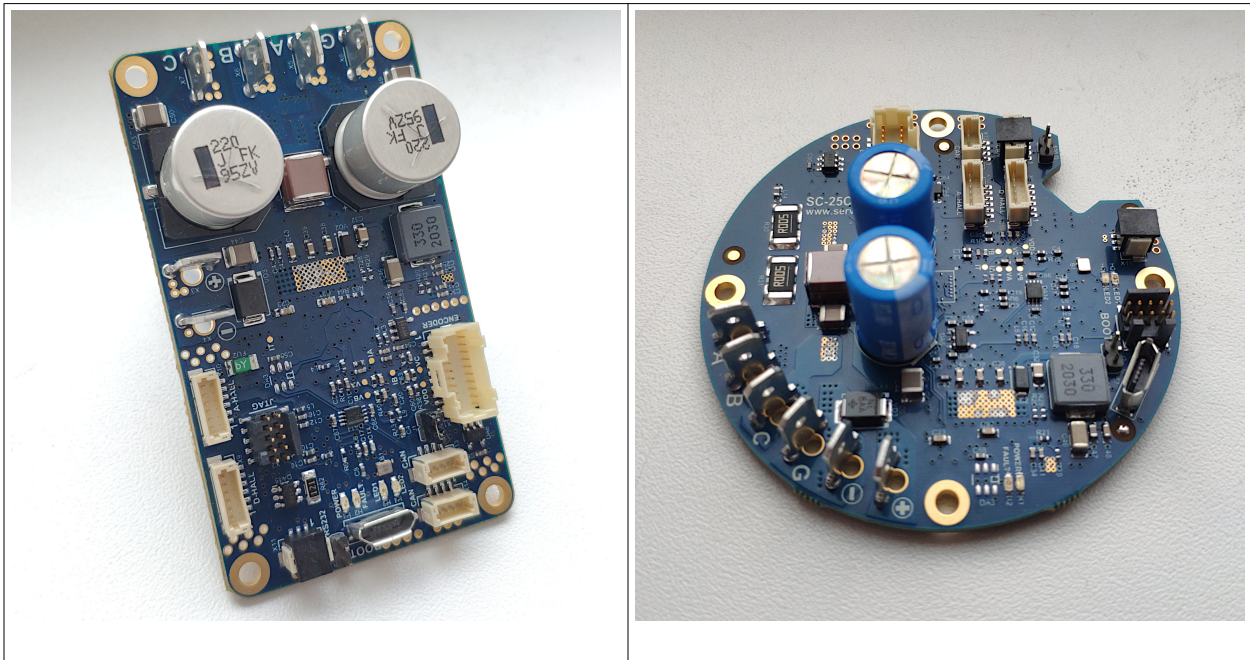


Firmware Flashing Guide

Servosila SC-25 Brushless Motor Controllers

Revision B



www.servosila.com/en/motion-control

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Introduction

Servosila SC-25 controllers are re-flashed via their RS232 ports. There is a pre-soldered connector as well as soldering holes for RS232 RX and TX signals. Please refer to the controller's datasheet to locate the RS232 port and the soldering holes.

Note #1: A Windows-compatible USB-to-RS232 converter/adaptor is required. Any brand would generally work.

Note #2: All the controller's configuration settings will be lost!

Note #3: The controller's Activation Key will be erased. A new Activation Key will need to be requested from Servosila Technical Support.

