2.251.1385 – Elprotronic FlashPro-X

04/2026

1.Introduction

FlashPro-X is primarily used for programming transmitter firmware.
Compared to MSPFET, it offers a wider range of functions, which are not required in most standard use cases.
FlashPro requires a corresponding FlashPro programming adapter (2.251.1385) to function smoothly. This adapter is subject to a charge and also serves as a licence dongle for FlashPro-X.

2. First-Time Setup

When starting FlashPro-X, the behavior depends on whether a compatible programming adapter is already connected and detected.

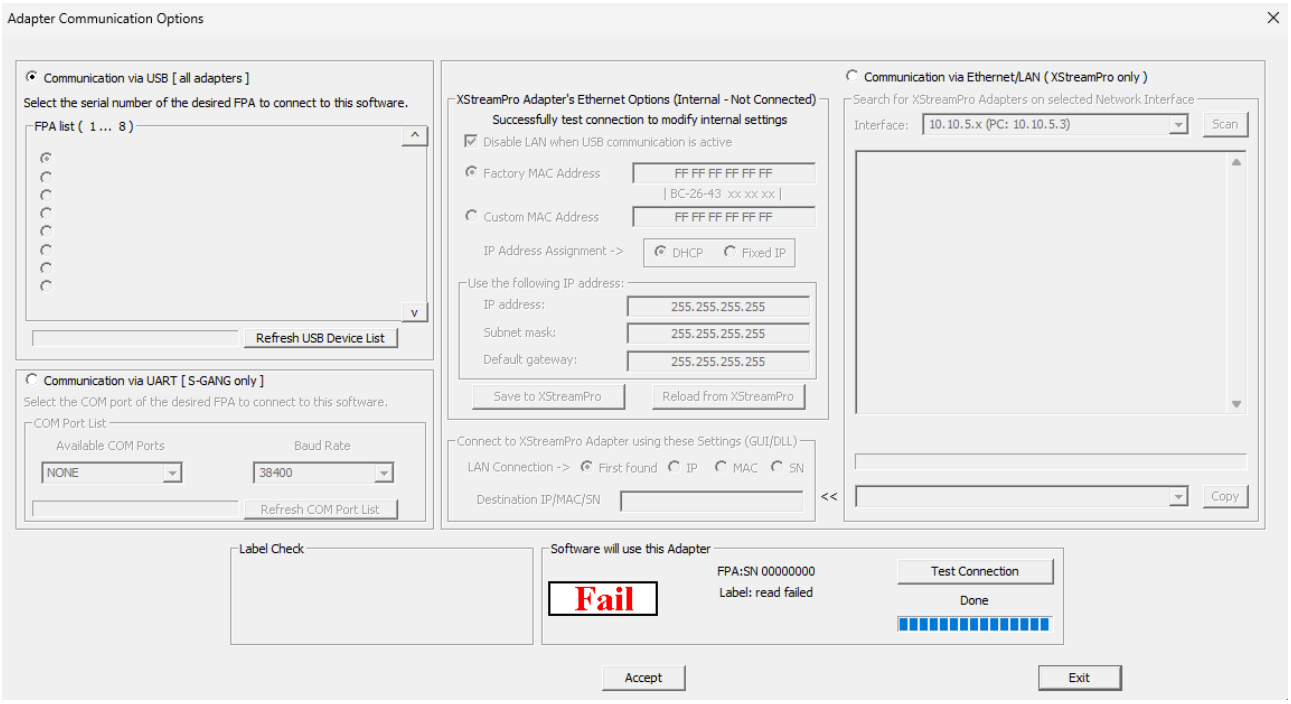
2.1 No Adapter Detected (Initial Configuration Required)

If **no programming adapter or interface is detected**, two pop-up windows will appear.

