



Build Guide

Building project

If you successfully followed “Project Setup.pdf” guide, you have already created all Build Targets:

-  all
-  clean

By executing “all” build target, code will be compiled, linked and stored to the build output directory specified in makefile. Build output looks like this:

```
> obj
> APPL.elf - [arm/le]
  APPL.hex
  APPL.map
```

At the top level there are tree files:

1. .elf file – final executable file which will be flashed to the device, contains everything necessary for flashing and debugging
2. .hex file – final executable file in rawer format than .elf file
3. .map file – contains information of all memory regions, variable locations etc.

At lower level in “obj” directory, there are files which are a result of compile and link operations and many processes between, like for example object files (.o).

By executing “all” build target, all .h, .c, .cpp and .s files which are located under SRC_DIRS (variable in makefile) are selected and used for build process.

At the moment there is no way to exclusively remove from build certain directories, however there is a tested method for excluding certain files from the build process:

```
117 INC_DIRS      := $(call find_includes_in_dir, $(SRC_DIRS))
118 HEADERS       := $(foreach dir, $(SRC_DIRS), $(shell find $(dir) -name "*.h"))
119 ASM_SRC        := $(foreach dir, $(SRC_DIRS), $(shell find $(dir) -name "*.s"))
120 C_SRC          := $(foreach dir, $(SRC_DIRS), $(shell find $(dir) -name "*.c -not -name "main.c"))
121 CXX_SRC         := $(foreach dir, $(SRC_DIRS), $(shell find $(dir) -name "*.cpp"))
122 OBJECTS        := $(addprefix $(OBJ_DIR)/, $(C_SRC:.c=.o) $(CXX_SRC:.cpp=.o) $(ASM_SRC:.s=.o))
123 LDSSCRIPTS     := $(addprefix -T, $(foreach dir, $(SRC_DIRS), $(shell find $(dir) -name "*.ld")))
```