

**CY3600**

## InSRkit™: ISR™ Programming Kit

### Features

- Supports all FLASH370i devices
- Standard JTAG programming Interface
- Multi-device programming
- Supports cascading of devices
- Easy to use PC based interface
- Eliminates programming insertion to improve manufacturing efficiency
- For programming in the lab, on manufacturing floor, or at remote sites

### Kit Contents

- **ISR™ (In-System Reprogrammable) Programming Cable**
- **ISR Programming Software**
- **ISR User's Guide**
  - PC Requirements
  - Configuration File Syntax
  - Description of all error codes
- **ISR Application Notes**

### Functional Description

The ISR programming kit enables users to program FLASH370i CPLDs on board with our ISR Programming kit and a personal computer. The ISR programming cable connects to the parallel port of a PC into a standard 10-pin male connector mounted on the user's board.

The ISR software reads in standard JEDEC format programming files and converts them to a serial bit stream for ISR programming. The ISR software reads in a simple user defined configuration file that dictates how many devices are in the daisy chain and what operation is to be done on each FLASH370i device. The same chain can be used with other JTAG compliant devices.

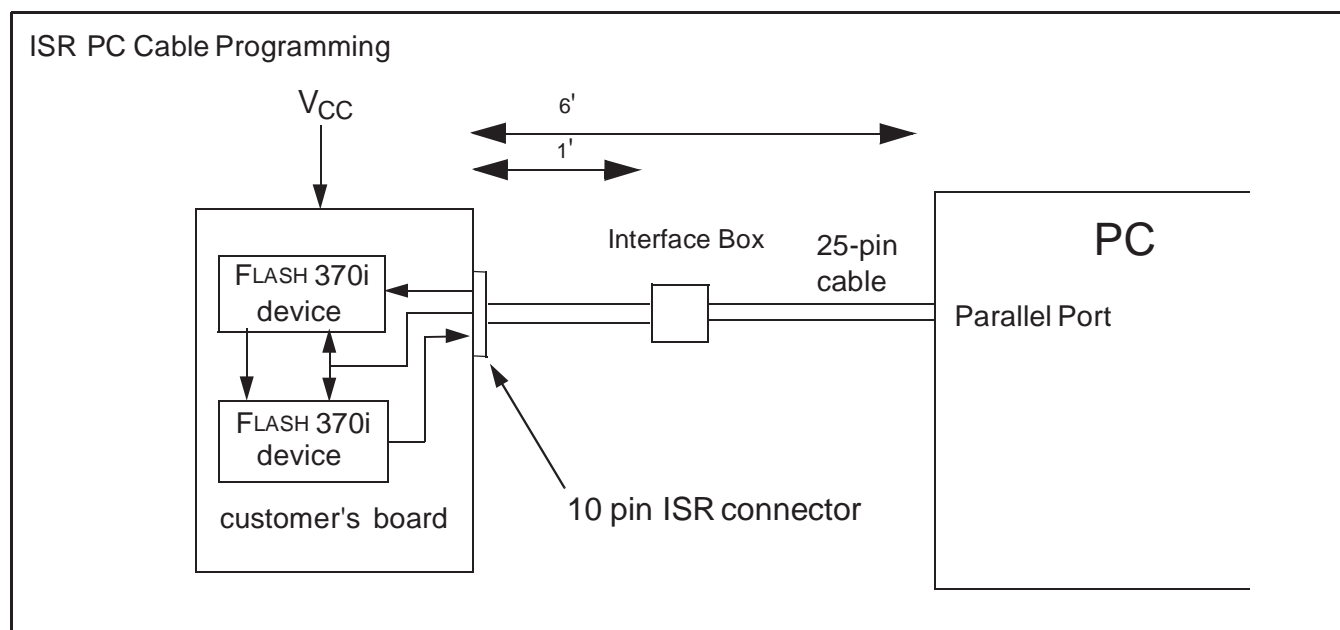
The ISR User's Guide describes the operation of the ISR software and how to set up the configuration file. The application notes included with the kit describe the FLASH370i architecture and all system design considerations for programming with the InSRkit.

### 10-pin ISR Connector

The diagram below shows the pinout of the 10-pin male connector to be mounted onto the board.

The view looking down onto the board is shown below.

SMODE	SCLK	SDI	NC	GND
GND	ISRVPP	ISR <sup>[1]</sup>	VCC	SDO



**Note:**

1. Refer to the ISR User's Guide for detailed information on ISR programming and electrical specification requirements.



Table 1 describes the function of each of these pins on the ISR programming cable. An OUTPUT is provided by the PC and an INPUT is provided by the target system.

**Table 1. Pin Description**

Pin	Type	Description
ISRVPP	OUTPUT	In System Programming high voltage programming pin.
ISR*	OUTPUT	In System Reprogramming enable indicator.
VCC	INPUT	+5V supply voltage provided from the target system to the cable.
SDO	INPUT	Serial Data Output Receiver. The SDO output pin of the last device in the ISR chain of the system is connected to this input pin.
SMODE	OUTPUT	Serial Mode Control. This is the mode select control input for the TAP controller state machine contained in the ISR interface.
SCLK	OUTPUT	Serial Clock. ISR interface clock input.
SDI	OUTPUT	Serial Data Input Driver. This output pin is connected to the SDI input of the first device in the ISR chain.
NC	NC	No Connect
GND	—	Zero volt common ground for PC and target system.

The dimensions of the male connector required in the system are given below.

Male Connector:

2 x 5 = 2 rows, 5 pins per row

Measuring from center of the pins, each pin is 0.1" from the others.

Pin Length is 0.23"

Pin cross-section is 0.025" x 0.025"

Part Number: Amp 103309-1

### PC System Requirements

- One free parallel port
- 500K conventional memory or higher
- 486 PC or better
- DOS version 6.0 or higher
- 1MB or more disk space

### Ordering Information

Product Code	Description
CY3600	ISR Programming Kit
CY3601*	Detachable Ribbon Cable

**Note:**

2. For replacement purposes only.

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