



1769-SM1 Compact I/O to DPI/SCANport Module Firmware v2.002

This release note describes major revision 2, minor revision 2 of firmware for 1769-SM1 Compact I/O to DPI/SCANport modules.

Introduction

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Enhancements

There are no enhancements provided in this revision of firmware.

Corrected Anomalies



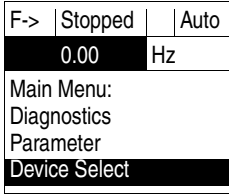



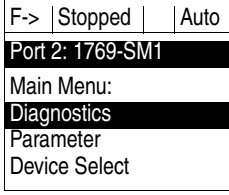



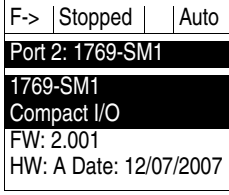





This section describes the anomaly corrected in this revision of firmware:

- Corrected an issue that caused the 1769-SM1 to reset unexpectedly when Channel 3 on the 1769-SM1 was connected to a DPI Host communicating at a DPI baud rate of 500K and no other DPI peripherals are connected to that DPI Host.

Determining Firmware Revision

This section describes procedures to determine the firmware revision of your 1769-SM1 Compact I/O to DPI/SCANport module.

Using the LCD HIM

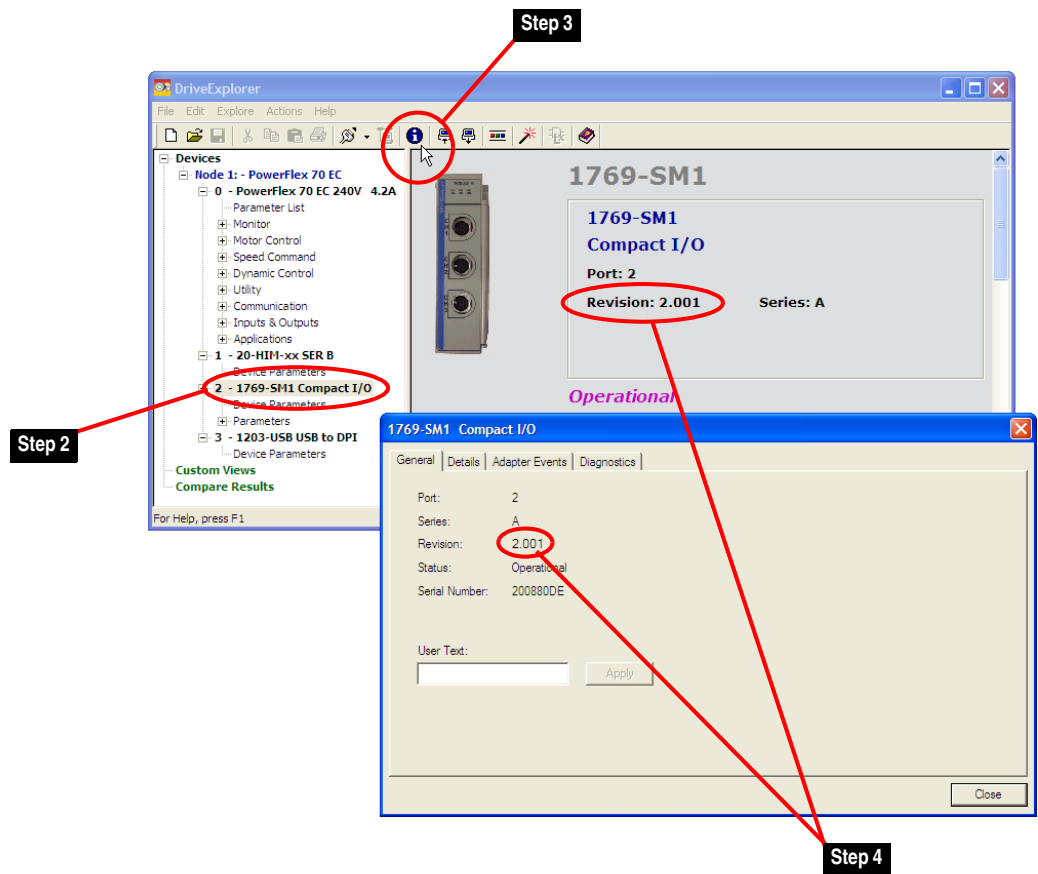
Step	Key(s)	Example Screens
1. In the main menu, press the Up Arrow or Down Arrow to scroll to Device Select .	 or 	
2. Press Enter to enter your selection.		Main Menu: Diagnostics Parameter Device Select
3. Press the Up Arrow or Down Arrow to scroll to the 1769-SM1 module.	 or 	
4. Press Enter to select the module. The main menu for the module will appear.		Main Menu: Diagnostics Parameter Device Select
5. Press the Up Arrow or Down Arrow to scroll to Diagnostics .	 or 	
6. Press Enter to enter your selection.		1769-SM1 Compact I/O FW: 2.001 HW: A Date: 12/07/2007
7. Press the Up Arrow or Down Arrow to scroll to Device Version .	 or 	
8. Press Enter to display the Product Data screen.		
9. Press Enter again to display the module's firmware version.		

