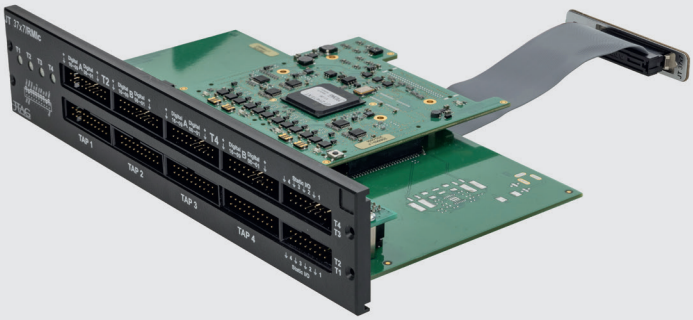
Datasheet

JT 37x7/RMIc-DIO-0/64 JTAG/boundary-scan controllers

The highest speed and fastest throughput of the JTAG range



- **40 MHz TCK**
- **4 TAPs**
- **Built-in QuadPod, optional 64 digital I/O Channels**
- **19" RMIc**

Introduction

The JT 37x7/RMIc-DIO-0 and /RMIc-DIO-64 are members of the 'DataBlaster' category of boundary-scan controllers and offer the highest speed and fastest throughput of the JTAG range. All variants of the JT 37x7 are both scalable (in terms of local memory) and are configured for a variety of interfaces. The unit fits across two slots of a 19" 1U high JT57xx/RMIc chassis and features USB, FireWire and Ethernet ports for control by a PC or other command machine.

Unlike other DataBlasters both JT 37x7/RMIc-DIO-x units feature a built-in signal conditioning module with the similar features to a QuadPod.

The integral signal conditioning module provides four TAP ports, 16 static IO channels and optionally 64 DIOS* channels available via four 20-pin standard 0.1" IDC connectors on the front panel of the module.

** Digital IO Scan – allows UUT tests to be enhanced with synchronized IO that can connect to connectors or test points on your UUT.*

Special functions

The integral signal conditioning module can be reconfigured to enable a range of SCIL (scan configured interface logic) functions that provide support for other bus interfaces such as NXP/ Freescale's BDM or MicroChip ICSP, etc.

Performance options

In order to meet the high throughput demand of factory testing and device programming by JTAG, JT 37x7/RMIc-DIO-x DataBlasters can run boundary-scan application code in an optimized binary file format known as BSX. In this way the units can maintain high-speed execution of up to 40 MHz TCK – fast enough to handle all PCB and devices currently available. The architecture of JTAG Technologies hardware and software products permits applications to be easily ported between development and production, regardless of the controller types.

The three DataBlaster configuration option levels are:

- ***JT 3707*** — base-level model suitable for board testing, CPLD programming and flash programming of small data blocks in engineering environments. This model can be upgraded to the higher performance JT 3717 for the cost difference plus service charge.
- ***JT 3717*** — mid-range suitable for all applications including in-system programming of CPLDs and flash memories via the built-in 64 Mbit FIFO buffer store it is suitable for board test in manufacturing (low and high volume) and debugging environments.
- ***JT 3727*** — suitable for all applications including in-system programming of CPLDs and flash memories via the built-in 128 Mbit FIFO buffer store it is suitable for board test in manufacturing (medium and high volume), legacy applications and debugging environments.

Instrument variant	JT 3707/RMIc-DIO-0/64	JT 3717/RMIc-DIO-0/64	JT 3727/RMIc-DIO-0/64
Number of TAPs	4	4	4
TCK Range (internal source)	1 kHz - 40 MHz	1 kHz - 40 MHz	1 kHz - 40 MHz
Output Voltage Range	1.0 V - 3.6 V	1.0 V - 3.6 V	1.0 V - 3.6 V
Input voltage threshold	0.6 V - 1.8 V	0.6 V - 1.8 V	0.6 V - 1.8 V
Number of DIO	16 (4 per TAP)	16 (4 per TAP)	16 (4 per TAP)
Interal FIFO buffer(flash image)	0 Mbits	64 Mbits	128 Mbits
Size	2 x RMIc chassis slot	2 x RMIc chassis slot	2 x RMIc chassis slot
DIOS Channels	0/64	0/64	0/64
Interfaces Supported	USB, E-Net, Firewire	USB, E-Net, Firewire	USB, E-Net, Firewire
Power supply	From JT 57xx/RMIc	From JT 57xx/RMIc	From JT 57xx/RMIc

Global Representation

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We ***are*** boundary-scan.®

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