# Maj du firmware

mardi 5 septembre 2017 13:38

Works on ubuntu version 16.04

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/*********Quick mode********/
/**************************/

Install the tools for firmware update (cf. verbose mode) : openocd (work on v0.10.0, last stable) (and libhidapi-dev package)

sudo apt-get install libhidapi-dev
in the openocd directory:
./configure --enable-cmsis-dap
make
sudo make install

change the directory to openRTLS firmware folder and use the right command according the device you want to program.

/******* master update ***********/
sudo openocd -s v17082412/tools -f oc8-r-swd.cfg -c "init;halt;flash probe 0;" -c "flash erase_address 0x00400000 0x00080000;" -c"flash write_bank 0 v17082412/binaries/oc8r-master_eval.bin 0x00000000;" -c "clear_gpbr_boot_reg; reset run; shutdown"
(the path to the files must be changed according to your PC)

/******* anchor update ***********/
sudo openocd -s v17082412/tools -f oc8-r-swd.cfg -c "init;halt;flash probe 0;" -c "flash erase_address 0x00400000 0x00080000;" -c"flash write_bank 0 v17082412/binaries/oc8r-anchor_eval.bin 0x00000000;" -c "clear_gpbr_boot_reg; reset run; shutdown"

/******* tag update ***********/
sudo openocd -s v17082412\tools -f at91sam4s-swd.cfg -c "init;halt;sleep 250;flash probe 0;" -c "flash erase_address 0x00400000 0x00020000;" -c"flash write_bank 0 v17082412/binaries/tagkiwi-antboot-ota-fwup.bin 0x00000000;" -c "clear_gpbr_boot_reg; reset run; shutdown"

/**************************/
/*********Verbose mode******/
/**************************/
Download the tar version 0.10.0
Go on https://sourceforge.net/projects/openocd/files/openocd/0.10.0/
Untar source file

(or clone git)

The normal installation procedure is the following
./configure
make
(sudo make install)

As the programmer is cmsis-dap compliant, is better to use this line:
./configure --enable-cmsis-dap

--enable-cmsis-dap is found by using the ./configure --help documentation
By adding --enable-cmsis-dap, you really specify that you want this component installed

Doing that, you have a warning because you need the hidapi.
So using sudo apt-cache search hidapi
Listing give you that you have the libhidapi-dev available. So we have to install it. (usually if you want an api, you will find lib in front of your api. With -dev, it's better if you want to have to build the library.
->
sudo apt-get install libhidapi-dev

As we have the missing package, now
./configure --enable-cmsis-dap
#(--enable… could avoid because cmsis-dap is by default installed if you have all the requiered library.)

make

sudo make install
This last line is usefull if you want that openocd could visible by the system without mention the exact location of this software (when you call openocd binary, you have to specify the exact location of this tool.

Now you can use the following command line to upgrade the firmware
sudo openocd -s v17082412/tools -f oc8-r-swd.cfg -c "init;halt;flash probe 0;" -c "flash erase_address 0x00400000 0x00080000;" -c"flash write_bank 0 v17082412/binaries/oc8r-master_eval.bin 0x00000000;" -c "clear_gpbr_boot_reg; reset run; shutdown"

Don't forget the sudo in front of the openocd command (acces to a peripheral, and sometimes, it's need even if you don't have the explicite error message!)

For tag:
sudo openocd -s v17082412/tools -f at91sam4s-swd.cfg -c "init;halt;sleep 250;flash probe 0;" -c "flash erase_address 0x00400000 0x00020000;" -c"flash write_bank 0 v17082412/binaries/tagkiwi-antboot-ota-fwup.bin 0x00000000;" -c "clear_gpbr_boot_reg; reset run; shutdown"