Using DriveExplorer Lite/Full

1. Launch DriveExplorer and go online (via EtherNet/IP using DriveExplorer Full only, or a 1203-USB or 1203-SSS converter) with one of the drives that is connected to the module.
2. In the DriveExplorer treeview, click on the 1769-SM1 module as shown in [Figure 1](#).
3. Click the information icon to display the adapter's Properties screen.
4. The "Revision:" field shows the present revision (for example, 2.001) of the module firmware.

▶ **TIP:** When clicking on the 1769-SM1 module using version 5.01 or higher DriveExplorer Lite/Full, the module firmware revision is also shown in the right pane of the DriveExplorer window.

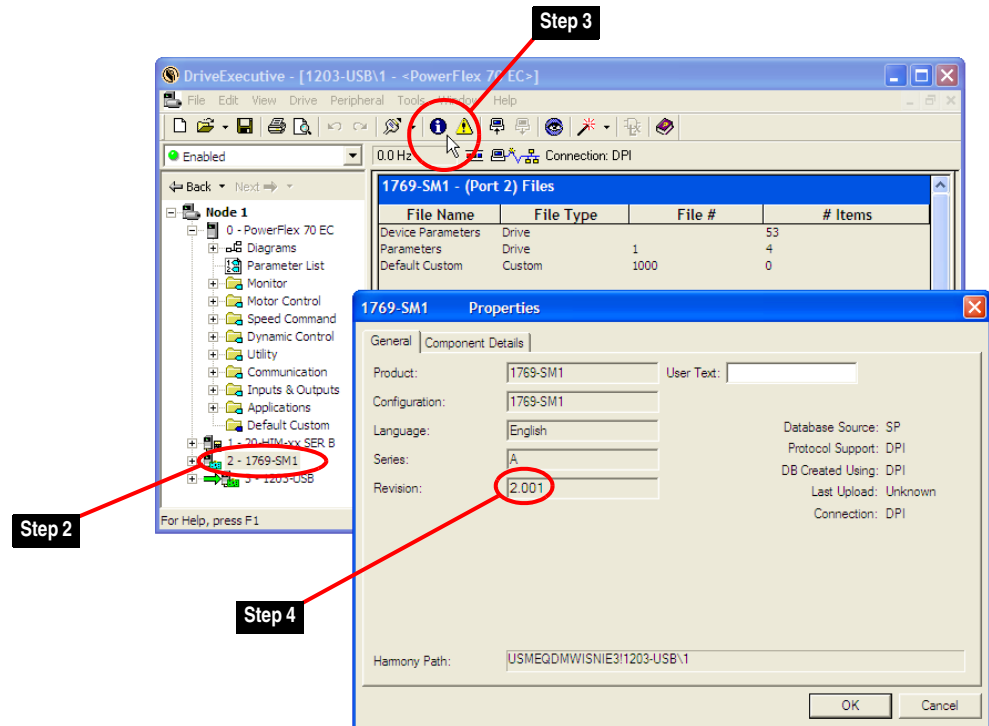
Figure 1 Information Icon in DriveExplorer Window



Using DriveExecutive

1. Launch DriveExecutive and go online (via EtherNet/IP, or a 1203-USB or 1203-SSS converter) with one of the drives that is connected to the module.
2. In the DriveExecutive treeview, click on the 1769-SM1 module as shown in [Figure 2](#).
3. Click the information icon to display the module's Properties screen.
4. The "Revision:" field shows the present revision (for example, 2.001) of the module firmware.

