



FPGA FLASH UTILITY



www.lotharek.pl

smd.lotharek.pl

DISCLAIMER:

- **User upgrades fpga at his own risk**
- **User shall have basic knowledge of driver installation and keep safety precautions**
- **Power failure in the middle of flashing is very risky - may damage FPGA**
- **Flashing interface will not be visible at HOST computer if SLAVE system is not power on!**
- **JTAG bridge is NOT powered from HOST**
- **Manual is for WINDOWS only.**
- **I do not use MAC/LINUX – please, refer to GOWINEMI www (p10)**

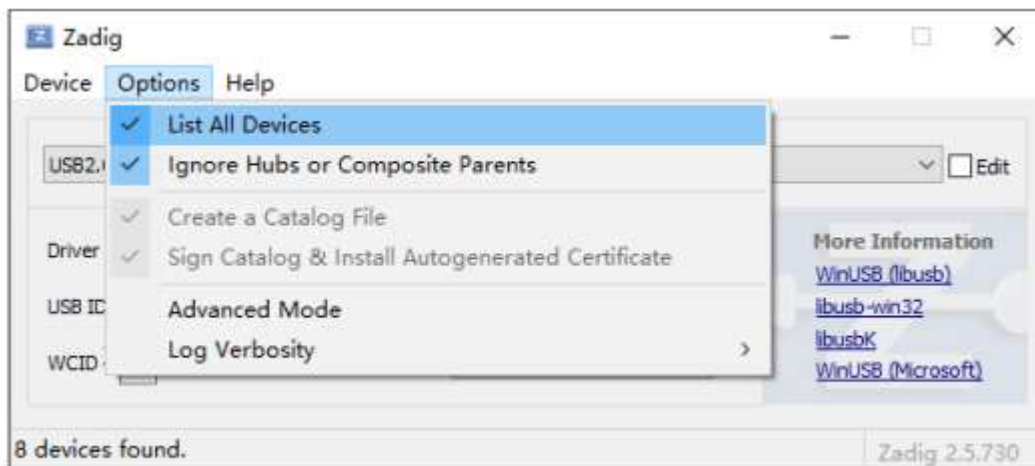
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HISTORY:

