

## THREE onTAP JTAG CONTROLLERS

Adjustable TCK Rate: 280KHz - 28.8MHz, Two self-adjusting JTAG Taps, Internal Vref Voltage Sources from 1.8V - 5.5V with the **standard** controller and .99V - 3.6V with the **low voltage** controller and the **low voltage/low impedance** controller, External Vref 1.8V - 5.5V and .99V - 3.6V, respectively.

### Speed up boundary scan test and programming

The onTAP JTAG Controllers are flexible, PC-based, high speed test and programming tools. These versatile High-Speed controllers offer dual-channel JTAG ports, with each port capable of test and programming speeds up to 28.8MHz. A low voltage controller version, as well as a low impedance version, supports voltages from .99V to 4.5V and a higher voltage version supports voltages from 1.8V to 5.5V. All three versions operate from either external voltage references or from an internal voltage source. These features, along with a new USB driver, bring increased speed to multiple JTAG chain testing and substantially reduce Flash programming times. The three Controller options are:

1. **Standard** (P/N FS-9165): Internal Voltage Adjust 1.8V - 5.5V
2. **Low Voltage** (P/N FS-9162): Internal Voltage Adjust .99V - 3.6V
3. **Low Voltage/Low Impedance** (P/N FS-9161): Internal Voltage Adjust .99V - 3.6V TAP circuit and low voltage controller **supports Intel's Core i7 and Atom applications**

All onTAP JTAG Controllers run at 30 MHz (nominal) TCK rate - 280KHz- 15MHz + 28.8MHz and have two self-adjusting JTAG ports.

The onTAP JTAG Controller comes with:

- **User's Guide**
- **A to Mini USB Cable**
- **2 IDC Ribbon Cable OR**
- **2 Fly Lead Adaptors (when available)**
- **2 Two Pin Shunts**

**H i g h l i g h t s :**

**onTAP  
JTAG CONTROLLER**

- Adjustable TCK rate 280KHz to 28.8 MHz
- Adjustable internal voltage 1.8V - 5.5V (standard Controller)
- Adjustable internal voltage 99V - 3.6V (low voltage controller)
- Two self adjusting JTAG taps
- Test and program two JTAG Chains
- Cut test and programming times by half
- Auto sensing voltage through Vref for devices operating from 1.8V to 5.5V OR .99V—3.6V
- Hot plug and play USB device
- All Controllers internally powered at 3.3V from USB ports and hubs.