Figure 2 Information Icon in DriveExecutive Window



Firmware Flashing

This section describes procedures to flash upgrade your module firmware. Flash kits for drives and communications adapters are provided on the Allen-Bradley Web Updates site located at <http://www.ab.com/support/abdrives/webupdate>. Flashing can be performed using a drive software tool over EtherNet/IP, or a 1203-USB or 1203-SSS converter. For information about how to connect to your drive, please refer to the 1203-USB or 1203-SSS User Manual. They can be viewed/downloaded on the Literature Library web site located at www.literature.rockwellautomation.com.



ATTENTION: Risk of permanent equipment damage exists. Once a flash update has been started, do not remove power from the drive until after the download has completed and the module MODULE status indicator starts FLASHING GREEN. If power is removed before this occurs, the module may be permanently damaged. A module that has been damaged in this way cannot be repaired.

Installing the Flash Kit

1. Install the flash kit utility from the Allen-Bradley Web Updates site for the 1769-SM1 module. (This also automatically installs the latest version of the ControlFLASH utility and deploys the firmware files for use with HyperTerminal on your computer.)
2. You are now ready to use DriveExplorer, DriveExecutive, ControlFLASH or HyperTerminal to update the module. Refer to the respective section below and follow the instructions.

Using DriveExplorer Lite/Full

1. With the Flash Kit installed (see [Installing the Flash Kit on page 4](#)), launch DriveExplorer and go online (via a 1203-USB or 1203-SSS converter) with one of the drives that is connected to the module.
NOTE: A 1203-S03 Splitter cable must be used to enable the 1203-USB or 1203-SSS converter to be connected between the 1769-SM1 module and drive.
2. In the DriveExplorer treeview, click on the 1769-SM1 module. Then click the information icon as shown in [Figure 1](#) to display the module's Properties screen.
3. On the 1769-SM1 Properties screen, click the Details tab.

Important: This update may cause the module parameters to revert to their default values. You may want to save your configuration using DriveExplorer or the HIM CopyCat feature before upgrading.

4. To start the flash update, click the **Flash Update...** button. Then select "2.002.xx" from the list of available updates and click **Next >**. Follow the remaining screen prompts until the flash update procedure completes and displays the new firmware revision (v2.002).

Using DriveExecutive

1. With the Flash Kit installed (see [Installing the Flash Kit on page 4](#)), launch DriveExecutive and go online (via a 1203-USB or 1203-SSS converter) with one of the drives that is connected to the module.
NOTE: A 1203-S03 Splitter cable must be used to enable the 1203-USB or 1203-SSS converter to be connected between the 1769-SM1 module and drive.
2. In the DriveExecutive treeview, click on the 1769-SM1 module. Then click the information icon as shown in [Figure 2](#) to display the module's Properties screen.
3. On the 1769-SM1 Properties screen, click the Component Details tab.

Important: This update may cause the module parameters to revert to their default values. You may want to save your configuration using DriveExecutive or the HIM CopyCat feature before upgrading.

4. To start the flash update, click the **Flash Update** button. Then select the 1769-SM1 from the list of available devices and click **Next >**.
5. Select "2.002.xx" from the list of available updates and click **Next >**. Follow the remaining screen prompts until the flash update procedure completes and displays the new firmware revision (v2.002).

Using ControlFLASH

1. With the Flash Kit installed (see [Installing the Flash Kit on page 4](#)), launch ControlFLASH by selecting **Start > (All) Programs > Flash Programming Tools > ControlFLASH**.
2. On the ControlFLASH Welcome screen, click **Next >**.
3. Choose “1769-SM1 via CompactLogix” from the list if flashing the 1769-SM1 module through a CompactLogix controller backplane—or choose “1769-SM1 via DPI Comm” from the list if flashing the 1769-SM1 module through a 1203-USB or 1203-SSS converter. Note that the latter option requires a 1203-S03 Splitter cable to be used to enable the 1203-USB or 1203-SSS converter to be connected between the 1769-SM1 module and drive. Then click **Next >**.

Important: This update may cause the module parameters to revert to their default values. You may want to save your configuration using the HIM CopyCat feature, DriveExplorer or DriveExecutive before upgrading.

4. Expand the treeview for the communication path you are using. If flashing the 1769-SM1 module through a CompactLogix controller backplane, select the 1769-SM1 module—or if flashing the 1769-SM1 module through a 1203-USB or 1203-SSS converter, select the “A-B DPI” icon (which represents the drive to which the 1769-SM1 module is connected). Then click **OK**.
5. With the Multiple Assemblies Found window displayed, select “Port X - 1769-SM1” from the list and click **OK**.
6. With the Firmware Revision window displayed, select “2.002.xx” from the list of available updates and click **Next >**. Follow the remaining screen prompts until the flash procedure completes and displays the new firmware revision (v2.002).

