

Update Instruction - PGR-8800



Littelfuse SELCO

Precautions

The firmware update process is sensitive to power interruptions while it is running. Connect the unit properly to a power supply, and fasten the screws in the terminal block before starting the upgrade. If power is interrupted while the firmware update is running, the emergency procedure outlined below can be used to put new software in the unit.

Normal procedure

- 1. Connect power
- 2. Connect the unit to a computer via USB
- 3. Open My Computer and check that the Log and configuration drives appear
- 4. Drag and drop the two firmware files (PGR-8800.bin and PGR-8800.md5) to the root of the Log drive
- 5. Wait for the Test diode to stop blinking, signifying that the firmware has been stored
- 6. Remove the USB cable to start the upgrade procedure
- 7. The upgrade takes about a minute. The vulnerable time is about 10 seconds in the middle of the period, just before the unit reboots. Progress is indicated on the sensor LEDs, which light up as the stages are completed.
- 8. When all sensor LEDs have turned on, and the unit has returned to normal operation, cycle the power to the unit.
- 9. Connect USB and check that the Log tells the correct version of the firmware and that any configuration changes you may have made are still correct.
- 10. Delete the firmware files from the Log drive. You can also delete the backup directory from the drive. The files in this directory contain the old firmware, should you wish to downgrade.

The upgrade will keep all settings and the log intact. New functions in the new firmware will be set to default values.

To revert the upgrade and continue with the old software, use the same procedure, but use the files from the backup directory on the Log drive when moving the firmware files to the root of the drive in point 4.



Emergency procedure for reviving dead units

This procedure is a last resort for units where the normal update procedure has failed for some reason, e.g. due to power interruptions. It is quite a bit trickier than the standard procedure. If in doubt, send the unit to Selco for revival. This procedure erases the configuration, but the log is not affected.

- Fetch and install Atmel AT91-ISP from http://www.atmel.com. Selco has a local copy available at ftp://ftp.selco.com/public/Atmel%20SAM-BA%20SW/. At the time of writing, this software (version 1.12) will only work on 32 bit Windows installations (Windows XP, Windows Vista 32 bit, Windows 7 32 bit).
- 2. Connect power to the unit. For safety reasons, use a low-voltage supply on the DC input.
- 3. Use a plastic pin to depress the Erase-button on the PCB. It is situated on the PCB directly below the Sensor 2 LED. It is just possible to reach it from the outside with a thin or bent insulating pin, but may be easier to do by removing the cover carefully take care in the right hand side, where the ribbon cable is connected, and avoid touching the PCB. Pressing this button while the unit is powered irreversibly erases the software in the unit.
- 4. Remove and reattach power. The unit will appear completely dead no LEDs will turn on.
- 5. Attach the USB cable. The computer will ask for permission to install software for the atm6124.sys Atmel AT91xxxxx Test board. Accept this.
- 6. Start Atmel AT91-ISP SAM-BA and select the at91sam7x256-ek board:

🐜 SAM-BA 2.9	_ 🗆 🗙
Select the connection : \usb\ARM0 Select your board : at91sam7x256-e	 *k
Connect	Exit
Or	
SAM-BA CDC 2.10	_
Select the connection : com7	•

Select your board : at91sam7x256-ek

•

Exit

7. In the Flash section, select the bin file in 'Send File Name' and click Send File.

Connect



File Script File Link Help at31sam7x256 Memory Display Applet traces on DBGU Infos Applet traces on DBGU Size in byte(s): 0x100 0xEANFFFFF 0xEANFFFFFE 0xEAFFFFFE 0xEAFFFFFE 0x00200000 0xEAFFFFFFE 0xEAFFFFFE 0xEAFFFFFE 0xEAFFFFFE 0xEAFFFFFE 0x00200020 0xE3ADD004 0xESSBD28 0xESSBD20C 0xE3SBD04 0xESSBD28 0x00200020 0xE3ADD004 0xESSBD28 0xESSBD004 0xESSBD28 0xESSBD04 0x00200020 0xE3ADD004 0xESSBD28 0xESSBD004 0xESSBD04 0xESSBD04 0x00200040 0x010C80B0 0x11CC80B2 0x13A0D001 0x158CD004 0x0102004 0x010200050 0xF2SEF004 0xF10E0000 0xF23EF200C Image: C/d1000Din	S	AM-BA 2.9 - /	AT91SA	M7X256-EK					
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									Board : AT91SAM7Y259 EV

8. Answer No to lock the flash when the download finishes.



9. Select the script Boot from Flash in the bottom of the screen, and press Execute.

Scripts		
Boot from Flash (GPNVM2)	•	Execute

10. Click Compare sent file with memory

Compare sent file with memory



Please check that you get this message:

Comparison Result		_ _ X			
Sent file & Memory area content (address: 0x100000, size: 262144 bytes) match exactly !					
	ОК				

- 11. Remove the USB cable
- 12. Remove and reattach power
- 13. The unit will now boot, turn on the test diode for some time, and be functional again.