



## ASIC/2-7540 Firmware Upgrade

Affects: ASIC/2-7540

Date: 23 February 2006



Note No. TE-030

ASI In-Field Flash Programmer software is used to upgrade the firmware in the ASIC/2-7540. It works over the RS-485 serial communication bus, or over a UDP/IP or TCP/IP Ethernet connection using an ASI EtherLink or EtherLink/2. FlashDev supports multiple products. The flash download files are kept in separate subfolders for each product. Make sure you have selected the correct product and download file.

### Install FlashDev

Install the ASI In-Field Flash Programmer, FlashDev.exe. as described in Tech Note 26, Flash Device. Unzip the file, FlashDev-2006.zip into c:\ (root). It will automatically create the folder C:\ASI\FlashDev\7540\ and unzip the necessary files. This needs to be done once unless we update the program.

Note: FlashDev works under **Win-XP**, **Win-2000**, but does not support Win-NT, Win98, Win95.

### Copy Hex File

Copy the latest firmware zip file, into the folder C:\ASI\FlashDev\7540\ and Unzip the firmware Hex file.

Product	Folder	Flash File
ASIC/2-7540	C:\ASI\FlashDev\7540	754aXX-rel.hex

The latest release is available from our website, [http://www.asicontrols.com/integrator/asic\\_2\\_7540/](http://www.asicontrols.com/integrator/asic_2_7540/) or contact: ASI Controls Technical Support [support@asicontrols.com](mailto:support@asicontrols.com), or call 925-866-8808

### Upgrading ASIC/2-7540 Firmware

The following rules apply to upgrading ASIC/2-7540 firmware:

1. Make sure you upload your configuration with Expert before attempting firmware upgrade. The project archive feature of Expert is a handy way to do this. Determine the controller address, current firmware version, and connection parameters (baud rate and COM Port; or IP address and port)
2. Launch FlashDev, select the product and latest firmware version, 754axx-rel.hex, and upgrade the firmware.
3. After upgrade, talk to the controller with Expert. Reload the configuration if necessary (see below).

#### FW754a1.0 to FW754a1.3

- For FW754a1.0 and earlier you **must** use Expert to save your configuration before upgrading the firmware. Disable all outputs before upgrading the controller to protect any equipment connected to the controller.
- Upgrade the firmware.
- Establish communications and **reload** the configuration with Expert.
- Verify the configuration with Expert.

Note: Do not attempt to upgrade Prototype ASIC/2-7540 with the Compact Flash slot. Contact technical support to get those controllers replaced.

#### FW754a1.1 to FW754a1.3

- Use Expert to save your configuration before upgrading the firmware.
- Upgrade the firmware.
- Establish communications and verify the configuration with Expert.

## FW754a1.2 (no Notify) to FW754a1.3

- For configurations without the Notify object, the configuration in the controller is most likely corrupted. You should find a backup copy of the configuration from fw754a1.1 or earlier.
- Upgrade the firmware.
- Establish communications and load the backup configuration with Expert.
- Verify the configuration with Expert.

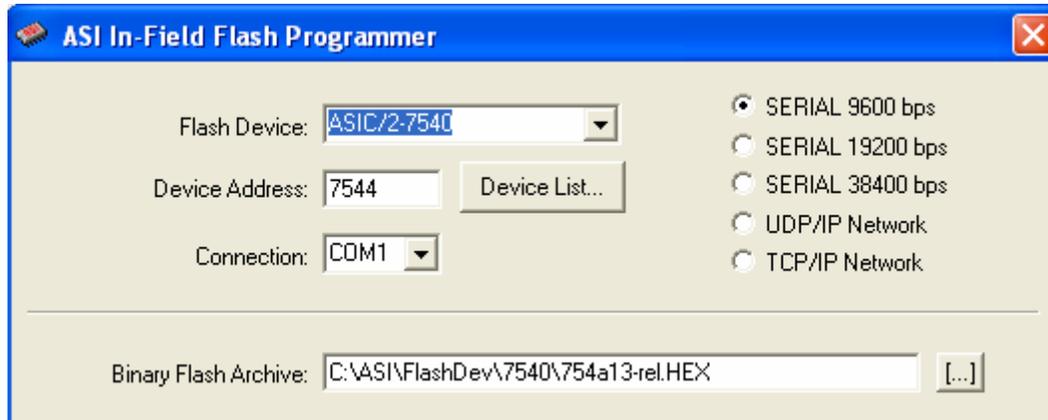
## FW754a1.2 (with Notify) to FW754a1.3

- For configurations with the Notify object, use Expert to save your configuration before upgrading the firmware.
- Upgrade the firmware.
- Establish communications and verify the configuration with Expert.

## Using Flash Download

Start FlashDev.exe. FlashDev.exe expects to run from and find its files in c:\ASIFlashDev\.

The first time you run it you will need to set the operating parameters.



## Select Product

Select the product to be downloaded. You MUST select the proper product.



