**LCD DISPLAY CONTROL DEVELOPMENT**

[func\_name] @ ”dest” : function described in destination file

# HARDWARE

* Schematic ([sch](schematic-v01.pdf))
* Microcontroller: STM32F407VE ([datasheet](stm32f407_datasheet.pdf), [reference manual](stm32f4_ref_man.pdf)), ARM Cortex M4, 168MHz, 512KB Flash.
* LCD Module: ER-TFTM043-4 ([datasheet](ER-TFTM043-4_datasheet.pdf)), 4.3”, SSD1963 Controller mode 8080, touch panel.
* Interface: FSMC ([reference](TFT_LCD_interfacing_FSMC.pdf))

# FIRMWARE

IDE: Keil uVision

Location: STM32F4xx\_LCD\Project\FreeRTOS\http\_client\_server\_socket\MDK-ARM\Project.uvproj

**Developed:**

* LCD and touch configuration, touch calibration.

[STM324xG\_LCD\_Init] @ ”stm32f4\_discovery\_LCD\_SSD1963.c”

[TP\_Init] [readCalibrationValue] @ ”stm32f4\_discovery\_tsc2046.c”

* Portting Embedded GUI Library

|-- LCD HAL Lib: mapping to LCD functions in ”stm32f4\_discovery\_LCD\_SSD1963.c”

|-- GUI Lib

**Work to do:**

* Re-check mapped functions.
* Complete porting GUI library.
* Add suitable objects.