

❖ MAJIC Series

❖ MAJIC III JTAG EMULATOR

- Non-intrusive, uses no target resources
- supports specific on-chip debug interfaces
- supports specific CPU core(s)
- supports on-chip hardware breakpoints
- Unlimited software breakpoints
- Programmable JTAG clock
- Ethernet, USB and serial I/O ports for fast, flexible host interface
- High speed download of application code
- Network compatibility allows shared and remote operation
- Internal RISC processor provides intelligent target control
- Internal Flash memory for easy firmware update
- Sleep-mode support(except for intel Xscale cpu cores)
- LEDs display operation status
- GSM/CDMA/Ti-OMAP FOR JTAG Emulator
- Manufacture : EPI Inc(USA)



<MODEL : MAJIC III>

- MDI Meta Debugger Interface
(for MIPS, ARM and Xscale tools)
- RDI Remote Debugger Interface(ARM)
- eXDI for Platform Builder
- MDI Server translates GDB remote to MDI
- Debug service request to MAJIC III

❖ Major features of the MAJIC III include:

Ethernet Interface

The 10Base-T/100Base-T Ethernet interface provides many advantages over serial or parallel interfaces to the host.

Download of your application code is over ten times faster than with serial interface.

This will significantly reduce the amount of time spent waiting for code changes to download to your target board. Network connection allows remote operation of the MAJIC III.

Now you can access the lab setup directly from your desktop.

This allows multiple engineers to share a common test bench.

Flash Memory

The MAJIC III firmware is easily upgraded without the need to replace ROMs.

Install new configuration kits easily and quickly using the simple program provided.

You can add support for multiple CPU types to the MAJIC III with a simple firmware upgrade.

New firmware updates will be available on our FTP site. Use the simple program provided to automatically program the updated firmware into the on-board flash memory. Flash memory makes it easy to program an IP address into the MAJICPLUS for point-to-point ethernet connection to a PC or workstation.

Internal RISC Processor

The use of a high performance internal RISC processor allows fast response to debugger operations such as single stepping and downloading of application code to the target.

Status LEDs and Reset Switch

The MAJIC III provides five LEDs which show the operational status of the emulator.

Choice of Configuration Kits

You may configure the MAJIC III to support one or more of the supported combinations of CPU core and onchip debug interface.

Each configuration kit includes the firmware, user license and interconnections necessary to support the CPU that you have chosen.

Please refer to the Configuration Kit data sheet for detailed specifications on the CPUs and on-chip interfaces currently supported.

Programmable JTAG Clock

The MAJIC III features a programmable TCK with a 0 to 10 MHz range.

This allows you to tailor the JTAG operation to match the performance of your target.

It also means that you can use the MAJIC III with low speed ASIC emulators, with FPGA implementation of your SoC design, or with devices that feature sleep mode operation.

Convenient Reset Switch

A convenient reset button on the MAJIC III is protected against accidental activation, yet is easily accessible by the user when a complete system reset is desired.

International Power Supply

The MAJIC III operates from a standard 5V power source. It comes with an external UL/CE approved AC adapter whose AC input range is compatible with all international AC voltage and frequency ranges.

A standard three-wire power connector is compatible with readily available power cords through the world.

▣ Specifications:

MAJIC III

- JTAG clock(TCK): 0 to 10 MHz Programmable
- Download Speed: >100k bytes/sec (Typical)
- Target voltage: 3.3V
- Serial interface: RS232C 1900-115.2k baud
- Ethernet interface: 10/100Base-T, TCP/IP
- USB: USB 2.0(Ethernet-to USB Adapter -Refer to Application Note)
- Indicator LEDs: Power, Status, Ethernet
- Size: 2.0 H x 7.4 W x 6.5 L (inches)
- Weight: 1.5 lbs
- Input power: 9 VDC +/- 5%, 2.0 A
- Power connector: 1.7 mm coaxial, center positive, male
- Temperature: Operating 0 - 40 degrees C
- Humidity: Operating 15% - 95% RH

External AC Adapter

- Output : 9 VDC, 2.0 A
- Input voltage: 90 - 264 VAC
- Input frequency: 47 - 63 Hz
- Input power: 0.6 A
- Size: 1. 1/8 H x 1. 7/8 W x 4.25 L (inches)
- Weight: 6 oz
- Compliance: UL, CUL, CE, TUV
- AC connector: EN 60320/13
- DC connector 1.7 mm coaxial, center positive, female