

**High Performance Embedded Systems**  
**Assignment 1**

Group #:	
Final Grade:	93.00%
Additional comments	Git repo was checked out at commit 5e9b473 - Jun 26th 23:58:08

**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%	
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%	0.00%	

**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%	8.00%	- SRCREV is only required when your source code is located in an external service such as git, it is not necessary for local files. - When using autotools and in general most of the packages, it is easier and better to put the source code into a tarball instead of separate files. - The recipe for rgb2yuv-c did not finished correctly because of output.yuv file name problem.
Autotools usage	Correct usage of autotools for the compilation of the programs.	10%	10.00%	
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%	- Need to indent the code - it makes it easier to follow and it looks better. - It is not necessary to use that many flags in the getopt, if it can be reduced to a few lines of code or a function call it is better to do it in place, this makes the code more readable. - Do not mix camelCase with snake_case, it looks bad. - Variable names should usually be more descriptive to make the code easier to follow. - In general, any commented code should be deleted, it is useless and under version control it is unnecessary to leave it there. - For this kind of operations:  unsigned char RGB_buffer[charCounter];  It is way better to use dynamic memory allocation using malloc();

**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%	0.00%	- There are not signs of participation from other team members. - Git flow did not follow the required approach, you should always avoid to make changes directly to master.