Adapter Communication Options
The first window is used to configure how the software communicates with the programming adapter. You can choose between the following communication interfaces:

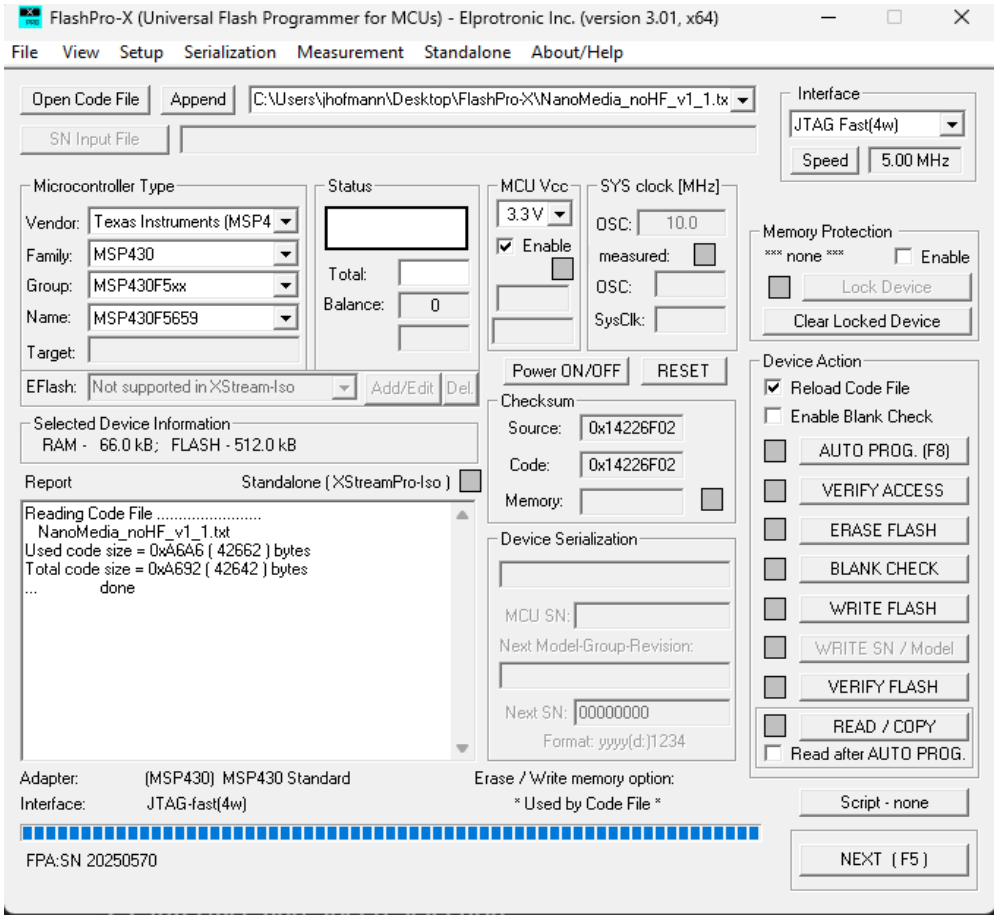
- **USB** (available for all adapters)
- **UART** (only for S-GANG)
- **Ethernet / LAN** (only for XStreamPro)

After selecting your preferred communication method, confirm with **"Accept"**.
The window will close, and the main graphical user interface (GUI) will open.



2.2 Adapter Already Connected (Default Case)

If a compatible FlashPro adapter is already connected and detected, the initial setup windows are skipped.
In this case, FlashPro-X starts directly in the main GUI with the adapter preconfigured.



2.3 Accessing Communication Settings Later

Even if the setup windows are skipped, the communication settings remain accessible at any time within the application.
You can adjust:

- The communication interface
- The connection parameters

via Setup then „Communication Options“.

