



TOTALFLOW
Technical Bulletin 132

microFLO FLASH 2101048-021
Enhancement

Totalflow Technical Bulletin

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1. Purpose

This document will describe a modification being made to the 6200 microFLO product line. Units in the field can be upgraded by installing ABB's latest FLASH image. This is a free upgrade and ABB is recommending customers implement this upgrade on their next routine site visit. This upgrade is not mandatory but recommended by the factory to enhance the Flow Computer's operation.

2. Description

Increasing the IMV Temperature Compensation Calculation Frequency – ABB has determined that in some scenarios the microFLO's zero may appear to be noisy or display small changes over a short period of time. This is most noticeable over small temperature changes (less than +/- 1 degree Fahrenheit). Even though the microFLO is well within the IMV's stated accuracy over temperature, ABB's investigation has determined that a product improvement could be made. To accomplish the improvement, ABB modified the latest FLASH to perform the temperature correction more frequently. Now the Flow Computer will re-compute and apply the compensation calculation at a sampling frequency of once per second. Previously the compensation algorithm was being used but only re-calculated based on an ambient temperature change of approximately +/- 1 degree temperature change.

Note: As of this bulletin, these changes are now being applied to all units shipping from ABB's factory.



Upgrade Procedure

The product improvement described within this bulletin can be incorporated by simply flashing the microFLO with standard 2101048-021 software. NOTE: It is possible that you may be using a different FLASH image. Verify what FLASH you require by reviewing the loaded FLASH using PCCU's "entry mode" "registry" tab. ABB will be re-releasing all current microFLO FLASH images to include the enhancement described in this bulletin.

Step #1 – Collect all historical data using PCCU32

Step #2 – Using "save and restore" save off the current microFLO configuration file to your laptop. ABB suggests using the station ID as the directory name for the configuration folder name on your laptop. This is a precaution in the unlikely event that the microFLO's configuration is lost.

Step #3 – FLASH microFLO with 2101048-021 or later (verify you are using our standard 2101048 base before proceeding). Also, make sure you have downloaded 2101048-021 from our web page before proceeding.

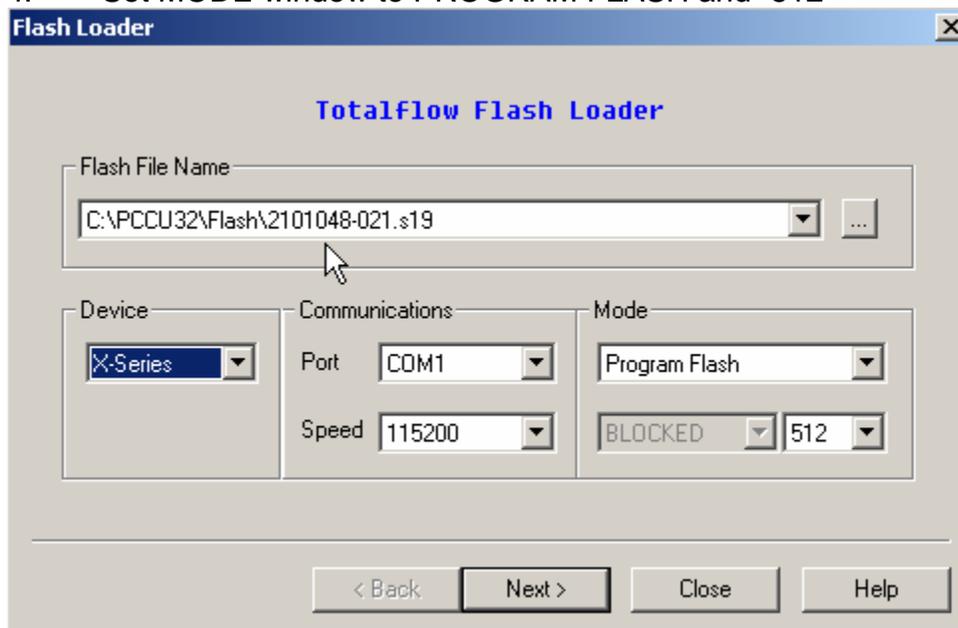
Step #4 – The microFLO's IMV **MUST** be re-calibrated after the FLASH upgrade is complete.

Using the FLASH LOADER

DO NOT start up PCCU32. The PCCU cable should still be connected to the XFC.

