

High Performance Embedded Systems
Assignment 1

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|--------------|---------|
| Group #: | 2 |
| Final Grade: | 110.00% |

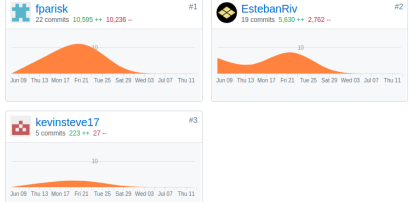
Part I: QEMU

| Item | Description | Total | Grade | Comments |
|------------------------|--|-------|--------|---|
| Full boot deliverables | - images/ - u-boot-qemu.log - linux-qemu.log - qemu_boot.log - video.txt | 15% | 15.00% | Great video! |
| Full boot execution | Correct execution of uboot, kernel and file system on QEMU based on video and local testing. | 25% | 25.00% | |
| Bonus | Add boot commands to u-boot environment | 10% | 10.00% | - If you look at your boot log, u-boot spends lot of time trying to boot from other locations before jumping to flash. Ideally, when you are sure of your boot sequence you can override the boot sequence by modifying the bootcmd variable directly. |

Part II: Yocto & NEON

| Item | Description | Total | Grade | Comments |
|--|--|-------|--------|--|
| Yocto meta-layer | Correct creation of the meta-tec layer and tec-image. Inherits from the console-image. Adds all new recipes into the tec-image and includes them in the final image. | 5% | 5.00% | |
| Yocto recipes | Correct creation of the following recipes: - rgb2yuv_c - rgb2yuv_intrinsics This includes correct build and installation of the binaries into the file system. Also it includes the presence of the required PDF documentation. | 10% | 10.00% | |
| Autotools usage | Correct usage of autotools for the compilation of the programs. | 10% | 10.00% | - Ideally, when using autotools, the best approach is to create a tarball for the source code and use it instead of listing each file in the SRC_URI variable. |
| Getopt implementation | Correct usage of getopt for the command line options | 5% | 5.00% | |
| Application implementation and functionality | The application meets with the requirements proposed and is totally functional providing the correct image conversion. | 25% | 25.00% | - Use only one style: camelCase or snake_case, never mix them. - Usually in C, main() is defined at the bottom of the file, this avoids writing the prototypes at the beginning of the file and make it easier to read. Normally this is a known convention in C that you will find from user applications to device drivers. - According to most common indentation standards, preprocessor directives such as #define should not be indented. - Avoid using pre-processor directives such as #ifdef as much as possible when they are easily replaced with normal conditionals. - As a general rule: if you commented out something in your code, then it is useless and you should delete it for release. - Changing the byte arrangement might cause the execution time measurements to be a little bit unfair, ideally, both algorithms should provide the same arrangement i.e. packed or planar. |

General

| Item | Description | Total | Grade | Comments |
|------------------------|--|-------|-------|---|
| Git control versioning | The delivery is correctly made using a git repository with the layout suggested and following the required work flow. User participation from all team members. Avoid using a unified commit or last hour commits (development must be continuous) | 5% | 5.00% | - hmm okay  |