1. Description

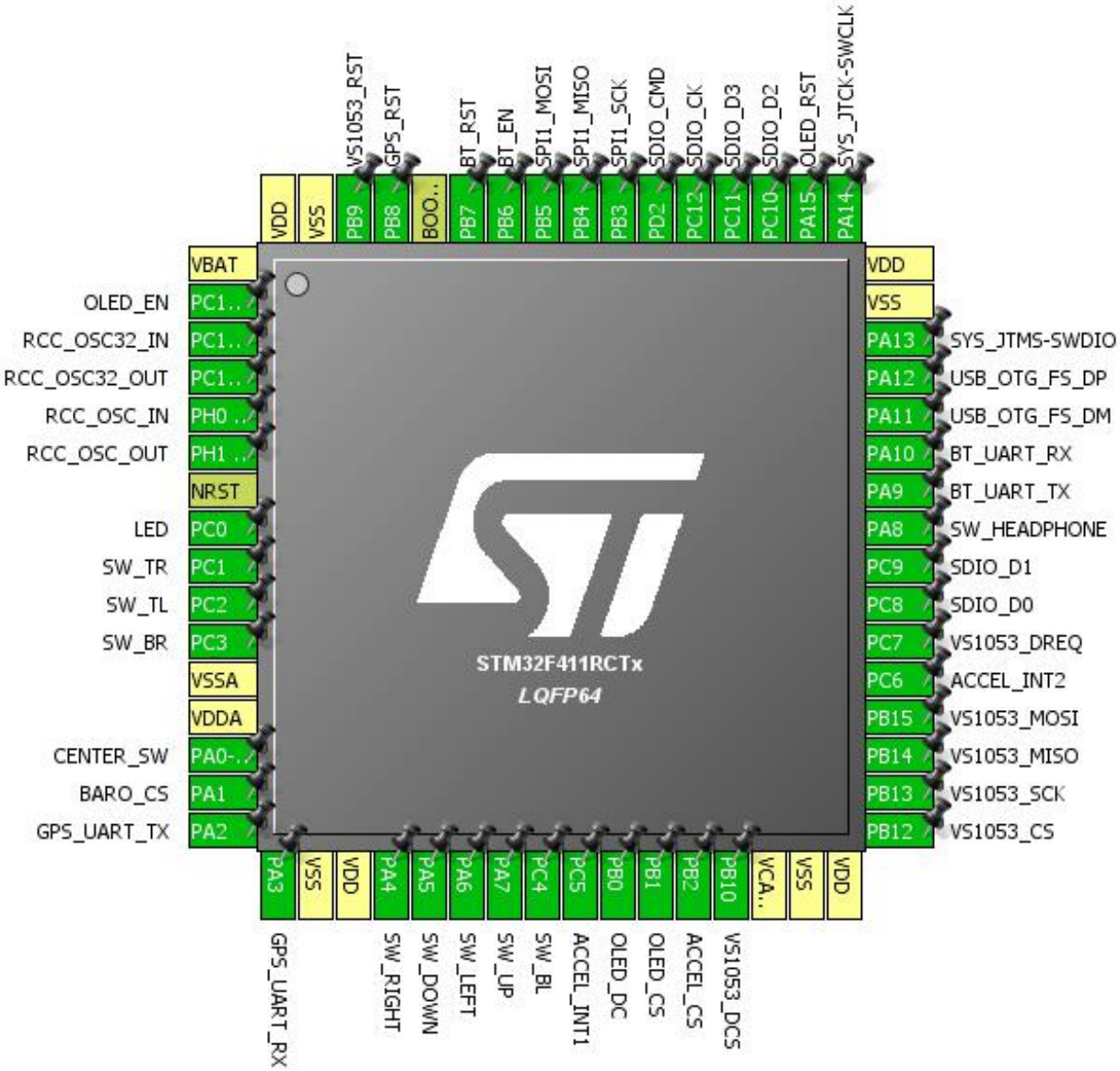
1.1. Project

Project Name	RunTracker
Board Name	RunTracker
Generated with:	STM32CubeMX 4.16.0
Date	09/02/2016

