

Embedded RTOS Final Project

By

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1) Some Cube MX setup

5VGTx - B-L475E-IOT01A / ArduinoUART_ADC.ioc - Pinout & Configuration GENERATE

uration Clock Configuration Project Manager

Additional Softwares Pinout

FREERTOS Mode and Configuration

Configuration

Reset Configuration

☒ Tasks and Queues ☒ Timers and Semaphores ☒ Mutexes ☒ FreeRTOS Heap Usage

☒ Config parameters ☒ Include parameters ☒ User Constants

Timers

Timer Name	Callback	Type	Code Generation Op...	Parameter	Allocation	Control Block Name
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Add Delete

Binary Semaphores

Semaphore Name	Allocation	Control Block Name
binarySP_ADC_DataReady	Dynamic	NULL
binarySP_RX_DataReady	Dynamic	NULL
binarySP_TX_Completed	Dynamic	NULL
binarySP_ADC_DataToCom	Dynamic	NULL

Add Delete

Counting Semaphores

Semaphore Name	Count	Allocation	Control Block Name
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2)

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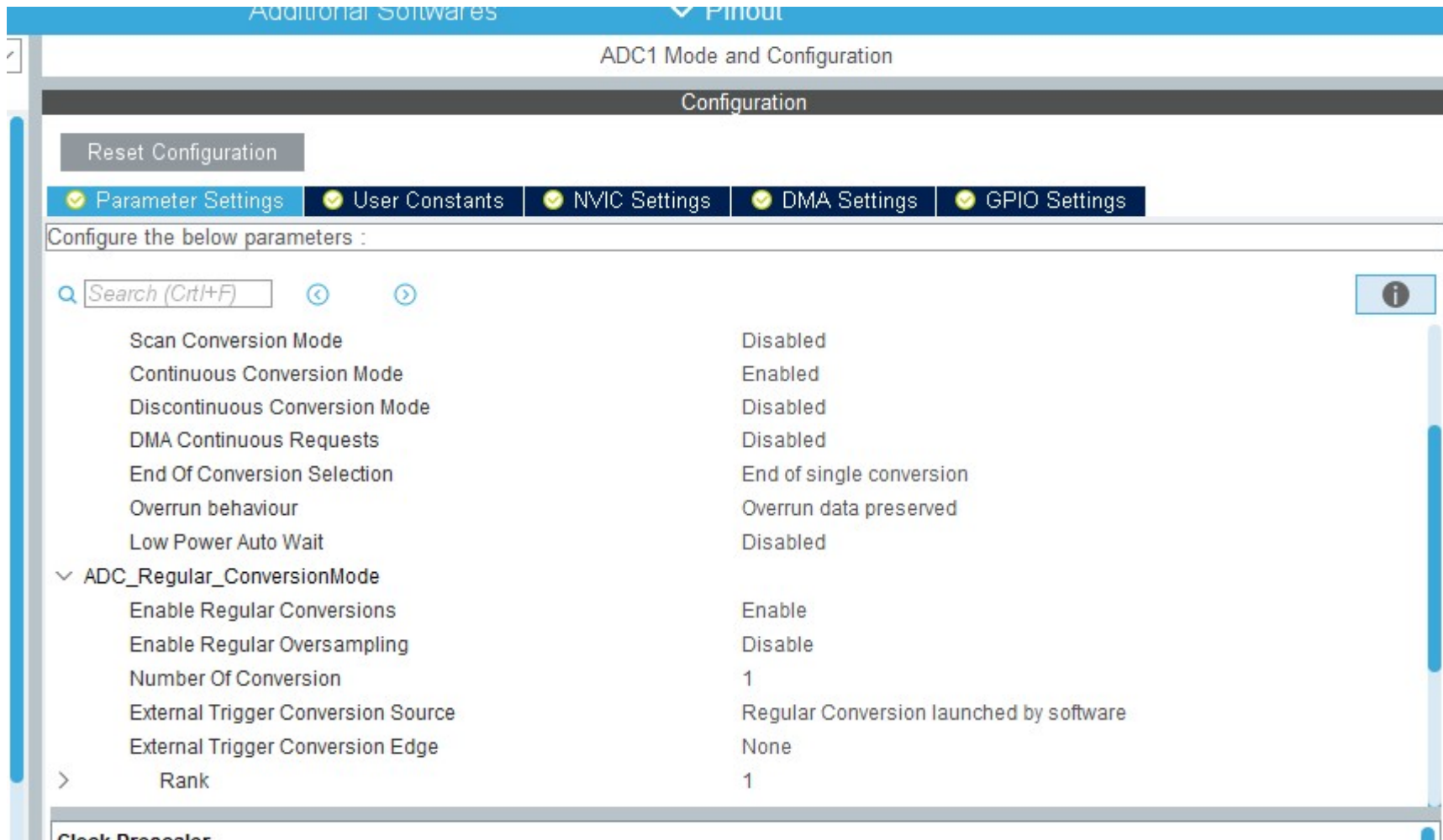
Tasks

Task Name	Priority	Stack Size (Wor...	Entry Function	Code Generatio...	Parameter	Allocation	Buffer Name	Control Block N...
comProcessor	osPriorityIdle	128	startComProce...	Default	NULL	Dynamic	NULL	NULL
checkADC	osPriorityNormal	128	startCheckADC	Default	NULL	Dynamic	NULL	NULL

