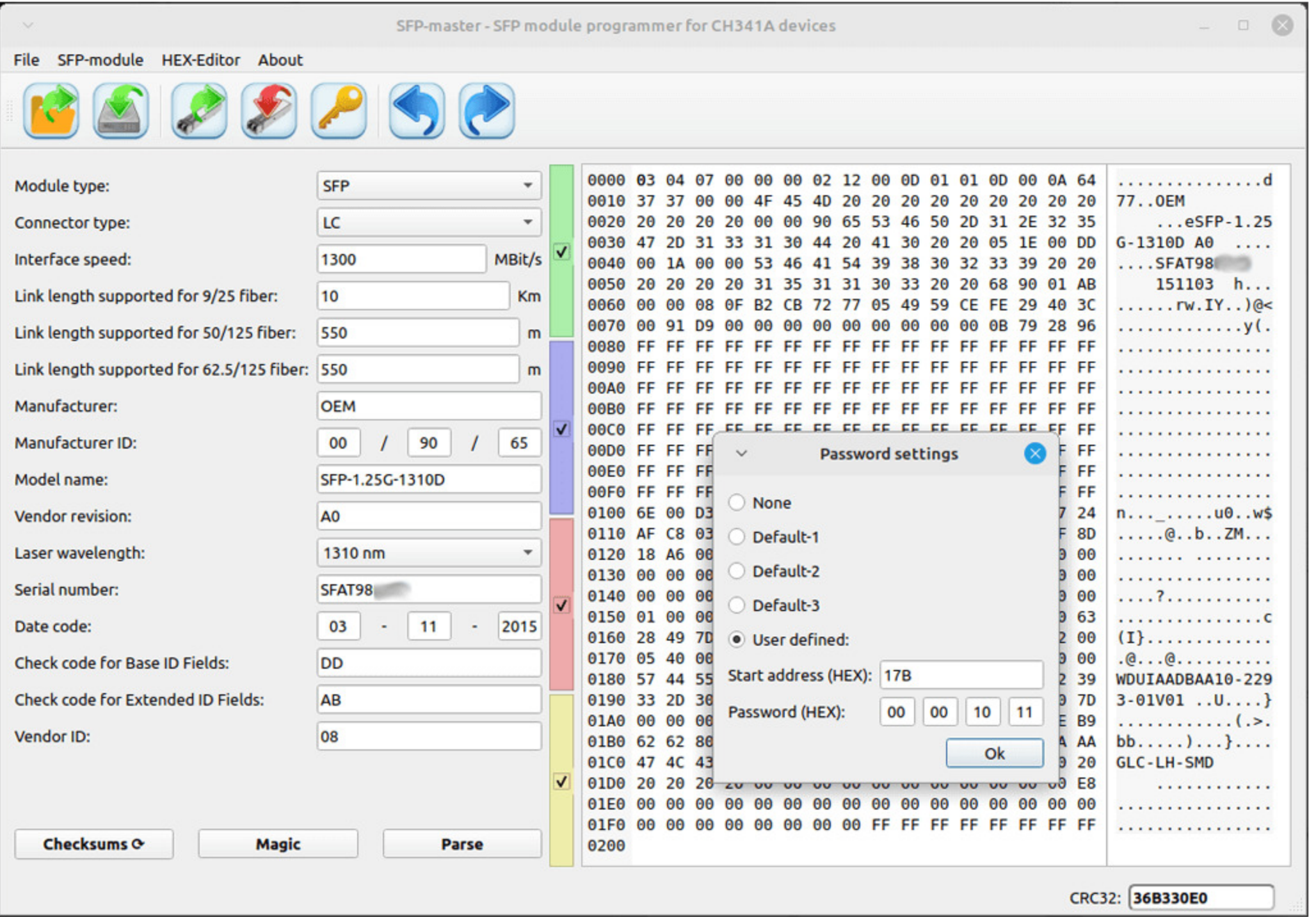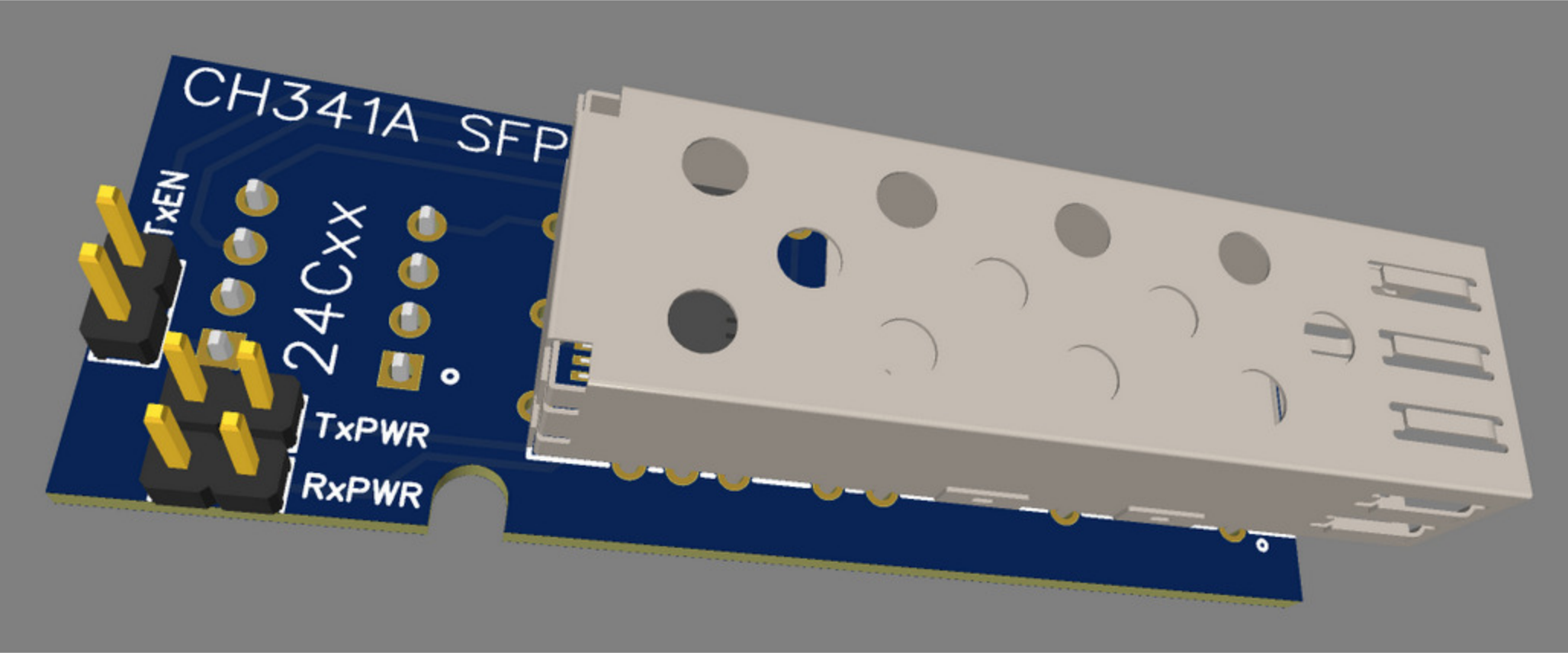