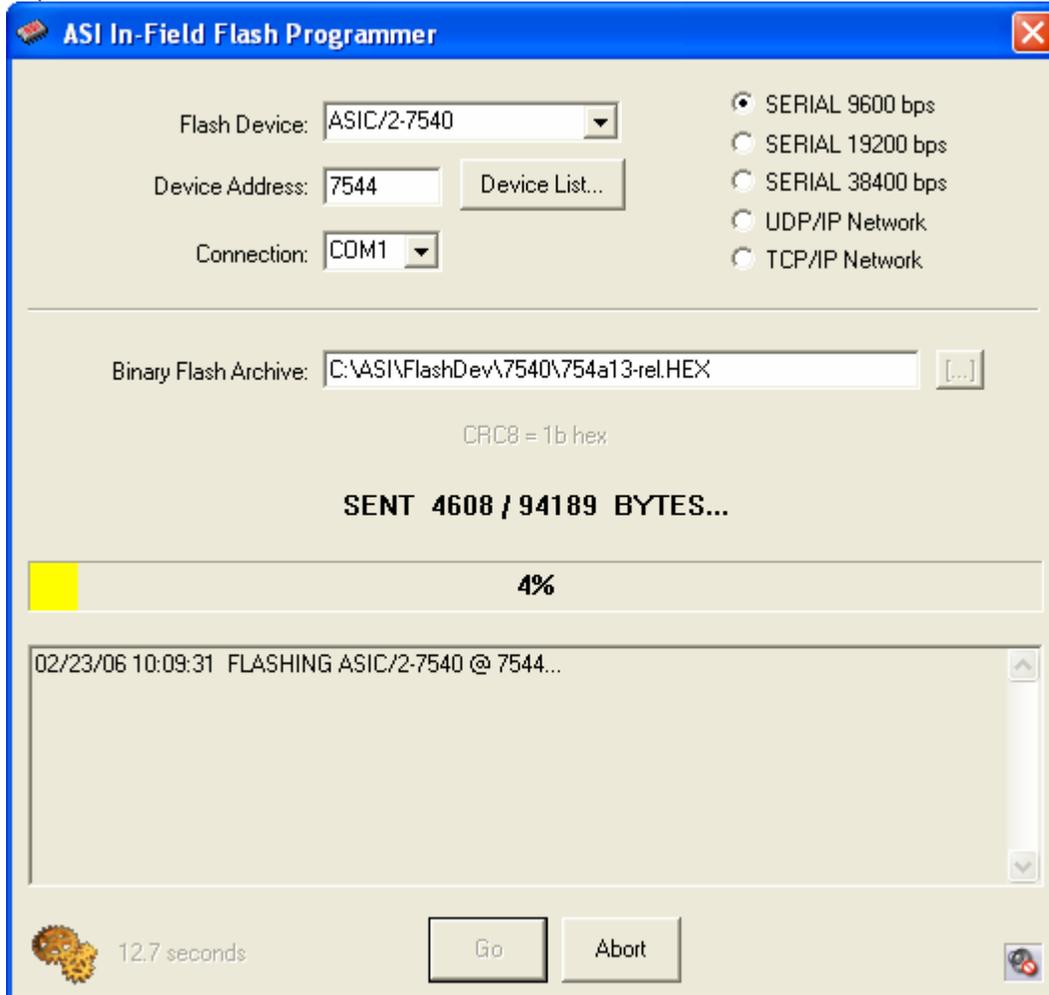
## Select Hex file

Select the firmware Hex file to be downloaded.



## Go

Press Go to start the download. FlashDev then downloads the file to the controller. Expert must be at Home or Closed to release the Com Port.



The status bar shows the progress in yellow and turns green when Flash Programming is Complete.



When successful, the controller goes to run mode, and resumes normal operation. The controller is now programmed with the new firmware. Close FlashDev by clicking the x in the upper right corner and reopen Expert.

Load or Reload the configuration .ASI file if required.

## Firmware Versions

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### **ASIC/2-7540 FW754a Ver 1.3h Release 2006-02-17 PN70025-04 ECO-395**

- o Fixes FW754a12 bug that caused random clearing of bits in memory
- o Fixes problem with DAK Passwords
- o Adds product validation (7540) to Flash download messages
- o Adds autodetect of specific USB devices
  - USB Ethernet Device: Hawking HUF11, Hawking HUF2, LinkSYS USB100M
  - USB Modem: Best Data 56USB-P
- o Adds USB Device Type; 0=Autodetect, 1=Ethernet, 2=Modem, 3=Memory
- o Adds USB watchdog to prevent lockups

Note: Do Not HOT SWAP USB Devices

### **ASIC/2-7540 FW754a Ver 1.2n Release 2006-02-03 PN70025-03 ECO-394**

- o Fixes problem with input reads at 256, 512, 768 raw counts

Note: This problem is in all earlier versions of F754a

All earlier versions should be upgraded to correct the problem.

WARNING: This version has a bug that randomly clears bits in memory unless there is at least 1 instance of the Notify Object present.

Note: This should not be used to upgrade Prototype Compact Flash hardware versions.

### **ASIC/2-7540 FW754a Ver 1.1e Released 2005-11-02 PN70025-02 ECO-390**

- o Input Tri-MUX and Quad-Mux types must now have the new value for two successive reads before the present value is changed. Adds new parameter Attr-6 LO Byte Temporary Value.
- o Fixes Notify Dial manager strings.
- o USB-Ethernet UDP/IP connection preliminary and not released.
- o Adds IP Parameters and expands System object size

Note: Object sizes have changed. When upgrading from 1.0 to 1.1 Application Configuration must be reloaded to the controller

### **ASIC/2-7540 FW754a Ver 1.0b Released 2005-08-10 PN70025-01-revised ECO-390**

- o Includes security bit for protection.
- o Initial Production Release

If you have any further questions please contact: ASI Controls Technical Support  
[support@asicontrols.com](mailto:support@asicontrols.com), or call 925-866-8808