

## RapidFET™ JTAG Overview

( Patents CA 2821434, CA 2513804, US 9479434, US 7590718 )

RapidFET™ JTAG is an out-of-band RapidIO diagnostic tool that has been specifically designed to support IDT RapidIO switches and has been used for years with Gen1, and Gen2 devices. 10xN (Gen3) support will be available Q2CY16 which will involve a new USB to I2C/JTAG adapter. The software leverages the same “look and feel” as our current version so transition to RapidIO’s latest 10xN technology should be easier than ever providing you with a familiar GUI access to internal RapidIO registers or being able to instantly analyze the RapidIO port connections and status.

For current RapidFET JTAG Enhanced users with active MAS, the software upgrade will be free to download, and new 10xN switch capable Adapters are all that is needed. For new customers, RapidFET JTAG Enhanced will come with the latest software and JTAG 10xN adapter hardware.

## RapidFET JTAG 10xN adapter supports the following key features:

- JTAG interface for Gen 1/2/3 devices \*
- I2C support for Gen 1/2/3 devices
- 1.8v and 3.3v I/O voltages supported with LED status indicators for Gen3/2 operation

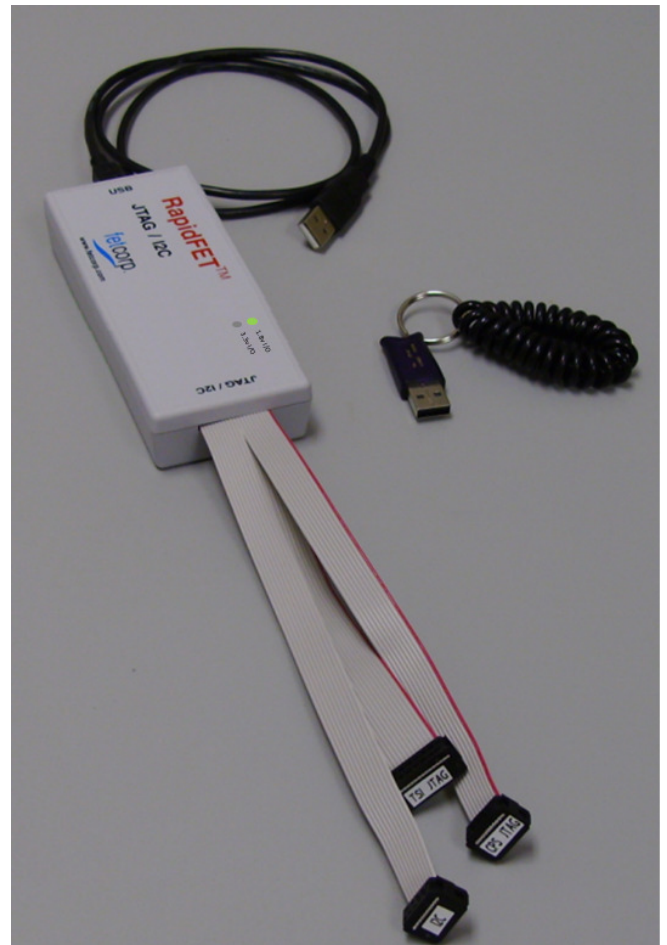
## RapidFET JTAG comes with:

- **RapidFET JTAG Diagnostic Software** – This is download from the FET Corp website
- **USB to JTAG/I2C Debug Adapter** – This Adapter is used to connect the JTAG or I2C interface on various switches to your PC.
- **USB License Key** – This key is used to control the RapidFET software license. It is capable of being upgraded electronically to RapidFET Professional
- **USB Cable** – Use to connect your PC to the Adapter

## Optional Adapter ONLY:

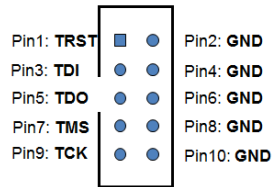
- An Adapter and USB cable only option will also be made available. However with over 10,000 registers in CPS Gen2 switches and over 70,000 registers in the new RXS Gen3 switches, you will want to take advantage of the device libraries in our latest RapidFET Software.

\* Exception: Tsi Gen 1 device JTAG 2x8 header pinout.