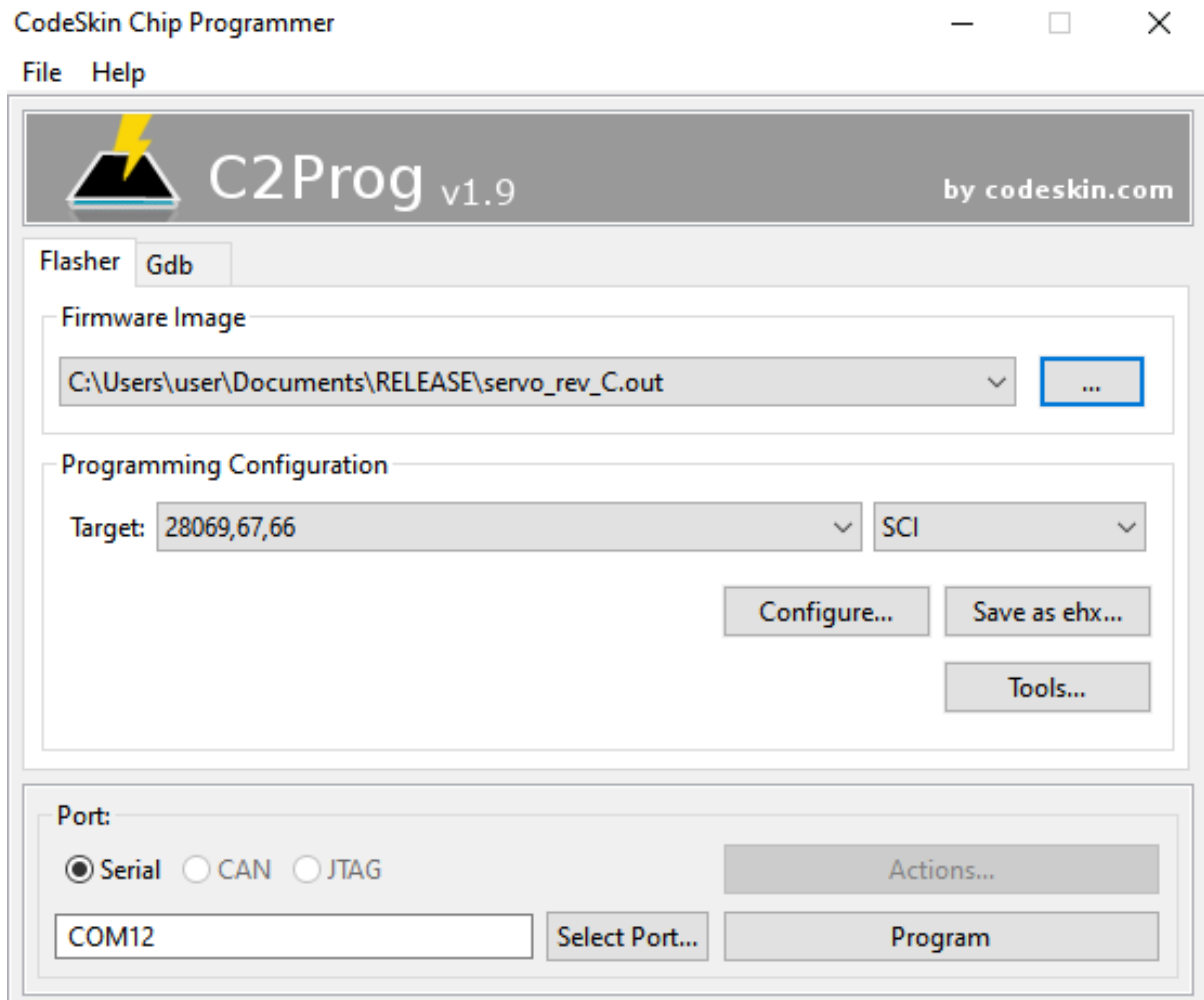
Step-by-step instructions

1. Request the latest firmware images from Servosila Technical Support.
2. Identify revision of your SC-25 controller by analyzing a model string printed on the controller. For example, SC-25R-C means "revision C".
3. Identify the firmware image file that matches the revision of your controller.
4. Connect a USB-to-RS232 adapter to the SC25 controller:
 1. either temporarily solder the wires to the board (**best**),
 2. or stick paper clips into the soldering holes and use the paper clips as makeshift connectors (**quick & dirty**),
 3. or use the board's dedicated RS232 connector (**industrialized re-flashing**).