3. Configuration Before Programming

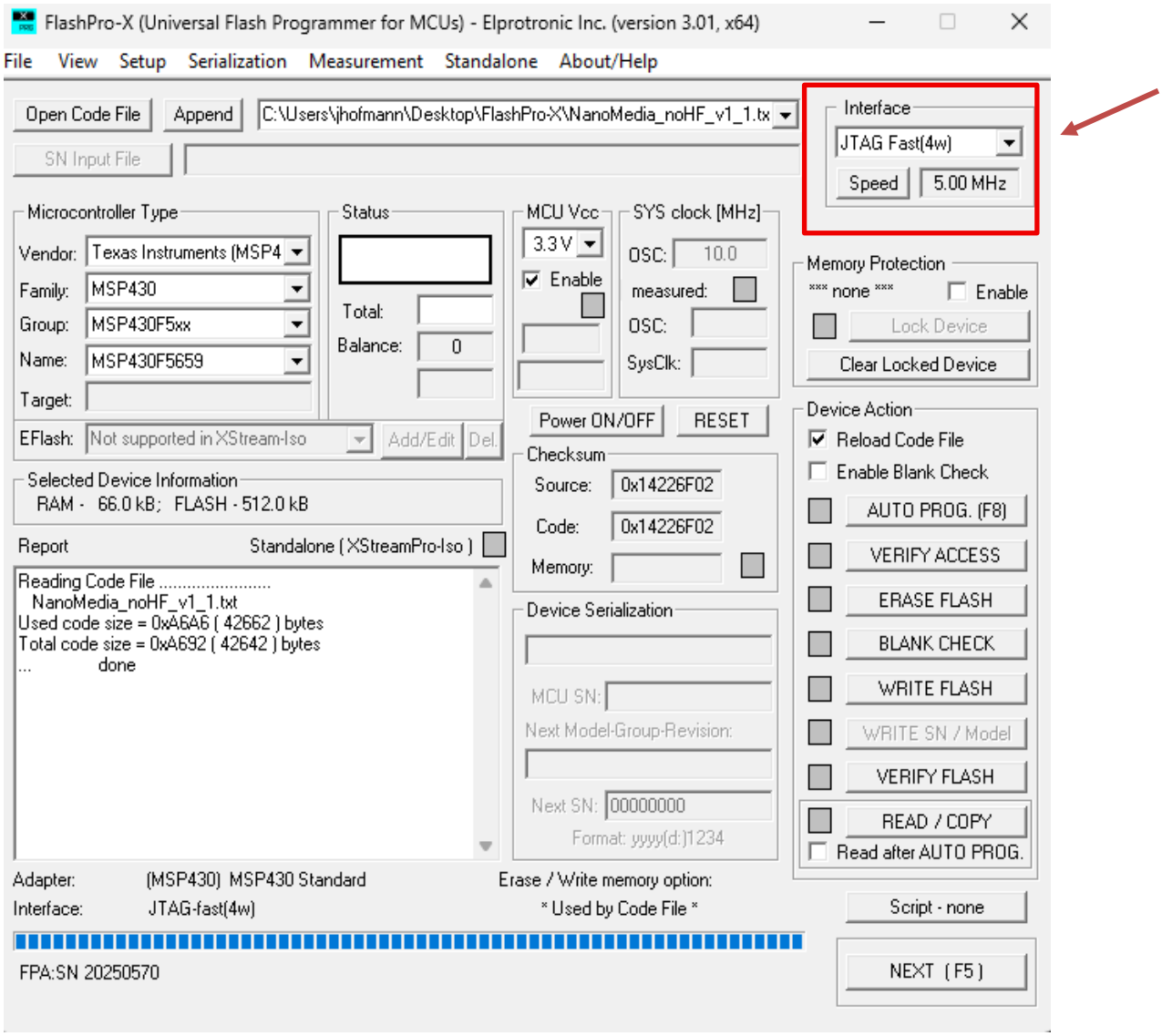
Before programming a device for the first time, certain settings must be configured to ensure a reliable process.

3.1 Interface and Speed Selection

In the main GUI, there is a section in the top-right corner where you can:

