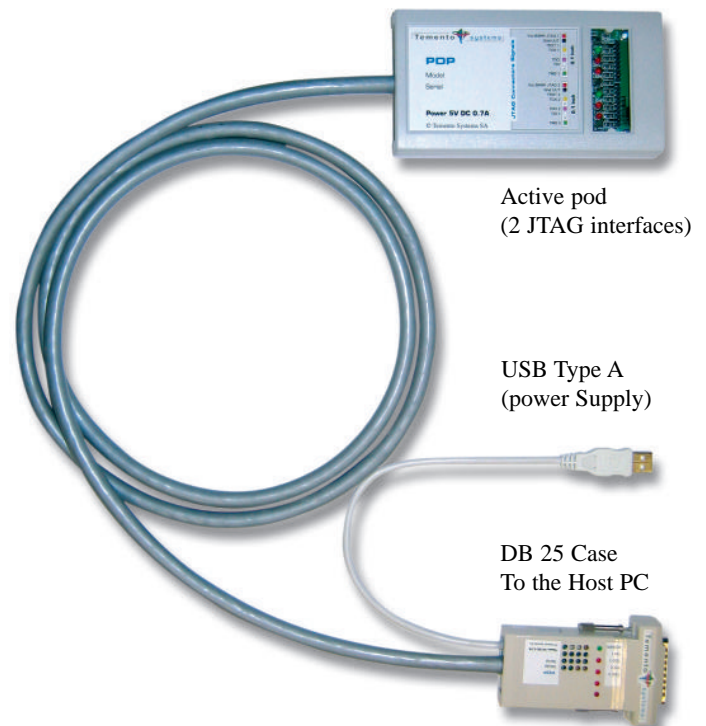
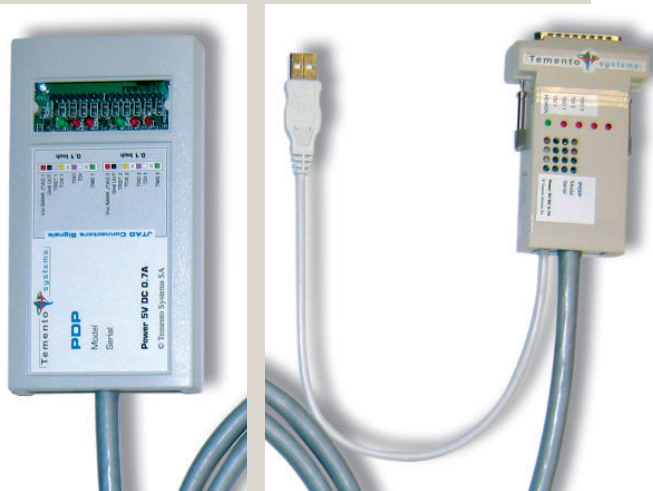
- Type 1 / 2 channels provides a Dual JTAG bus for FPGA download suites and DiaLite debug on the same parallel Port (DB25)
- Type 2 / 2 channels provides a Dual JTAG bus for FPGA download suites on the Parallel Port (DB25) and DiaLite debug on a TemTag Port (DB9)
- Type 3 / 1 channel provides a single JTAG bus for either DiaTem or DiaLite debug from a TemTag Port (DB9)
- Type 3 / 2 channels provides a dual JTAG bus for either DiaTem or DiaLite debug from a TemTag Port (DB9) + Extender (DB9)

FEATURES

- ◆ Fully compliant with IEEE 1149.1 standard
- ◆ Supports 2 independent JTAG ports
- ◆ Up to 30 MHz programmable clock per JTAG port
- ◆ Correction delays "line TBC delay" for High Speed Transmission
- ◆ Able to drive UUT with 1V8, 2V5, 3V3 or 5V levels
- ◆ Standard DB25 or DB9 connectivity (TemTag™ PCI board interface)
- ◆ 5 Leds on each pod of TemCable for indicating power presence and signal activity
- ◆ Compatible with DiaLite™ and DiaTem Studio™ software solutions
- ◆ Targets all existing FPGA vendors (ACTEL, ALTERA, ATMEL, LATTICE, XILINX)