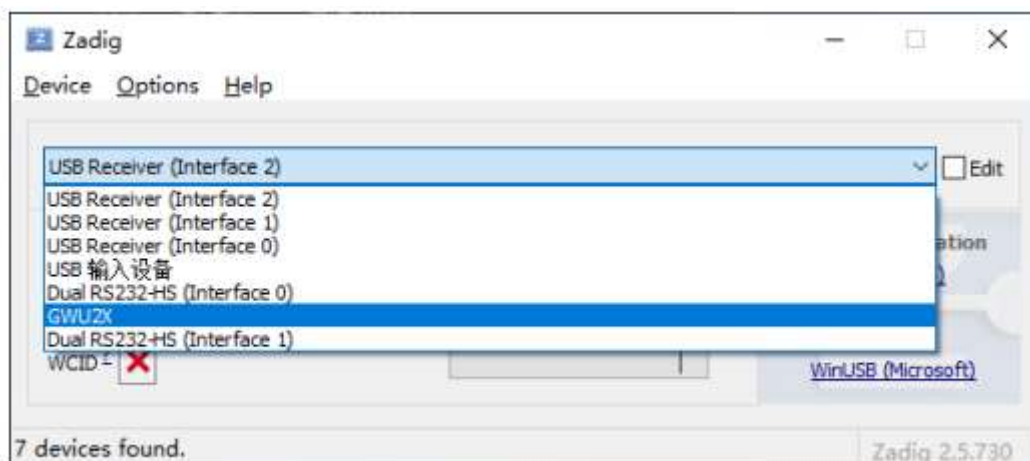
- 12.13.2025 - 1.0 – initial release

DRIVER INSTALL

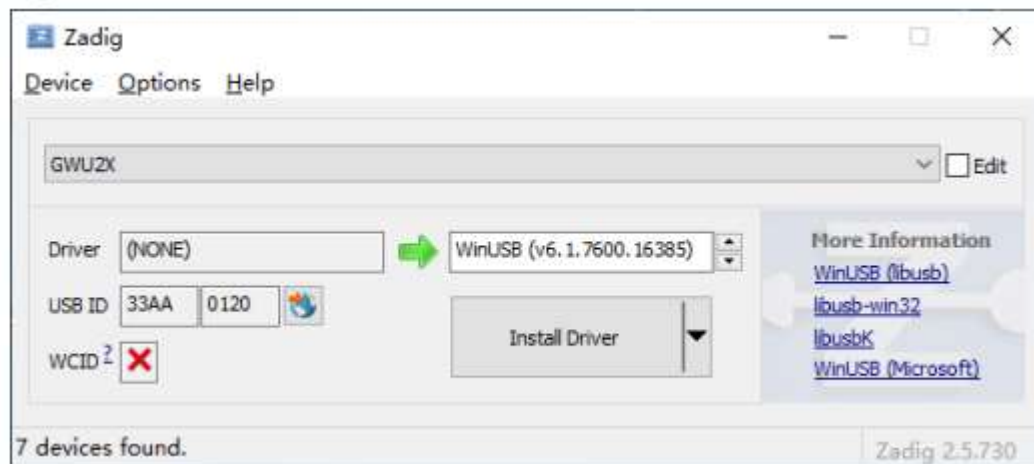
1. Download and save Zadig driver installer from: <https://zadig.akeo.ie/>
2. Connect with USB_C cable PC (**HOST**) and device we are about to flash (**SLAVE**)
3. Power on SLAVE system
4. Device manager shall detect **NEW DEVICE**
5. Double-click to open Zadig (administrator privileges required), click Options, and check the "List All Device" option.



6. All USB devices connected to the computer will be listed
7. Select the **GWU2X** device that requires driver installation



8. Select the driver to be installed, use libusb+WinUSB, and select WinUSB



9. Click “Install Driver”. The driver will be installed after a few moments.

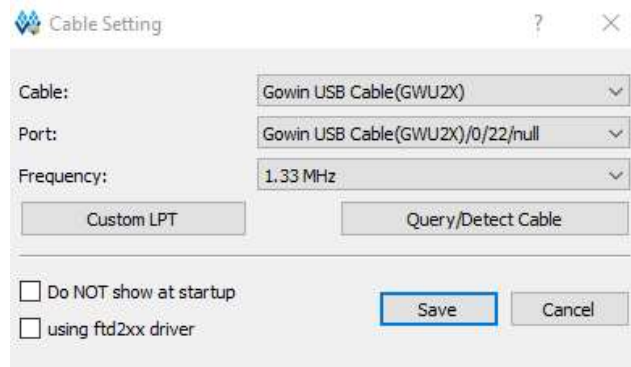
(long moments...)

10. Original instruction from GOWIN_SEMI is available here: (more info – linux,MAC)

https://www.gowinsemi.com/upload/database_doc/206/document/68b8a03ea0c3f.pdf

FLASHING:

1. Download FPFA flash software: (win10 64bit) from my Synology:
<https://lothar.dscloud.biz:5001/sharing/ChUIGQc3v> or from Gowin official site
(needs registration) <https://www.gowinsemi.com>
2. Run programmer
3. New window appears; press QUERY/DETECT CABLE:

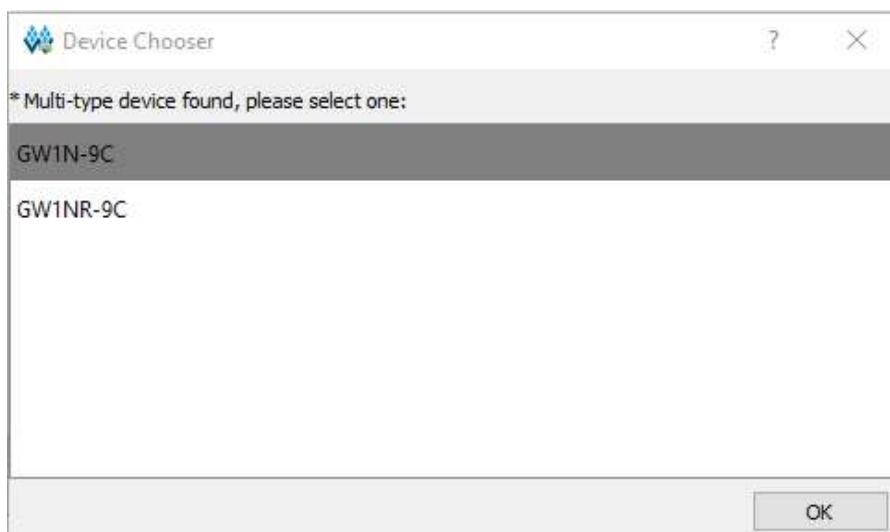


4. Press SAVE, then SCOPE ikon



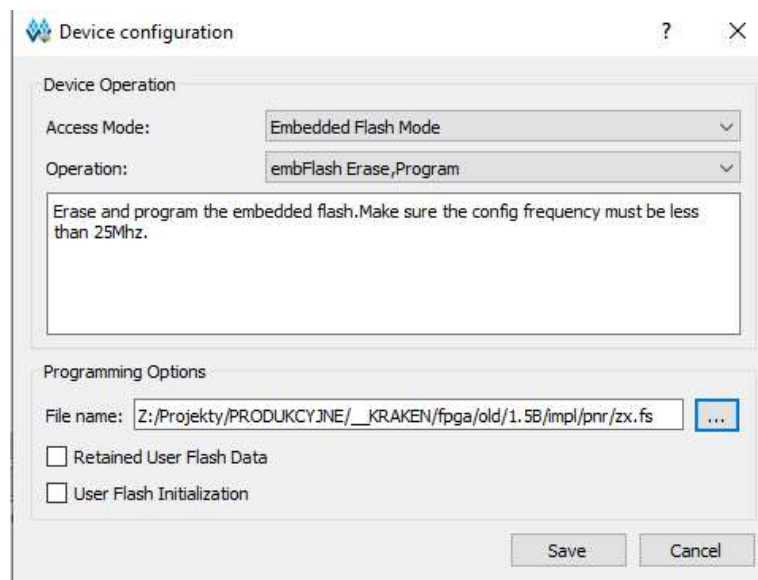
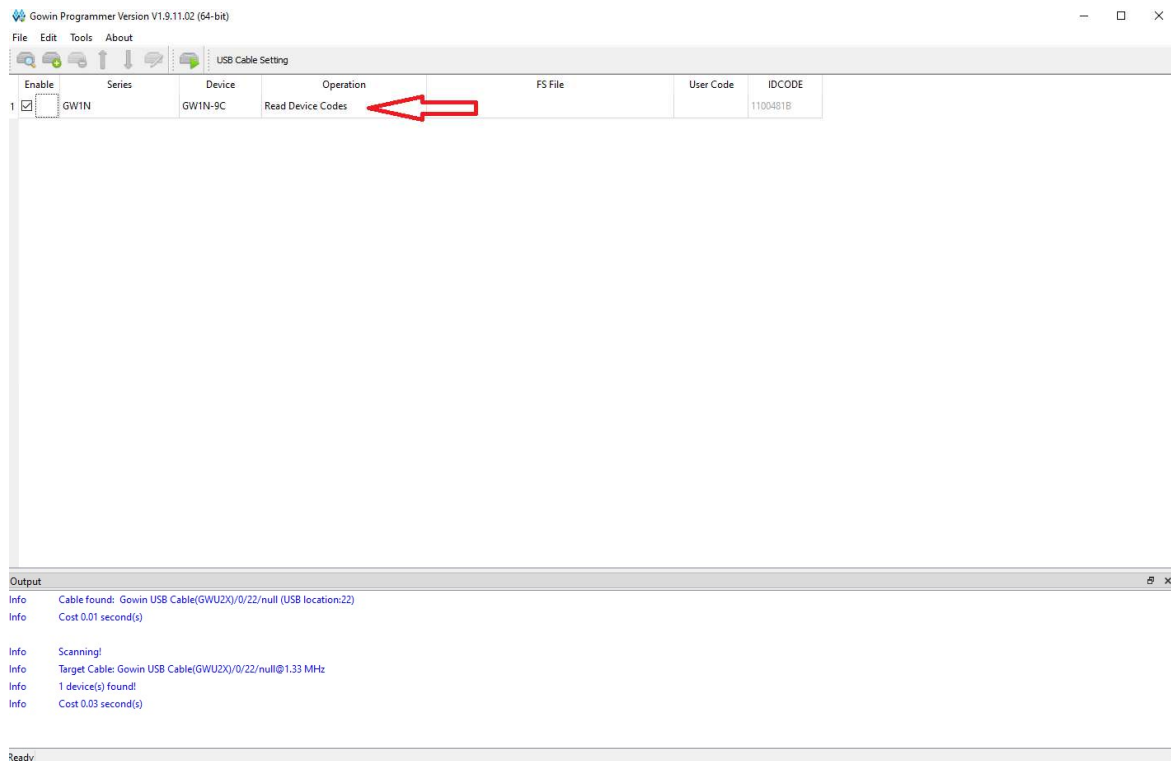
5. DEVICE shall be detected. As different FPGAs are used for each design, please refer to FILES TAB section of corresponding product. Below KRAKEN example:

KRAKEN – GW1N-9C.



6. Press OK

7. CLICK at **READ DEVICE CODE** tab and set up toolchain; load firmware You have downloaded from my www and SAVE settings



8. Press **PLAY** (green triangle) and wait few seconds. Done 😊