1.2. MCU

MCU Series	STM32F4
MCU Line	STM32F411
MCU name	STM32F411RCTx
MCU Package	LQFP64
MCU Pin number	64

2. Pinout Configuration



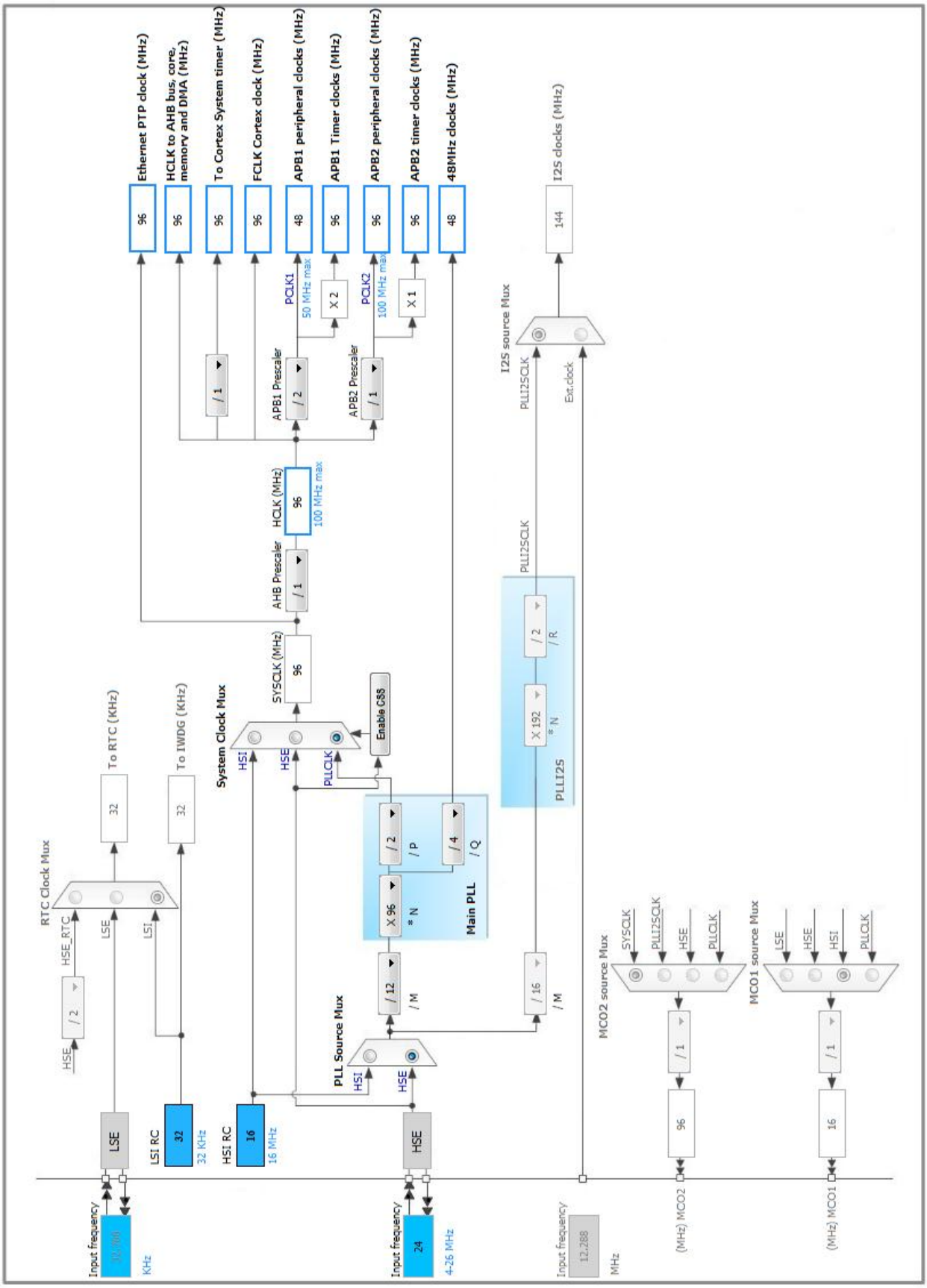
3. Pins Configuration

Pin Number LQFP64	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
1	VBAT	Power		
2	PC13-ANTI_TAMP *	I/O	GPIO_Output	OLED_EN
3	PC14-OSC32_IN	I/O	RCC_OSC32_IN	
4	PC15-OSC32_OUT	I/O	RCC_OSC32_OUT	
5	PH0 - OSC_IN	I/O	RCC_OSC_IN	
6	PH1 - OSC_OUT	I/O	RCC_OSC_OUT	
7	NRST	Reset		
8	PC0 *	I/O	GPIO_Output	LED
9	PC1	I/O	GPIO_EXTI1	SW_TR
10	PC2	I/O	GPIO_EXTI2	SW_TL
11	PC3	I/O	GPIO_EXTI3	SW_BR
12	VSSA	Power		
13	VDDA	Power		
14	PA0-WKUP	I/O	GPIO_EXTI0	CENTER_SW
15	PA1 *	I/O	GPIO_Output	BARO_CS
16	PA2	I/O	USART2_TX	GPS_UART_TX
17	PA3	I/O	USART2_RX	GPS_UART_RX
18	VSS	Power		
19	VDD	Power		
20	PA4 *	I/O	GPIO_Input	SW_RIGHT
21	PA5 *	I/O	GPIO_Input	SW_DOWN
22	PA6 *	I/O	GPIO_Input	SW_LEFT
23	PA7 *	I/O	GPIO_Input	SW_UP
24	PC4	I/O	GPIO_EXTI4	SW_BL
25	PC5	I/O	GPIO_EXTI5	ACCEL_INT1
26	PB0 *	I/O	GPIO_Output	OLED_DC
27	PB1 *	I/O	GPIO_Output	OLED_CS