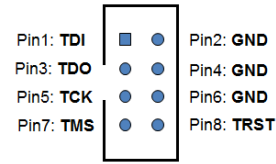
## Connectors/Pinouts: (Top View)

### Tsi / CPS / SPS JTAG Connection



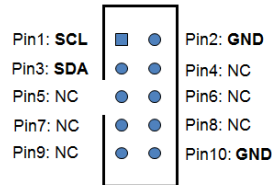
2x5 Header - Gen1 and 2 IDT RapidIO devices: 3.3v I/O

### RXS JTAG Connection



2x4 Header: Gen3 RXS Switch 1.8v I/O

### Tsi / CPS / SPS / RXS I2C Connection



Recommended compatible PCB Male Connectors:

- 2x5 Header: 3M, Part #: N2510-6002-RB, or equiv.
- 2x4 Header: Würth Electronics, Part #: 61200821621, or equiv.

2x5 Header - Gen1, 2, and 3 IDT RapidIO devices: 3v3 or 1v8 I/O

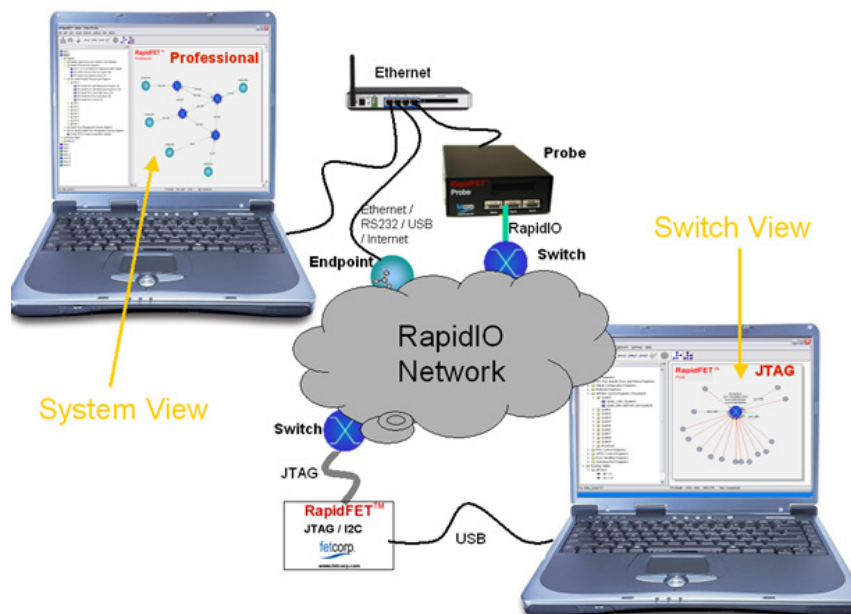
## RapidIO Network Management and Diagnostic tool family:

**RapidFET Professional:** – Professional is the software that forms the foundation of the Network Management tool set. It allows you to perform a variety of operations on your RapidIO network or monitor your RapidIO network passively. This includes capabilities such as Enumeration, Discovery, and Initialization of routing tables and registers, Performance and Error monitoring, Data Generation, Congestion monitoring, Report Generation and much more. Professional consists of a client that runs on a PC, and a server that runs on any RapidIO endpoint including in system processors, FPGAs, or RapidFET Probe.

**RapidFET Probe:** – Probe is a hardware module that acts as a dedicated server for Professional and contains a DSP and RapidIO Switch that is used to quickly connect to any system - either directly through CX4 cable or via a variety of adapters. It can also be used to inject specific packets for testing including error packets. The Probe is designed to work seamlessly in conjunction with Professional eliminating the need to port a server to an existing system processor or endpoint.

**RapidFET JTAG:** –While Professional is a system based tool, JTAG is a single switch debug tool where discovery beyond the switch is not possible. JTAG provides basic register access via the JTAG/I2C ports including EEPROM programming, Scripting and other basic capabilities. It supports some of Professional's advanced features such as Quad/Lane/SERDES configuration, and Performance monitoring.

For more information, please email Fabric Embedded Tools Corporation at [info@fetcorp.com](mailto:info@fetcorp.com)



*This information is subject to change without notice.*