

0

Your Email address

1

Memory Type	Size (bytes)
Code	19796
RO Data	4812
RW Data	80
ZI Data	1568
Total RO Size (Code + RO Data)	24608
Total RW Size (RW Data + ZI Data)	6832
Total ROM Size (Code + RO Data + RW Data)	24688

2

Memory Type	Size (bytes)
Code	19796
RO Data	4812
RW Data	80
ZI Data	1568
Total RO Size (Code + RO Data)	24608
Total RW Size (RW Data + ZI Data)	6832
Total ROM Size (Code + RO Data + RW Data)	24688

3

Maximum Stack Usage	304 bytes + Unknown
Call Chain for Maximum Stack Depth	Thread_Read_Accelerometer ⇒ convert_xyz_to_roll_pitch ⇒ atan2 ⇒ atan ⇒ __kernel_poly ⇒ __aeabi_dmul ⇒ __double_epilogue ⇒ __aeabi_llsr
Main function stack depth and comparison	112

4

5

Handler	Max. Depth of Stack
SVC_Handler	Unknown Stack Size
PendSV_Handler	56 + Unknown Stack Size
SysTick_Handler	80 + Unknown Stack Size
osRtxPendSV_Handler	56
osRtxTick_Handler	80
UART0_IRQHandler	24

6

Thread	Max. Depth of Stack
Thread_Read_Accelerometer	304
Thread_Read_TS	132
Thread_Update_Screen	220
osRtxIdleThread	0
osRtxTimerThread	72

7

Memory Type	Object Name	Size (bytes)
Code	st7789.o	1210 / 1228

check 1228

check 1228

	RO Data	lucida_12x19.o	3831	
	RW Data	rtx_lib.o	4892	
	ZI Data	startup_mkl25z4.o	1024	
8	Memory Type	Library Member Name	Size (bytes)	
	Code	printf.o	2306	
	RO Data	atan.o	152	
	RW Data	rtx_lkernel.o	164	
	ZI Data	os_systick.o	1	
9	Type	Object(Section)	Symbol Name	Size (bytes)
	Thumb Code	*(.text*)	svcRtxThreadNew	484
	Data	*(.bss*)	os_mem	4096
	Data	*(.constdata*)	aTeven	48
	Data	*(.data*)	pp,p1,p2	8
	Data	*(.rodata*)	N/A	N/A
10	Type	Object(Section)	Symbol Name	Size (bytes)
	Thumb Code	*(.text*)	LCD_Draw_Line	510
	Data	*(.bss*)	TxQ,RxQ	268
	Data	*(.constdata*)	Lucida_Console12x1	3831
	Data	*(.data*)	osRtxInfo	164
	Data	*(.rodata*)	osRtxConfig	112
11		Largest Function	2nd	3rd
	Name	_printf_core	LCD_Draw_Line	svcRtxThreadNew
	.text Size (bytes)	1760	510	484
	Percentage of Total ROM size (as listed in map file summary)	7.12896954	2.065780946	1.960466623
12, 13	Thread	Estimated Stack Size Bound from Static Analysis	Initial Stack Size Measurement from Watermarking	Updated Stack Size Measurement from Watermarking
	Thread_Read_Accelerometer	304	392	400
	Thread_Read_TS	132	96	152
	Thread_Update_Screen	220	232	240
	osRtxIdleThread	0	64	64
	osRtxTimerThread	72	96	96
14	No, Thread_Read_Accelerometer, Thread_Read_TS, Thread_Update_Screen, osRtxIdleThread, osRtxTimerThread			
15	6648			
16	Thread Name	Function with Largest Stack Frame	Size of that Frame	
	Thread_Read_Accelerometer	__aeabi_dmul	72	
	Thread_Read_TS	LCD_Draw_Line	80	
	Thread_Update_Screen	LCD_Draw_Line	80	

17	osRtxIdleThread	N/A	N/A			
	osRtxTimer Thread	osRtxPostProcess	32			
18		Largest Item	2 nd	3 rd	4 th	5 th
	Name	os_mem	Lucida_Console12x19	TxQ	RxQ	os_timer_thread_stack
	RAM Size	4096	3831	268	268	256
19		Largest Function	2 nd	3 rd	4 th	5 th
	Name	_printf_core	LCD_Draw_Line	svcRtxThreadNew	atan	svcRtxMessageQueueNew
	ROM Size	1760	510	510	472	428
20.a		Largest Library Function	2 nd	3 rd	4 th	5 th
	Name	_printf_core	svcRtxThreadNew	atan	svcRtxMessageQueueNew	atan2
	ROM Size	1760	484	472	428	372
20.b	convert atan2 to atan2f calls					
		748				

21

	Largest Function	2 nd	3 rd	4 th	5 th
Name	LCD_Draw_Line	LCD_TS_Read	LCD_Fill_Rectangle	Draw_Paddle	Update_Ball
ROM Size	510	394	262	260	238
	Largest .constdata	2 nd	3 rd	4 th	5 th
Name	Lucida_Console12x1	Init_Seq_ST778	aTeven	aTodd	os_idle_thread_attr, os_timer_thread_attr, Read_TS_att, Read_Accelerometer_att, Update_Screen_att
ROM Size	3831	142	48	40	36

22