

# Weekly Progress Report

## Capstone Team 8 RISC-V CleanFlight/BetaFlight Port

### Week #15

**Date: 04/13 - 04/20**

#### Authors:

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#### Summary:

##### Bliss check ins:

- **Monday**
  - **Done**
    - Writing documentation on using Minicom to debug the board serially.
    - Writing updated Addendum
  - **Doing**
    - Betaflight UART research
- **Tuesday**
  - **Done**
  - **Doing**
    - Kendryte UART example
    - Betaflight UART research
- **Wednesday**
  - **Done**
  - **Doing**
    - Kendryte UART example
    - Betaflight UART research
- **Thursday**
  - **Done**
    - Kendryte UART example
  - **Doing**
    - Betaflight UART research
    - How to manually send data through the UART for testing
- **Friday**

- **Done**
- **Doing**
  - Betaflight UART research
  - How to manually send data through the UART for testing

Eric check ins:

- **Monday**

- **Done**
  - Various changes to target.mk, MAIXBIT.mk, and source.mk seen below:
  - **\*Target.mk**
    - --Commented all source files out of TARGET\_SRC
  - **\*MAIXBIT.mk**
    - --Added all source files in bsp and driver folders to STDPERIPH\_SRC
    - --STDPERIPH\_SRC gets assigned to DEVICE\_STDPERIPH\_SRC
    - --Uncommented STARTUP\_SRC, assigned it crt.S
  - **\*source.mk**
    - --Uncommented COMMON\_DEVICE\_SRC (gets DEVICE\_STDPERIPH\_SRC from target.mk)
    - --Uncommented SRC += \$(COMMON\_SRC) at the bottom of source.m

- **Doing**

- **Tuesday**

- **Done**
  - Debugged mystery LED that was blinking on Maixbit board after changes to 'riscv\_blink\_led' branch
    - (Cause was a commented assembly flag)

- **Doing**

- **Wednesday**

- **Done**
  - Familiarization with Kendryte's UART lib and UART examples

- **Doing**
  - Investigating BF UART driver files
  - Two files in particular seem like a good place to start:
    - serial\_uart\_impl.h
    - serial\_uart\_stm32f10x.c (template for serial\_uart\_k210.c to be created)

- **Thursday**

- **Done**
  - Installed GTKterm software for serial interfacing.

- Installed Qemu and Risc-v extensions for hardware emulation until Maixbit board arrives.
- **Doing**
- **Friday**
  - **Done**
  - **Doing**
    - Working on other classwork.

#### Niko check ins:

- **Monday**
  - **Done** UART Example
  - **Doing**
- **Tuesday**
  - **Done** Cleanup SDK
  - **Doing**
- **Wednesday**
  - **Done** Setup Qemu
  - **Doing**
- **Thursday**
  - **Done** Gdb + qemu
  - **Doing**
- **Friday**
  - **Done** tested and pushed demo with BF in led branch
  - **Doing**

#### Ruben check ins:

- **Monday**
  - **Done**
    - Cleaned up code from Niko's led uart
    - Pushed my changes onto Eric's branch
  - **Doing**
- **Tuesday**
  - **Done**
  - **Doing**
- **Wednesday**
  - **Done**
  - **Doing**
- **Thursday**
  - **Done**
  - **Doing**
- **Friday**
  - **Done**
  - **Doing**

**Weekly Issues:**

1. Ex
2. Ex2

**Notes:**

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