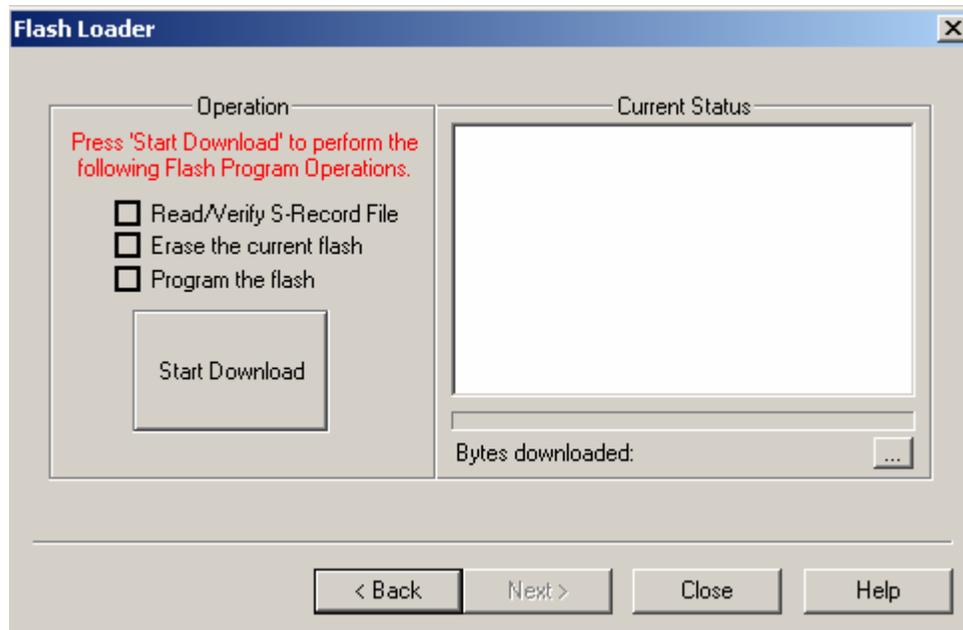
- A. On the laptop, go to START, then PROGRAMS, then Totalflow PCCU32 and click on FLASH LOADER
- B. Flash Loader screen setup
 1. Click the BROWSE button and point the FLASH FILE NAME window to the XFLASH folder you created earlier on your "C" drive and select the file:2101048-021.s19 (or the ABB enhanced version of the FLASH you are currently using)
 2. Set DEVICE window to "X-Series"
 3. Set COMMUNICATIONS window to COM 1 (if this is your laptop serial port)

4. Set MODE window to PROGRAM FLASH and “512”



C. Click on the NEXT button.

D. Click the “Start Download” button

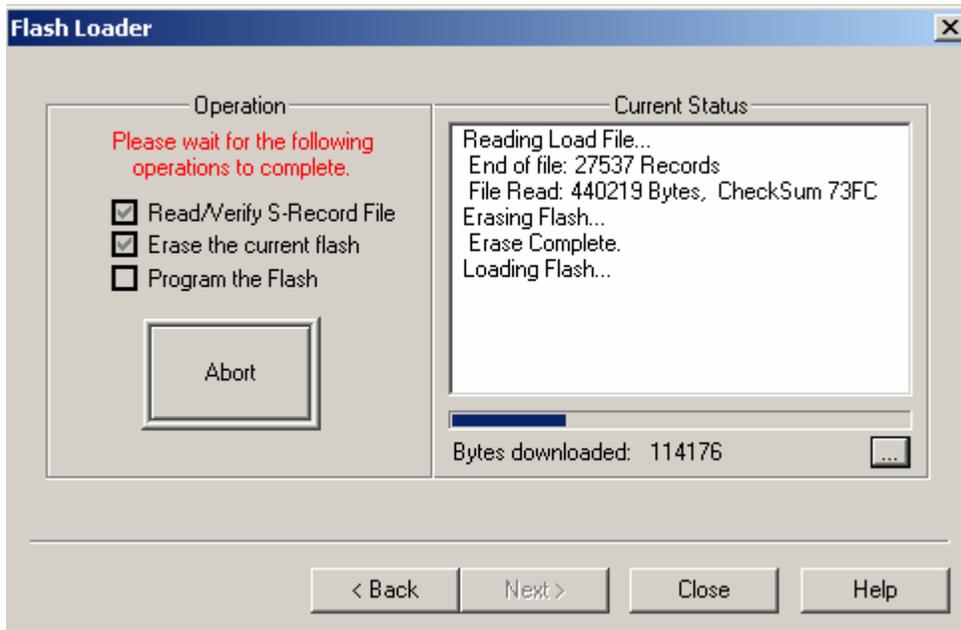


E. Immediately following, the XFC display will read:

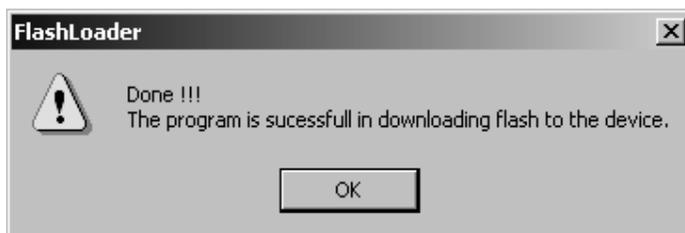
1. TOTALFOW FLASH LOADER (top line)

2. ERASE (bottom line)

- F. Next, display will start to increment numbers until it is complete. The FLASH LOADER screen will appear as below during the Flash Download.



- G. While executing the FLASH LOADER, the XFC display will reflect the following sequence in RAPID succession.
1. Verifying Flash (top line). Number incrementing (bottom line).
 2. Checksum 73FC = 73FC (top line). Verify Passed (bottom line).
 3. Warm Boot on top line and Flash 2101048-021 on bottom line.
 4. microFLO Flow Computer (top line). 2101048-021 (COPYRIGHT) (bottom line). When this appears, the RE-BOOTING is complete.
- H. The FLASH LOADER screen will appear on your laptop screen:



- I. Click on the OK button. Flow Computer should now be running.



3. **Conclusion**

ABB is providing this upgrade as an enhancement. Previous FLASH images will continue to operate normally and meet ABB's stated accuracy specifications.

Please call our technical service staff at (800) 442-3097 option 1,2 for upgrade assistance or if you have trouble downloading the FLASH image.