28	PB2 *	I/O	GPIO_Output	ACCEL_CS
29	PB10 *	I/O	GPIO_Output	VS1053_DCS
30	VCAP1	Power		
31	VSS	Power		
32	VDD	Power		
33	PB12 *	I/O	GPIO_Output	VS1053_CS
34	PB13	I/O	SPI2_SCK	VS1053_SCK
35	PB14	I/O	SPI2_MISO	VS1053_MISO
36	PB15	I/O	SPI2_MOSI	VS1053_MOSI

Pin Number LQFP64	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
37	PC6	I/O	GPIO_EXTI6	ACCEL_INT2
38	PC7	I/O	GPIO_EXTI7	VS1053_DREQ
39	PC8	I/O	SDIO_D0	
40	PC9	I/O	SDIO_D1	
41	PA8	I/O	GPIO_EXTI8	SW_HEADPHONE
42	PA9	I/O	USART1_TX	BT_UART_TX
43	PA10	I/O	USART1_RX	BT_UART_RX
44	PA11	I/O	USB_OTG_FS_DM	
45	PA12	I/O	USB_OTG_FS_DP	
46	PA13	I/O	SYS_JTMS-SWDIO	
47	VSS	Power		
48	VDD	Power		
49	PA14	I/O	SYS_JTCK-SWCLK	
50	PA15 *	I/O	GPIO_Output	OLED_RST
51	PC10	I/O	SDIO_D2	
52	PC11	I/O	SDIO_D3	
53	PC12	I/O	SDIO_CK	
54	PD2	I/O	SDIO_CMD	
55	PB3	I/O	SPI1_SCK	
56	PB4	I/O	SPI1_MISO	
57	PB5	I/O	SPI1_MOSI	
58	PB6 *	I/O	GPIO_Output	BT_EN
59	PB7 *	I/O	GPIO_Output	BT_RST
60	BOOT0	Boot		
61	PB8 *	I/O	GPIO_Output	GPS_RST
62	PB9 *	I/O	GPIO_Output	VS1053_RST
63	VSS	Power		
64	VDD	Power		