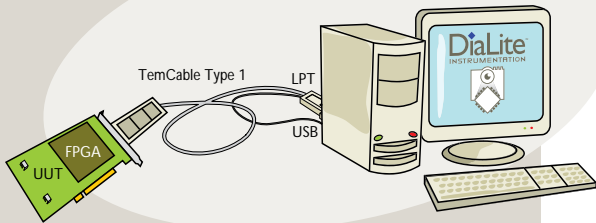
BENEFITS

- ◆ Match your test platform connectivity and your needs thanks to 4 TemCable versions available
- ◆ Save time thanks to high speed transmission and a universal test interface solution
- ◆ Improve productivity and confidence in your tests with a reliable interface

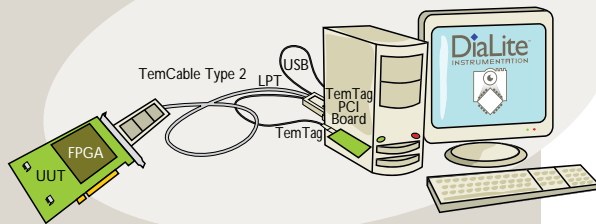


TYPICAL APPLICATIONS

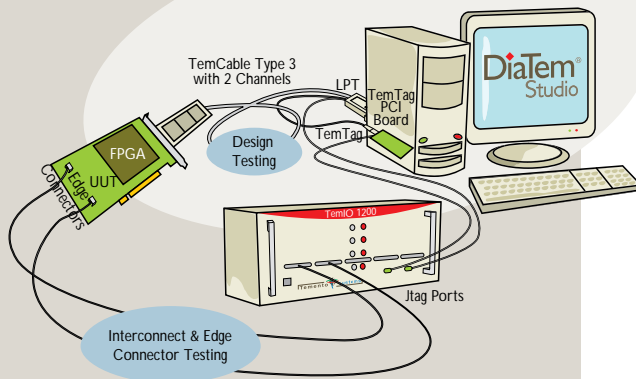
Program & Debug with the Parallel Port



Program & Debug at very High Speed



Verify and Debug at very High Speed in a Production Environment



SPECIFICATIONS

CONFIGURATION

Cable Length : 2 meters
Status Visualization : 5 LEDs on each Pod
Download Speed : Up to 30 Mbits/s
Operating Frequency : From 0 to 30 MHz
Operating (Temp/Humidity) : 0°C to 50°C/5 to 90%
Storage (Temp/Humidity) : -5°C to 70°C/0 to 95%

ELECTRICAL DC CHARACTERISTICS

Supply Voltage VIN : (+2.8;+5.25V)/+5.5V max
Power Dissipation Pd : 4 W max
Output Current Io : +/- 33 mA max
Operating Supply Current Icc : 200 /400 mA
UUT Supply Current Icc Bank Jtag : 5/35 mA
UUT Supply Voltage Vcc Bank Jtag : +1.8/+5.6 VDC

CONNECTORS

Type	UUT Side	Host PC Side
I	2 JTAG Ports**	1 USB* + 1 DB25
II	2 JTAG Ports**	1 USB* + 1 DB25 + 1 DB9***
III	1 or 2 JTAG Ports**	1 USB* + 2 DB9***

* For TemCable power supply only ** 1 cable with Flying JTAG wires provided ***For Connection with a TemTag™ Controller

DEVICES COMPATIBILITY

Actel, Altera, Atmel, Lattice, Xilinx and all devices compatible with IEEE 1149.1 for the programming through the JTAG Port.

SOFTWARE ENVIRONMENT

Operating Systems : Windows 2000, Windows NT, Windows XP
Supported Tools : DiaLite™, DiaTem™ Studio

ORDERING INFORMATIONS

- ◆ **TEM CABLE PDP2 V1.0 :** PDP Type 1 / 2 Channels
 - ◆ **TEM CABLE PDP3 V1.0 :** PDP Type 2 / 2 Channels
 - ◆ **TEM CABLE PDP41 V1.0 :** PDP Type 3 / 1 Channel
 - ◆ **TEM CABLE PDP42 V1.0 :** PDP Type 3 / 2 Channels
- Options / Spare parts :**
- ◆ **TEM CABLE EXP10 V1.0 :** HE10/Flying JTAG wires cable

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/>

European Headquarters / Corporate Headquarters
 Temento Systems
 Zirst 60 Rue Lavoisier
 38330 Montbonnot France
 Tel +33 (0)4 56 52 60 00
 Fax +33 (0)4 56 52 60 01

Temento Systems S.A. is a registered trademark. All other trademarks and registered trademarks are the property of their respective owners.