- Select the active interface
- Adjust the communication speed

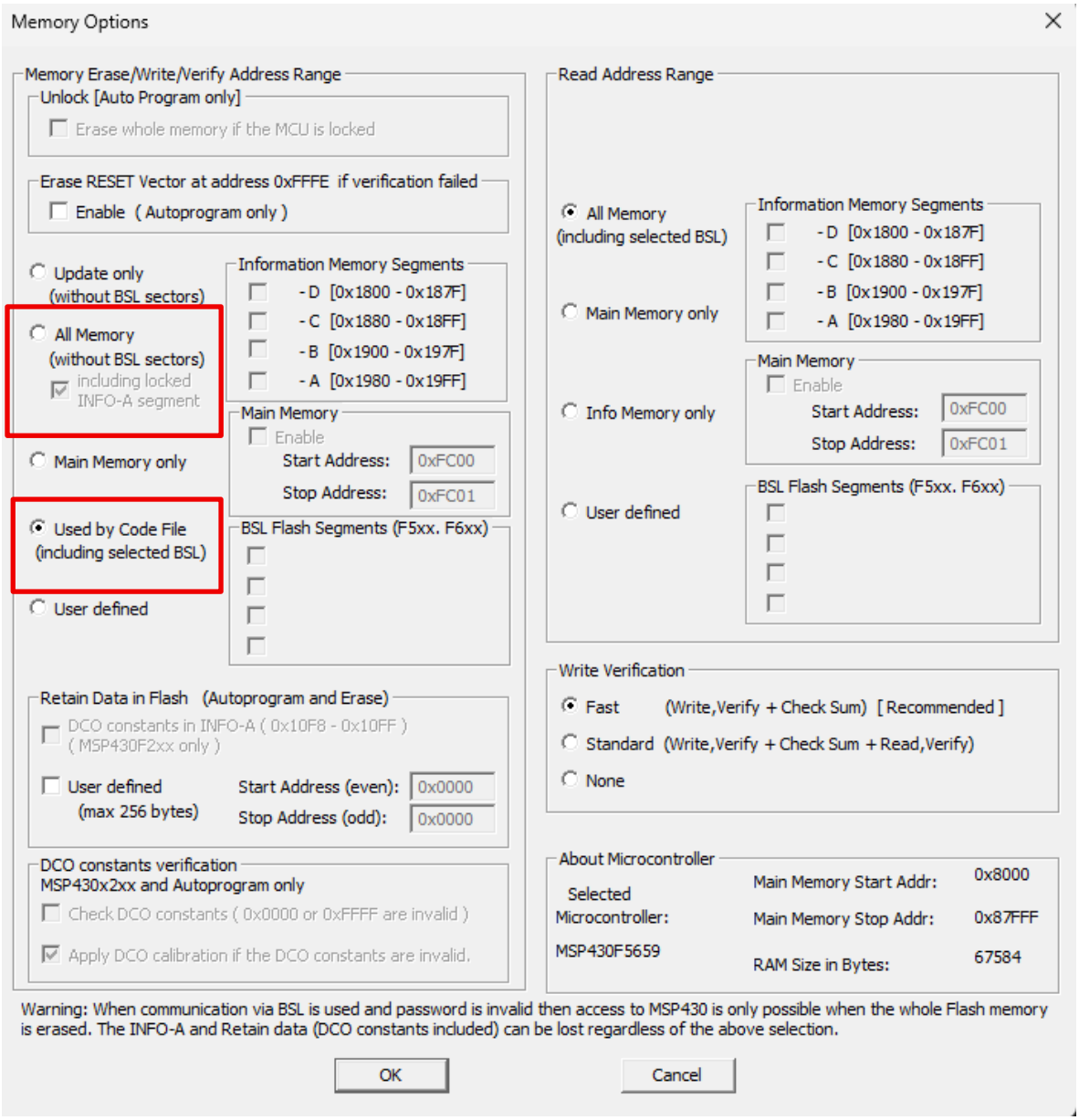
These settings can be modified at any time depending on your hardware and requirements.



3.2 Memory Options

Navigate to Setup then „Memory Options“ and select one of the following:

- **All Memory**
  - Erases the entire memory
  - Use this when programming the controller for the first time
- **Used by Code File**
  - Keeps configuration files and parameter values
  - Use this when updating or reprogramming an existing controller



3.3 JTAG Speed Settings

For certain joystick controllers, it is necessary to reduce the programming speed.