Using HyperTerminal

1. With the Flash Kit installed (see [Installing the Flash Kit on page 4](#)), launch HyperTerminal and go online (via 1203-USB or 1203-SSS converter) with the powered drive that is connected to the module.
2. Press the **Enter** key until the main menu ([Figure 3](#)) appears.

Figure 3 Main Menu

```
Main Menu - Enter Number for Selection
1> Display Setup Parameters
2> Display Event Queue
3> Flash Upgrade
```

3. In the main menu, press **3** to flash upgrade. Then press the number key that corresponds to the “1769-SM1” in the list, and press **Y** (for Yes) to update the flash code. The terminal program will start displaying the

letter “C”. This signals the XMODEM protocol that the download may proceed. You then have one minute to start the transfer.

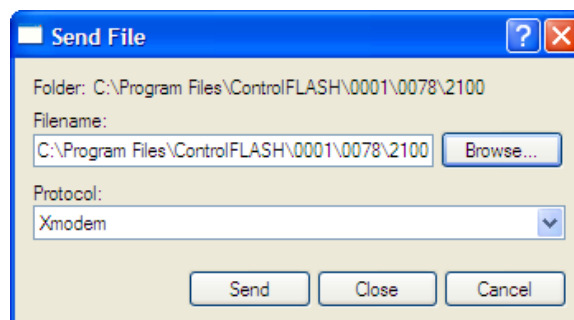


ATTENTION: Risk of injury or equipment damage exists. When you perform a flash update, the drive will fault if it is receiving control I/O from the module. Verify that the drive has stopped safely or is receiving control I/O from an alternate source before beginning a flash update.

4. Select **Transfer > Send File** to display the Send File screen ([Figure 4](#)).
5. Click **Browse** and navigate to the flash file located in:

C:\Program Files\ControlFLASH\0001\0078\2100

Figure 4 Send File Screen



6. In the Select File to Send window list, click on the “1769-SM1_02_002_01_Boot.bin” file. Then click **Open**. This file name now appears in the Filename box in the Send File screen.
7. In the Protocol box, select “Xmodem.”
8. Click **Send**. A dialog box appears and reports the progress of the update. When it is complete, the message “Flash Complete” appears. Press any key to continue.

Important: Keep the device powered for 15 seconds after the operation has completed or until the MODULE status indicator starts flashing green.



TIP: To cancel the flash update at any time, press **CTRL-X**.

9. Repeat steps 2 through 8 for the “1769-SM1_02_002_01_App.bin” file.
10. Press the **Enter** key to return to the main menu.

Restrictions

No restrictions apply to this revision of firmware.

Compatible Revisions

To use this revision of firmware, update your system tools as follows:

Update this:	To this version or later:
DriveExplorer Lite/Full	4.01
DriveExecutive	3.01
PowerFlex 7-Class Drive	all versions compatible
LCD HIM	all versions compatible
RSLinx Classic	2.43

Rockwell Automation Support

Rockwell Automation provides technical information on the web to assist you in using our products. At <http://support.rockwellautomation.com>, you can find technical manuals, a knowledge base of Frequently Asked Questions (FAQs), technical and application notes, sample code and links to software service packs, and a MySupport feature that you can customize to make the best use of these tools.

Rockwell Automation also provides complimentary phone support for drives, communication adapters, and peripherals. If you experience a problem with the adapter, please review the information in its User Manual. For further help in getting your adapter operational, contact a Customer Support representative:

United States	(1) 262.512.8176 Monday – Friday, 7am – 6pm CST
Outside United States	Please contact your local Rockwell Automation representative for any technical support issues.

For an additional level of technical phone support for installation, configuration and troubleshooting, we offer TechConnect Support programs. For more information, contact your local distributor or Rockwell Automation representative, or visit <http://support.rockwellautomation.com>.

Product Satisfaction Return

Rockwell Automation tests all products to ensure that they are fully operational when shipped from the manufacturing facility. However, if your product is not functioning and needs to be returned:

United States	Contact your distributor. You must provide a Customer Support case number (see phone number above to obtain one) to your distributor to complete the return process.
Outside United States	Please contact your local Rockwell Automation representative for return procedure.

U.S. Allen-Bradley Drives Technical Support - Tel: (1) 262.512.8176, Fax: (1) 262.512.2222, Email: support@drives.ra.rockwell.com, Online: www.ab.com/support/abdrives

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