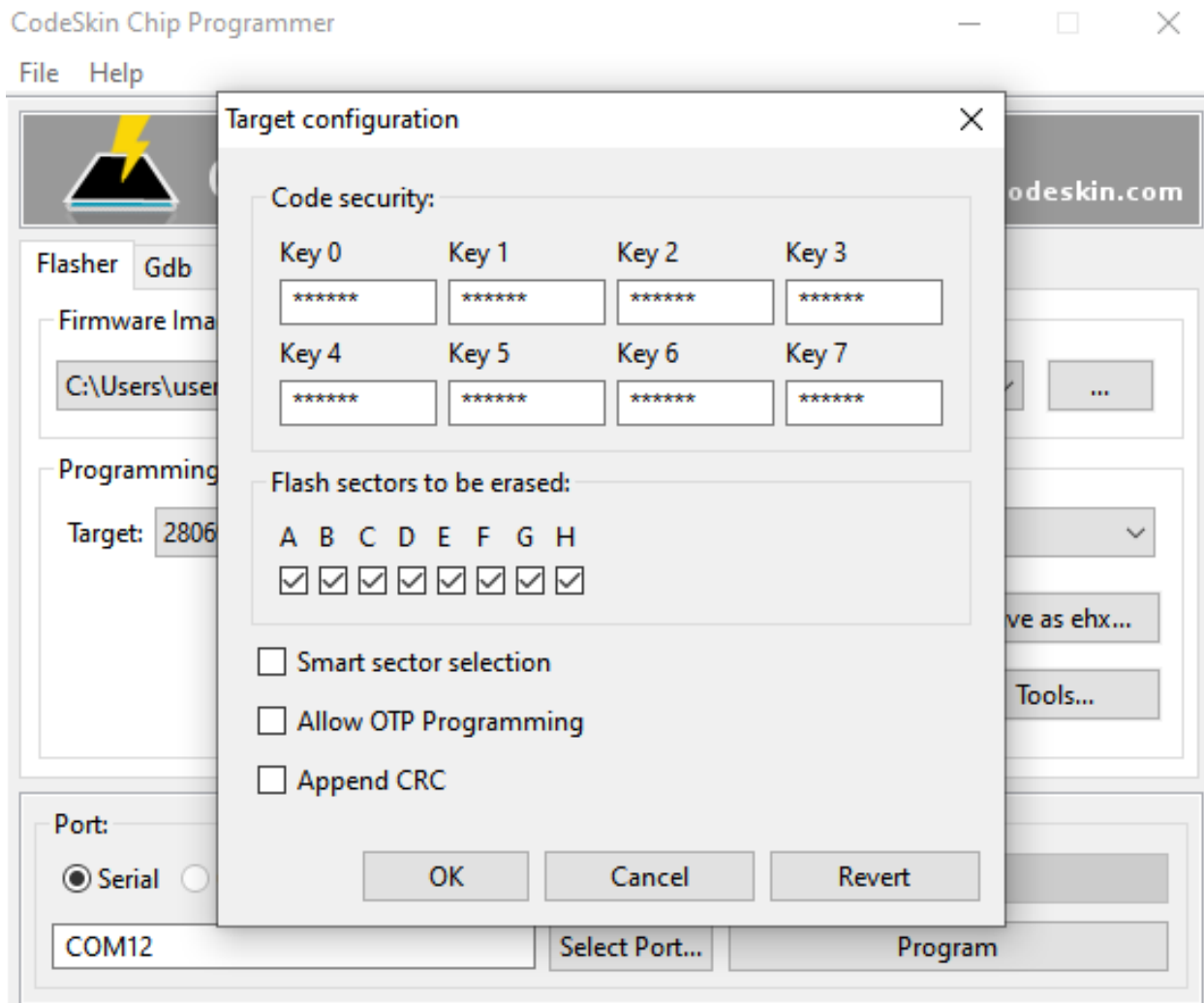
Refer to the controller's datasheet for information on how to locate the soldering holes.

5. Install the C2Prog flashing software on your Windows computer:
<https://www.codeskin.com/c2prog-download>
6. Connect USB-to-RS232 adapter to the Windows computer. By this time, the adapter should be already connected to SC25 controller via RS232 interface.

7. Start the C2Prog utility. Set the parameters as the following:



1. **Firmware image:** choose a firmware image that matches revision of your SC25 controllers.
2. **Target:** 28069,67,66.
3. **Interface to target:** SCI
4. **Port:** Serial.
5. Select a COM port that matches your USB-to-RS232 adapter.
6. Press button **Configure**. Then configure as the following:



7. **Un-check** “Smart sector selection”
 8. **Check all** “Flash sectors to be erased”.
 9. DO NOT TOUCH the section “Code security”.
8. Move a jumper from position “120 Ohm” to position “BOOT”. The jumper can be located using a picture from the controllers’ datasheet.
 9. Power ON the SC25 controller (make sure the jumper is moved first!)
 10. In C2Prog, hit the “Program” button (make sure the controller is powered on first!).
 11. The re-flashing process takes about 1 minute or so. Any problem → contact Servosila Technical Support. Typical problems:
 1. Typical problem #1: RX vs. TX signals mismatch (check wiring)
 2. Typical problem #2: <https://e2e.ti.com/support/microcontrollers/c2000-microcontrollers-group/c2000/f/c2000-microcontrollers-forum/482627/serial-programming-via-c2prog-in-piccolo-28069>

12. After the re-flashing process is successfully completed:
 1. Power OFF the controller
 2. Move the jumper back from position “BOOT” to position “120 Ohm”.

13. Power ON the controller (move the jumper first!)

14. Connect the Servoscope software to the controller. There will be an “Activation Key Missing” fault.

15. How to request the Activation Key:
 1. Take a picture of “Device Information” in Servoscope software.
 2. Send the information to Servosila Technical Support via WhatsApp, Telegram or Email.



*Servo drives designed around SERVOSILA SC-25C
brushless motor controllers*

YouTube: <http://www.youtube.com/user/servosila>

www.servosila.com/en/motion-control