* The pin is affected with an I/O function

4. Clock Tree Configuration



5. IPs and Middleware Configuration

5.1. RCC

High Speed Clock (HSE): Crystal/Ceramic Resonator
Low Speed Clock (LSE) : Crystal/Ceramic Resonator

5.1.1. Parameter Settings:

System Parameters:

VDD voltage (V)	3.3
Instruction Cache	Enabled
Prefetch Buffer	Enabled
Data Cache	Enabled
Flash Latency(WS)	3 WS (4 CPU cycle)

RCC Parameters:

HSI Calibration Value	16
TIM Prescaler Selection	Disabled
HSE Startup Timout Value (ms)	100
LSE Startup Timout Value (ms)	5000

Power Parameters:

Power Regulatror Voltage Scale	Power Regulator Voltage Scale 1

5.2. SDIO

Mode: SD 4 bits Wide bus

5.2.1. Parameter Settings:

SDIO parameters:

SDIOCLK clock divide factor	0

5.3. SPI1

Mode: Full-Duplex Master

5.3.1. Parameter Settings:

Basic Parameters:

Frame Format	Motorola
Data Size	8 Bits
First Bit	MSB First

Clock Parameters:

Prescaler (for Baud Rate)	2
Baud Rate	**48.0 MBits/s ***
Clock Polarity (CPOL)	Low
Clock Phase (CPHA)	1 Edge

Advanced Parameters:

CRC Calculation	Disabled
NSS Signal Type	Software

5.4. SPI2

Mode: Full-Duplex Master

5.4.1. Parameter Settings:

Basic Parameters:

Frame Format	Motorola
Data Size	8 Bits
First Bit	MSB First

Clock Parameters:

Prescaler (for Baud Rate)	2
Baud Rate	**24.0 MBits/s ***
Clock Polarity (CPOL)	Low
Clock Phase (CPHA)	1 Edge

Advanced Parameters:

CRC Calculation	Disabled
NSS Signal Type	Software

5.5. SYS

Debug: Serial Wire

Timebase Source: TIM5

5.6. TIM2

Channel1: Output Compare No Output

5.6.1. Parameter Settings:

Counter Settings:

Prescaler (PSC - 16 bits value)	0
Counter Mode	Up
Counter Period (AutoReload Register - 32 bits value)	0
Internal Clock Division (CKD)	No Division

Trigger Output (TRGO) Parameters:

Master/Slave Mode	Disable (no sync between this TIM (Master) and its Slaves
Trigger Event Selection	Reset (UG bit from TIMx_EGR)

Output Compare No Output Channel 1:

Mode	Frozen (used for Timing base)
Pulse (32 bits value)	0
CH Polarity	High

5.7. USART1

Mode: Asynchronous

5.7.1. Parameter Settings:

Basic Parameters:

Baud Rate	115200
Word Length	8 Bits (including Parity)
Parity	None
Stop Bits	1

Advanced Parameters:

Data Direction	Receive and Transmit
Over Sampling	16 Samples

5.8. USART2

Mode: Asynchronous

5.8.1. Parameter Settings:

Basic Parameters:

Baud Rate	**9600 ***
Word Length	8 Bits (including Parity)
Parity	None
Stop Bits	1

Advanced Parameters:

Data Direction	Receive and Transmit
Over Sampling	16 Samples

5.9. USB_OTG_FS

Mode: Device_Only

5.9.1. Parameter Settings:

Speed	Device Full Speed 12MBit/s
Endpoint 0 Max Packet size	64 Bytes
Enable internal IP DMA	Disabled
Low power	Disabled
Link Power Management	Disabled
VBUS sensing	Enabled
Signal start of frame	Disabled

5.10. WWDG

mode: Activated

5.10.1. Parameter Settings:

Watchdog Clocking:

WWDG counter clock prescaler	1
WWDG window value	64
WWDG free-running downcounter value	64

Watchdog Interrupt:

EWI Mode	Disable

5.11. FATFS

mode: SD Card

5.11.1. Set Defines:

Version:

FATFS version	R0.11

Function Parameters:

FS_TINY (Tiny mode)	Disabled
FS_READONLY (Read-only mode)	Disabled
FS_MINIMIZE (Minimization level)	Disabled
USE_STRFUNC (String functions)	Enabled with LF -> CRLF conversion
USE_FIND (Find functions)	Disabled
USE_MKFS (Make filesystem function)	Enabled
USE_FORWARD (Forward function)	Disabled
USE_LABEL (Volume label functions)	Disabled
USE_FASTSEEK (Fast seek function)	Enabled

Locale and Namespace Parameters:

CODE_PAGE (Code page on target)	Latin 1 (Windows)
USE_LFN (Use Long Filename)	**Enabled with dynamic working buffer on the HEAP ***
MAX_LFN (Max Long Filename)	255
LFN_UNICODE (Enable Unicode)	ANSI/OEM
STRF_ENCODE (Character encoding)	UTF-8
FS_RPATH (Relative Path)	Disabled

Physical Drive Parameters:

VOLUMES (Logical drives)	1
MAX_SS (Maximum Sector Size)	512
MIN_SS (Minimum Sector Size)	512
MULTI_PARTITION (Volume partitions feature)	Disabled
USE_TRIM (Erase feature)	Disabled
FS_NOFSINFO (Force full FAT scan)	0

System Parameters:

FS_NORTC (Timestamp feature)	Dynamic timestamp
NORTC_YEAR (Year for timestamp)	2015
NORTC_MON (Month for timestamp)	6
NORTC_MDAY (Day for timestamp)	4
WORD_ACCESS (Platform dependent access option)	Byte access

FS_REENTRANT (Re-Entrancy)	Enabled
FS_TIMEOUT (Timeout ticks)	1000
SYNC_t (O/S sync object)	osSemaphoreId
FS_LOCK (Number of files opened simultaneously)	**5 ***

5.11.2. IPs instances:

SDIO/SDMMC:

SDIO instance	SDIO

5.12. FREERTOS

mode: Enabled

5.12.1. Config parameters:

Versions:

CMSIS-RTOS version	1.02
FreeRTOS version	8.2.3

Kernel settings:

USE_PREEMPTION	Enabled
CPU_CLOCK_HZ	SystemCoreClock
TICK_RATE_HZ	1000
MAX_PRIORITIES	7
MINIMAL_STACK_SIZE	128
MAX_TASK_NAME_LEN	16
USE_16_BIT_TICKS	Disabled
IDLE_SHOULD_YIELD	Enabled
USE_MUTEXES	Enabled
USE_RECURSIVE_MUTEXES	Disabled
USE_COUNTING_SEMAPHORES	Disabled
QUEUE_REGISTRY_SIZE	8
USE_APPLICATION_TASK_TAG	Disabled
TOTAL_HEAP_SIZE	15360
Memory Management scheme	heap_4
USE_ALTERNATIVE_API	Disabled
ENABLE_BACKWARD_COMPATIBILITY	Enabled
USE_PORT_OPTIMISED_TASK_SELECTION	Disabled
USE_TICKLESS_IDLE	Disabled
USE_TASK_NOTIFICATIONS	Enabled

Hook function related definitions:

USE_IDLE_HOOK	Disabled
USE_TICK_HOOK	Disabled
USE_MALLOC_FAILED_HOOK	Disabled
CHECK_FOR_STACK_OVERFLOW	Disabled

Run time and task stats gathering related definitions:

USE_TRACE_FACILITY	Enabled
GENERATE_RUN_TIME_STATS	Disabled

Co-routine related definitions:

USE_CO_ROUTINES	Disabled
MAX_CO_ROUTINE_PRIORITIES	2

Software timer definitions:

USE_TIMERS	Disabled
TIMER_TASK_PRIORITY	2
TIMER_QUEUE_LENGTH	10
TIMER_TASK_STACK_DEPTH	256

Interrupt nesting behaviour configuration:

LIBRARY_LOWEST_INTERRUPT_PRIORITY	15
LIBRARY_MAX_SYSCALL_INTERRUPT_PRIORITY	5

5.12.2. Include parameters:

Include definitions:

vTaskPrioritySet	Enabled
uxTaskPriorityGet	Enabled
vTaskDelete	Enabled
vTaskCleanUpResources	Disabled
vTaskSuspend	Enabled
vTaskDelayUntil	Disabled
vTaskDelay	Enabled
xTaskGetSchedulerState	Enabled
xTaskResumeFromISR	Enabled
xQueueGetMutexHolder	Disabled
xSemaphoreGetMutexHolder	Disabled
pcTaskGetTaskName	Disabled
uxTaskGetStackHighWaterMark	Disabled
xTaskGetCurrentTaskHandle	Disabled
eTaskGetState	Disabled
xEventGroupSetBitFromISR	Disabled
xTimerPendFunctionCall	Disabled

5.13. USB_DEVICE

Class For FS IP: Mass Storage Class

5.13.1. Parameter Settings:

Basic Parameters:

USBD_MAX_NUM_INTERFACES (Maximum number of supported interfaces)	1
USBD_MAX_NUM_CONFIGURATION (Maximum number of supported configuration)	1
USBD_MAX_STR_DESC_SIZ (Maximum size for the string descriptors)	512
USBD_SUPPORT_USER_STRING (Enable user string descriptor)	Disabled
USBD_SELF_POWERED (Enabled self power)	Enabled
USBD_DEBUG_LEVEL (USBD Debug Level)	0: No debug message

Class Parameters:

MSC_MEDIA_PACKET (Media I/O buffer Size)	512

5.13.2. Device Descriptor:

Device Descriptor:

VID (Vendor IDentifier)	1155
LANGID_STRING (Language Identifier)	English(United States)
MANUFACTURER_STRING (Manufacturer Identifier)	STMicroelectronics

Device Descriptor FS:

PID (Product IDentifier)	22314
PRODUCT_STRING (Product Identifier)	STM32 Mass Storage
SERIALNUMBER_STRING (Serial number)	00000000001A
CONFIGURATION_STRING (Configuration Identifier)	MSC Config
INTERFACE_STRING (Interface Identifier)	MSC Interface

*** User modified value**

6. System Configuration

6.1. GPIO configuration

IP	Pin	Signal	GPIO mode	GPIO pull/up pull down	Max Speed	User Label
RCC	PC14-OSC32_IN	RCC_OSC32_IN	n/a	n/a	n/a	
	PC15-OSC32_OUT	RCC_OSC32_OUT	n/a	n/a	n/a	
	PH0 - OSC_IN	RCC_OSC_IN	n/a	n/a	n/a	
	PH1 - OSC_OUT	RCC_OSC_OUT	n/a	n/a	n/a	
SDIO	PC8	SDIO_D0	Alternate Function Push Pull	No pull-up and no pull-down	Very High	
	PC9	SDIO_D1	Alternate Function Push Pull	No pull-up and no pull-down	Very High	
	PC10	SDIO_D2	Alternate Function Push Pull	No pull-up and no pull-down	Very High	
	PC11	SDIO_D3	Alternate Function Push Pull	No pull-up and no pull-down	Very High	
	PC12	SDIO_CK	Alternate Function Push Pull	No pull-up and no pull-down	Very High	
	PD2	SDIO_CMD	Alternate Function Push Pull	No pull-up and no pull-down	Very High	
SPI1	PB3	SPI1_SCK	Alternate Function Push Pull	No pull-up and no pull-down	**Very High ***	
	PB4	SPI1_MISO	Alternate Function Push Pull	No pull-up and no pull-down	**Very High ***	
	PB5	SPI1_MOSI	Alternate Function Push Pull	No pull-up and no pull-down	**Very High ***	
SPI2	PB13	SPI2_SCK	Alternate Function Push Pull	No pull-up and no pull-down	**Very High ***	VS1053_SCK
	PB14	SPI2_MISO	Alternate Function Push Pull	No pull-up and no pull-down	**Very High ***	VS1053_MISO
	PB15	SPI2_MOSI	Alternate Function Push Pull	No pull-up and no pull-down	**Very High ***	VS1053_MOSI
SYS	PA13	SYS_JTMS-SWDIO	n/a	n/a	n/a	
	PA14	SYS_JTCK-SWCLK	n/a	n/a	n/a	
USART1	PA9	USART1_TX	Alternate Function Push Pull	Pull-up	**Very High ***	BT_UART_TX
	PA10	USART1_RX	Alternate Function Push Pull	Pull-up	**Very High**	BT_UART_RX