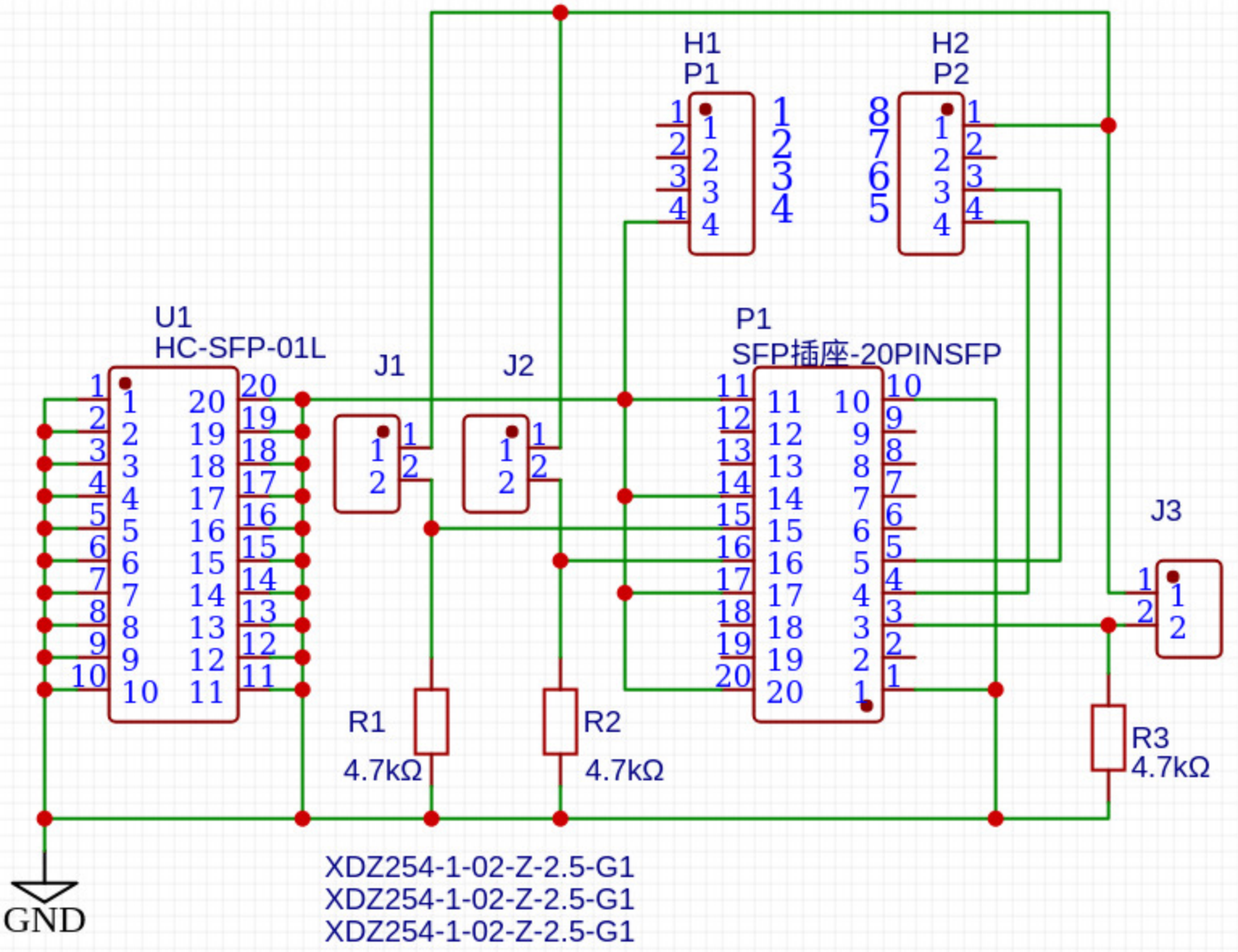# SFP-Master