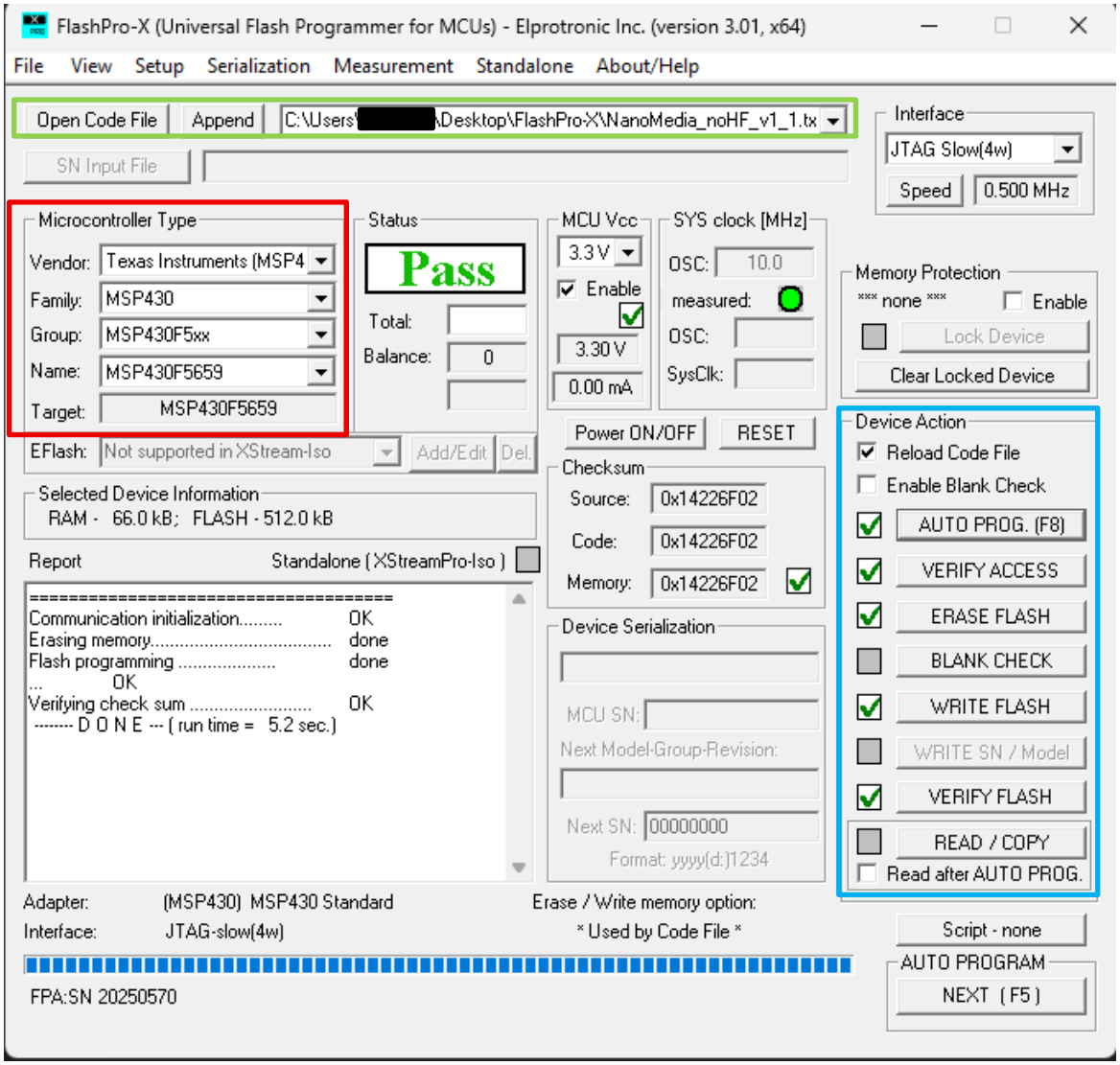
- Set the speed to slow (up to 400 kbit/s) in the JTAG options

This ensures stable communication during programming.

4. Programming a Firmware

Follow these steps to program firmware onto a transmitter:

1. Select the appropriate **microcontroller family** in the *"Microcontroller Type"* section
2. Choose the exact **microcontroller (µC)** from the dropdown menu
3. Load the firmware using **"Open Code File"**
4. Connect the programming adapter to the transmitter
5. Switch on the transmitter
    - Ensure the **emergency stop switch is unlocked**
6. **Disable** „Enable Blank Check"
7. Click the **"AUTO PROG"** button to start programming
8. Wait until the process is complete
    - A successful operation is indicated by **"PASS"** in the *Status* area
9. Disconnect the programming adapter
10. Switch off the transmitter



5. Troubleshooting & Notes / Best Practices

5.1 General Information

- FlashPro-X replaces the previously used **FlashPro-430** software.
  → Due to this change, some menus, functions, or interface elements may differ or have been completely replaced.
- The latest version of FlashPro-X can be downloaded here:
  https://www.elprotronic.com/pages/downloads-fp-gp-x

5.2 Memory Handling

- FlashPro-X provides the advantage that **configuration files and parameters are not overwritten** during programming
  → if "Used by Code File" is selected in the "Memory Options"
- This means:
  - No additional backup of parameters is required
  - Existing configurations remain intact during firmware updates
- In contrast to MSPFET:
  - **Only the firmware area is updated**
  - The full microcontroller memory is **not completely erased**

5.3 Critical Safety Notes

! Care must be taken to ensure that the microcontroller and software are compatible with each other, otherwise the hardware may be destroyed!

! Make sure that the "Blow JTAG Security Fuse" option is not active. A destroyed security fuse prevents further programming of the microcontroller!

! In contrast to MSPFET, the complete microcontroller is not deleted here, only the firmware part. Parameters are retained!