IP	Pin	Signal	GPIO mode	GPIO pull/up pull down	Max Speed	User Label
					*	
USART2	PA2	USART2_TX	Alternate Function Push Pull	Pull-up	**Very High ***	GPS_UART_TX
	PA3	USART2_RX	Alternate Function Push Pull	Pull-up	**Very High ***	GPS_UART_RX
USB_OTG_FS	PA11	USB_OTG_FS_DM	Alternate Function Push Pull	No pull-up and no pull-down	**Very High ***	
	PA12	USB_OTG_FS_DP	Alternate Function Push Pull	No pull-up and no pull-down	**Very High ***	
GPIO	PC13-ANTI_TAMP	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	OLED_EN
	PC0	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	LED
	PC1	GPIO_EXTI1	**External Interrupt Mode with Falling edge trigger detection**	No pull-up and no pull-down	n/a	SW_TR
	PC2	GPIO_EXTI2	**External Interrupt Mode with Falling edge trigger detection**	No pull-up and no pull-down	n/a	SW_TL
	PC3	GPIO_EXTI3	**External Interrupt Mode with Falling edge trigger detection**	No pull-up and no pull-down	n/a	SW_BR
	PA0-WKUP	GPIO_EXTI0	**External Interrupt Mode with Rising/Falling edge**	No pull-up and no pull-down	n/a	CENTER_SW
	PA1	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	BARO_CS
	PA4	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	SW_RIGHT
	PA5	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	SW_DOWN
	PA6	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	SW_LEFT
	PA7	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	SW_UP
	PC4	GPIO_EXTI4	**External Interrupt Mode with Falling edge trigger detection**	No pull-up and no pull-down	n/a	SW_BL
	PC5	GPIO_EXTI5	External Interrupt Mode with Rising edge trigger detection	**Pull-down ***	n/a	ACCEL_INT1
	PB0	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	OLED_DC
	PB1	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	OLED_CS
	PB2	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	ACCEL_CS
	PB10	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	VS1053_DCS
	PB12	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	VS1053_CS

IP	Pin	Signal	GPIO mode	GPIO pull/up pull down	Max Speed	User Label
	PC6	GPIO_EXTI6	External Interrupt Mode with Rising edge trigger detection	**Pull-down ***	n/a	ACCEL_INT2
	PC7	GPIO_EXTI7	External Interrupt Mode with Rising edge trigger detection	**Pull-down ***	n/a	VS1053_DREQ
	PA8	GPIO_EXTI8	**External Interrupt Mode with Rising/Falling edge**	No pull-up and no pull-down	n/a	SW_HEADPHONE
	PA15	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	OLED_RST
	PB6	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	BT_EN
	PB7	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	BT_RST
	PB8	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	GPS_RST
	PB9	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	VS1053_RST

6.2. DMA configuration

DMA request	Stream	Direction	Priority
SPI2_TX	DMA1_Stream4	Memory To Peripheral	Low
SPI1_TX	DMA2_Stream2	Memory To Peripheral	Low
SDIO_RX	DMA2_Stream3	Peripheral To Memory	Low
SDIO_TX	DMA2_Stream6	Memory To Peripheral	Low
SPI1_RX	DMA2_Stream0	Peripheral To Memory	Low
USART2_RX	DMA1_Stream5	Peripheral To Memory	Low

SPI2_TX: DMA1_Stream4 DMA request Settings:

Mode:	Normal
Use fifo:	**Enable ***
FIFO Threshold:	Full
Peripheral Increment:	Disable
Memory Increment:	**Enable ***
Peripheral Data Width:	Byte
Memory Data Width:	Byte
Peripheral Burst Size:	Single
Memory Burst Size:	Single

SPI1_TX: DMA2_Stream2 DMA request Settings:

Mode:	Normal
Use fifo:	Disable
Peripheral Increment:	Disable
Memory Increment:	**Enable ***
Peripheral Data Width:	Byte
Memory Data Width:	Byte

SDIO_RX: DMA2_Stream3 DMA request Settings:

Mode:	**Peripheral Flow Control ***
Use fifo:	**Enable ***
FIFO Threshold:	Full
Peripheral Increment:	Disable
Memory Increment:	**Enable ***
Peripheral Data Width:	**Word ***

Memory Data Width:	Word
Peripheral Burst Size:	**4 Increment ***
Memory Burst Size:	4 Increment

SDIO_TX: DMA2_Stream6 DMA request Settings:

Mode:	**Peripheral Flow Control ***
Use fifo:	**Enable ***
FIFO Threshold:	Full
Peripheral Increment:	Disable
Memory Increment:	**Enable ***
Peripheral Data Width:	**Word ***
Memory Data Width:	Word
Peripheral Burst Size:	**4 Increment ***
Memory Burst Size:	4 Increment

SPI1_RX: DMA2_Stream0 DMA request Settings:

Mode:	Normal
Use fifo:	Disable
Peripheral Increment:	Disable
Memory Increment:	**Enable ***
Peripheral Data Width:	Byte
Memory Data Width:	Byte

USART2_RX: DMA1_Stream5 DMA request Settings:

Mode:	**Circular ***
Use fifo:	Disable
Peripheral Increment:	Disable
Memory Increment:	**Enable ***
Peripheral Data Width:	Byte
Memory Data Width:	Byte

6.3. NVIC configuration

Interrupt Table	Enable	Preenmption Priority	SubPriority
Non maskable interrupt	true	0	0
Hard fault interrupt	true	0	0
Memory management fault	true	0	0
Pre-fetch fault, memory access fault	true	0	0
Undefined instruction or illegal state	true	0	0
System service call via SWI instruction	true	0	0
Debug monitor	true	0	0
Pendable request for system service	true	15	0
System tick timer	true	15	0
EXTI line0 interrupt	true	5	0
EXTI line1 interrupt	true	5	0
EXTI line2 interrupt	true	5	0
EXTI line3 interrupt	true	5	0
EXTI line4 interrupt	true	5	0
DMA1 stream4 global interrupt	true	5	0
DMA1 stream5 global interrupt	true	5	0
EXTI line[9:5] interrupts	true	5	0
TIM2 global interrupt	true	5	0
SPI1 global interrupt	true	5	0
SPI2 global interrupt	true	5	0
USART1 global interrupt	true	5	0
USART2 global interrupt	true	5	0
SDIO global interrupt	true	5	0
TIM5 global interrupt	true	0	0
DMA2 stream0 global interrupt	true	5	0
DMA2 stream2 global interrupt	true	5	0
DMA2 stream3 global interrupt	true	5	0
USB On The Go FS global interrupt	true	0	0
DMA2 stream6 global interrupt	true	5	0
Window watchdog interrupt	unused		
PVD interrupt through EXTI line 16	unused		
Flash global interrupt	unused		
RCC global interrupt	unused		
FPU global interrupt	unused		

*** User modified value**

7. Power Consumption Calculator report

7.1. Microcontroller Selection

Series	STM32F4
Line	STM32F411
MCU	STM32F411RCTx
Datasheet	026289_Rev4

7.2. Parameter Selection

Temperature	25
Vdd	null

8. Software Project

8.1. Project Settings

Name	Value
Project Name	RunTracker
Project Folder	C:\Users\gla1309\Desktop\RunTracker\RunTracker\software\RunTracker
Toolchain / IDE	SW4STM32
Firmware Package Name and Version	STM32Cube FW_F4 V1.13.0

8.2. Code Generation Settings

Name	Value
STM32Cube Firmware Library Package	Copy only the necessary library files
Generate peripheral initialization as a pair of '.c/.h' files	Yes
Backup previously generated files when re-generating	No
Delete previously generated files when not re-generated	Yes
Set all free pins as analog (to optimize the power consumption)	No