How to download a new firmware with Octopus

Ver 1.00

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With the Octopus, you can download a new firmware in the eeprom or flash of FRL, FMM, GIII, SLINK CMC and TD (trigger distributor) cards.
For the GIII, the connector should be change to a 10 pins connector.(ask me)
FRL, FMM, SLINK CMC and TD use the firewire connector for the JTAG. **Do not connector this connector to a firewire port**.
By the way, all cards exepted the SLINK CMC can be reprogram via software.

The Octopus is able to download a new firmware up to 8 boards in parallel.
The result of the download is indicated on the LCD display. You can use any connector in parallel or individually.

The firmware to download is recorded on the Flash memory (FAT format).
The format of the firmware file is SVF (Serial Vector file). This format is generated by Altera and Xilinx tools.

With the green button (right), you can choose the file to download.
With blue buttons (middle), you shift the file name on right or left to see the name in complet.
With red button (left) you start the upload.

To avoid to download a wrong file see the convention below.

FRL:
The JTAG connector is on the back of the card.
-The bridge: same file for both versions, file name start with **p4_frl_bridge_fb00….**
-The main FPGA: There are three FRL versions, The first version used an EPC4 flash instead of an EPC8 for the two other versions. The version 0 (preserie) they are used only in the green barrack and in the lab. For version 1 and 2 see front panel below 'FRL' inscription, nothing means ver1 and a label 'V2' means ver2.

     ver0, file name start with **p4_frl_frlepc4_f020…..**
     ver1, file name start with **p4_frl_frl_f020…..**
     ver2, file name start with **p4_frl_frl_f021…..**

FMM:
The JTAG connector is on the back of the card.
There are two FPGA on the FMM. But the FMM has 3 modes:
-ATTS
The bridge: file name start with **p5_atts_bridge_fb00….**

<u>-FMM</u>:
The bridge: file name start with **p5_fmm_bridge_fb01….**
<u>-TESTER</u>:
Used only in the lab. Ask for information.

SLINK CMC:
The SLINK has one FPGA, two boards version exist. To know which version to download check the version indicated on the front panel closed to the JTAG connector.
-If no indication, it is a ver1, the file name start with **p2_cmc_cf01…….**
-If there is a 'V2' indication, the file name start with **p2_cmc_cf11……**

TD (trigger distributor):
The JTAG connector is on the back of the card.
The trigger distributor has one FPGA and two versions.
-One version is used in FRL crate he file name start with **p2_TD_FRL_ce02……**
-The other version is used in FMM crate he file name start with **p2_TD_FMM_ce01……**

GIII:
Multiple versions exist. Ask to know which version to download.