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Find the *Tincan Tools Flyswatter2* at our website: ***Click HERE***

Flyswatter2

Posts

The Flyswatter2 is an high performance USB to JTAG in-circuit debugger and programmer designed for use with ARM and MIPS target devices. It uses the open source OpenOCD (Open On-Chip Debugger) software to provide debugging and in-system programming of embedded target devices.



Contents

- 1 Features
  - 1.1 Supported Devices

- 2 JTAG Interface
  - 2.1 JTAG Connector Pinout
- 3 Serial Port Interface
- 4 Flyswatter2 How To Guides
  - 4.1 BeagleBone Black – Linux
  - 4.2 Olimex LPC-P2148 – Linux
  - 4.3 Olimex LPC-P2148 – Windows
  - 4.4 Olimex PIC-P32MX – Linux
  - 4.5 Olimex PIC-P32MX – Windows
  - 4.6 Beagleboard – Linux
  - 4.7 Beagleboard – Windows
  - 4.8 Beagleboard XM – Linux
  - 4.9 Beagleboard XM – Windows
  - 4.10 Pandaboard – Linux
  - 4.11 Pandaboard – Windows
  - 4.12 RouterStation Pro – Windows
  - 4.13 Flyswatter2 LPC2214 How To Linux

Features

- USB 2.0 Hi-speed device interface (480 Mbits/sec)
- Can be used to debug and program all ARM and MIPS processors supported by OpenOCD
- Provides a standard ARM 20-pin JTAG interface connector (Male shrouded header, 2 rows x 10 pins)
- Adds a virtual RS232 serial port to your computer or laptop with full modem signals: TXD, RXD, RTS, CTS, DTR, DSR, DCD, RI
- Supports target voltages of: 5.0V, 3.3V, 2.5V, 1.8V, 1.6V (voltage range: 1.6V to 5.0V)
- No external power supply required – the Flyswatter2 gets its power from the computer's USB port
- Uses open source software: OpenOCD – Open On-Chip Debugger debugger software
- Package Includes: Flyswatter2, USB Cable, 12 inch serial cable, and 8 inch 20-pin JTAG ribbon cable

- Compact Size: 3.15 inches (width) x 2.7 inches (length) x 0.8 inches (height)

Supported Devices

OpenOCD supports the following ARM cores:

ARM CORE	EXAMPLE PROCESSORS
ARM7TDMI	LPC2148, AT91SAM7
ARM720T	LH79520, EP7312
ARM9TDMI	
ARM920T	S3C2410, S3C2440
ARM922T	
ARM926EJS	S3C2412, STN8811, STN8815
ARM966E	STR91XF
ARM11	S3C6400, OMAP2420, MSM7200
ARM1136	
ARM1156	
ARM1176	
CORTEX-M3	LM3S series, STM32 series
CORTEX-A8	OMAP3530 BeagleBoard
CORTEX-A8	DM3730 BeagleBoard-xM
CORTEX-A9	OMAP4430 PandaBoard
XSCALE	PXA255, PXA270, IXP42X
MARVEL	FEROCEON CPU CORE

OpenOCD also supports the following MIPS cores (requires a ARM20MIPS14 MIPS JTAG Adapter):

MIPS CORE	EXAMPLE PROCESSORS
MIPS	M4K, MIPS32

JTAG Interface

The Flyswatter provides a standard ARM-compatible 20-pin JTAG interface. The JTAG interface connects to the target device with a 20-pin ribbon cable. This connection enables access to the on-chip debug module which is integrated into the ARM CPU. The debug module enables a programmer to debug the software on an embedded target system.

The second purpose of the JTAG interface is to allow the programming of NOR and NAND FLASH memory devices that are connected to or embedded within the target CPU.

JTAG Connector Pinout

Serial Port Interface

The Flyswatter2's serial port provides you with an independent functional "USB to RS-232" serial device. The serial port is completely independent from OpenOCD on both Linux and Windows. You can use the Flyswatter2's serial port without having to use OpenOCD or JTAG, or you can use it together with OpenOCD and have both a serial port and JTAG interface operating at the same time for debugging and communicating with your target device.

For Linux, the RS232 driver for the FT2232 is part of the main kernel tree and is provided in most standard Linux distributions. In Windows, you have to load the Windows driver for the FT2232. Once the driver is loaded, Windows will assign a virtual COM port to the Flyswatter2's serial port. It operates just like a standard COM port. You can use the Flyswatter2's serial port on laptops or PC's that do not have a 9-pin legacy serial connector.

Supports all standard baud rates: 300, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200

You can use Minicom to communicate with the Flyswatter2's serial port on Linux. See the Minicom page for setup instructions.

Flyswatter2 How To Guides

BeagleBone Black – Linux

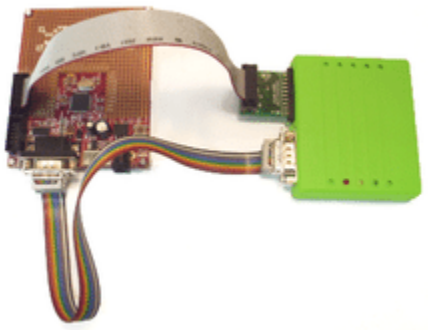
This guide walk a first time user through connecting the Flyswatter2 to the BeagleBone Black Board, and installing and running OpenOCD and GDB Debugger.

Olimex LPC-P2148 – Linux

Olimex LPC-P2148 – Windows

These guides walk a first time user through connecting the Flyswatter2 to the Olimex LPC-P2148 Prototype Board, and installing and running OpenOCD and GDB Debugger.

Olimex PIC-P32MX – Linux



Olimex PIC-P32MX – Windows

These guides walk a first time user through connecting the Flyswatter2 to the Olimex PIC-P32MX board, and installing and running OpenOCD and GDB Debugger.

Beagleboard – Linux

Beagleboard – Windows

These guides provide a first time user with instructions for the Beagleboard, and installing and running OpenOCD and GDB Debugger.

Beagleboard XM – Linux

Beagleboard XM – Windows

These guides provide a first time user with instructions for the TI Beagleboard XM, and installing and running OpenOCD and GDB Debugger.

Pandaboard – Linux

Pandaboard – Windows

These guides provide a first time user with instructions for the TI Pandaboard, and installing and running OpenOCD and GDB Debugger.

RouterStation Pro – Windows

These guides walk a first time user through connecting the Flyswatter2 to the Ubiquiti RouterStation Pro, and installing and running OpenOCD and GDB Debugger.

Flyswatter2 LPC2214 How To Linux

These guides walk a first time user through connecting the Flyswatter2 to the MikroElektronika LPC2214 mikroBoard, and installing and running OpenOCD, GDB Debugger and Eclipse.

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