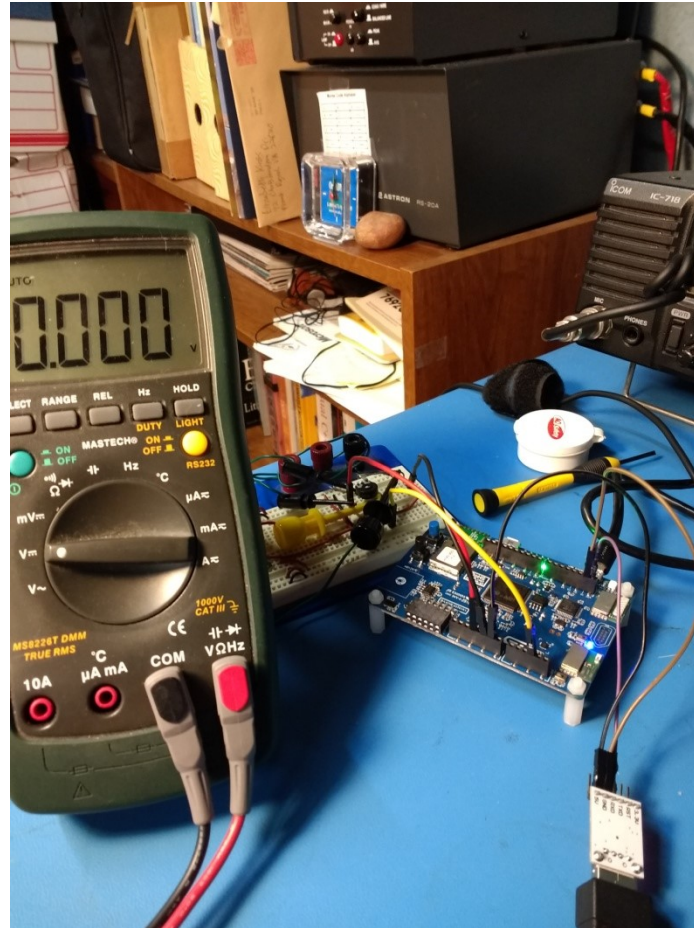
Add

Delete

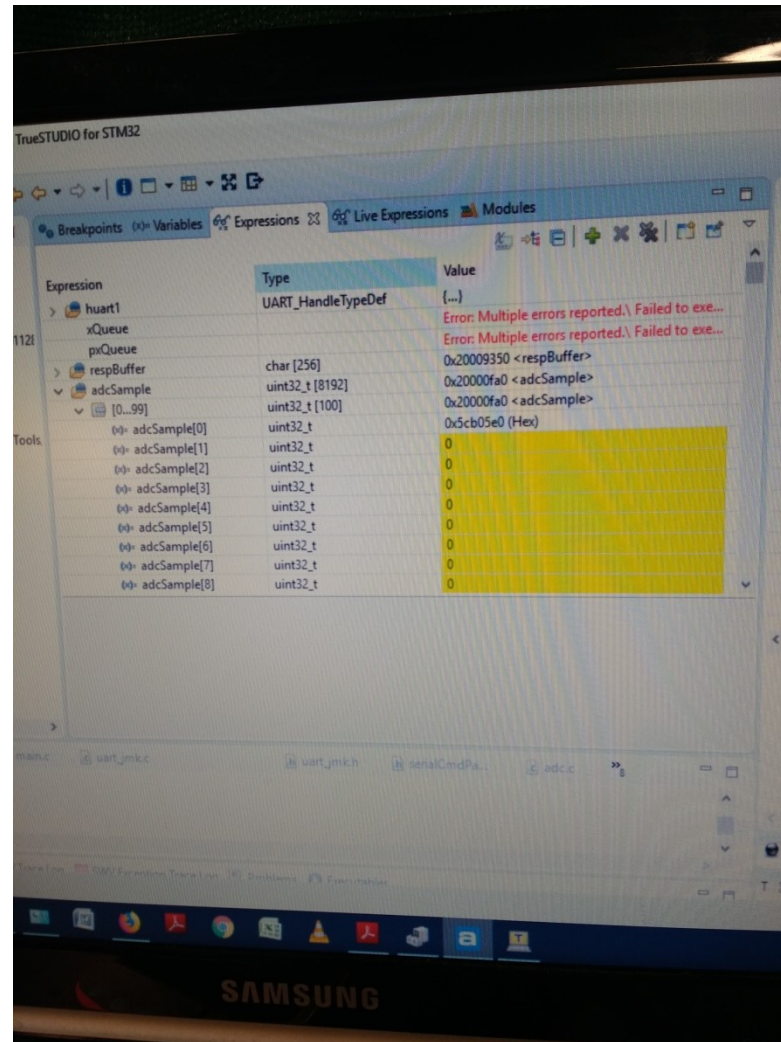
3)



4)



5)



5)

```
C[1]
Command requested: C[1]
OK, trigger the ADC !
ADC value read: 4007
One of 16384 samples in 0 Milliseconds.
C[1]
```