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SFP-module data programmer for CH341a devices

SFP-Master is a free software programmer of optical `SFP modules` for CH341a devices. It can be used to read, write and save SFP module data to the computer. It requires an SFP to I2C adapter. This adapter is used to read and program SFP-module data. It must be inserted into the slot labelled `24xxx` of the CH341a programmer.

- See more details here.

Jumpers J1 to J3 (TxPWR, RxPWR, TxEN) must be installed initially. They are used to supply power to the SFP module. If you want to programm a module with hardware write protection, remove one of the jumpers and try to programm the module. If it fails, remove the other jumper and repeat the operation.

Connection

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To work with the programmer, connect the SFP module to the connector in the SFP adapter, connect the SFP adapter to the CH341A programmer device to the slot marked `24xx`. Connect the CH341A Programmer Unit to the USB connector of the computer and start the `SFP-Master` programm.

How to use

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The hexadecimal chip editor (right side of the screen) is used to display and modify buffer data.

It contains the following controls: `Hex-Editor / Undo` or ⬅ or `<Ctrl+Z>` undo and `Hex-Editor / Redo` or ➡ or `<Ctrl+Y>` redo.

- Pressing `SFP-module / Read from SFP` or 🔧 or `<Ctrl+R>` to read data from the SFP-module into the computer buffer.

- Pressing `SFP-module / Write to SFP` or 🔧 or `<Ctrl+W>` to write data from the computer buffer into the SFP-module.

- Press `SFP Module / Set Module Password` or 🔑 or `<Ctrl+P>` to bring up the password setting menu for modules that are password protected.
- The checkboxes are used to select the address area for read, write or save procedures. The yellow checkbox is used for addresses 0x180 - 0x1FF, red for 0x100 - 0x17F, blue for 0x080 - 0x0FF, and green for 0x000 - 0x07F (always checked).

The `Parse` button is used to re-parse hexadecimal data in the hex editor, if they have been changed manually.

The `Checksum` button is used to calculate two checksums (addresses 0x03F and 0x05F according to SFF-8472 Rev 12.3), if the module data have been changed manually in the hex editor.

Changing the data on the left side of the screen automatically causes the data to be changed in the hex editor.

- The `File / Save` or 💾 or `<Ctrl+S>` button is used to save the computer buffer to a file.

- The `File / Open` or 📂 or `<Ctrl+O>` button is used to save the file in the computer buffer.

- The `File / Exit` or ⬅ or `<Ctrl+X>` button is used to close the program.