

1. Description

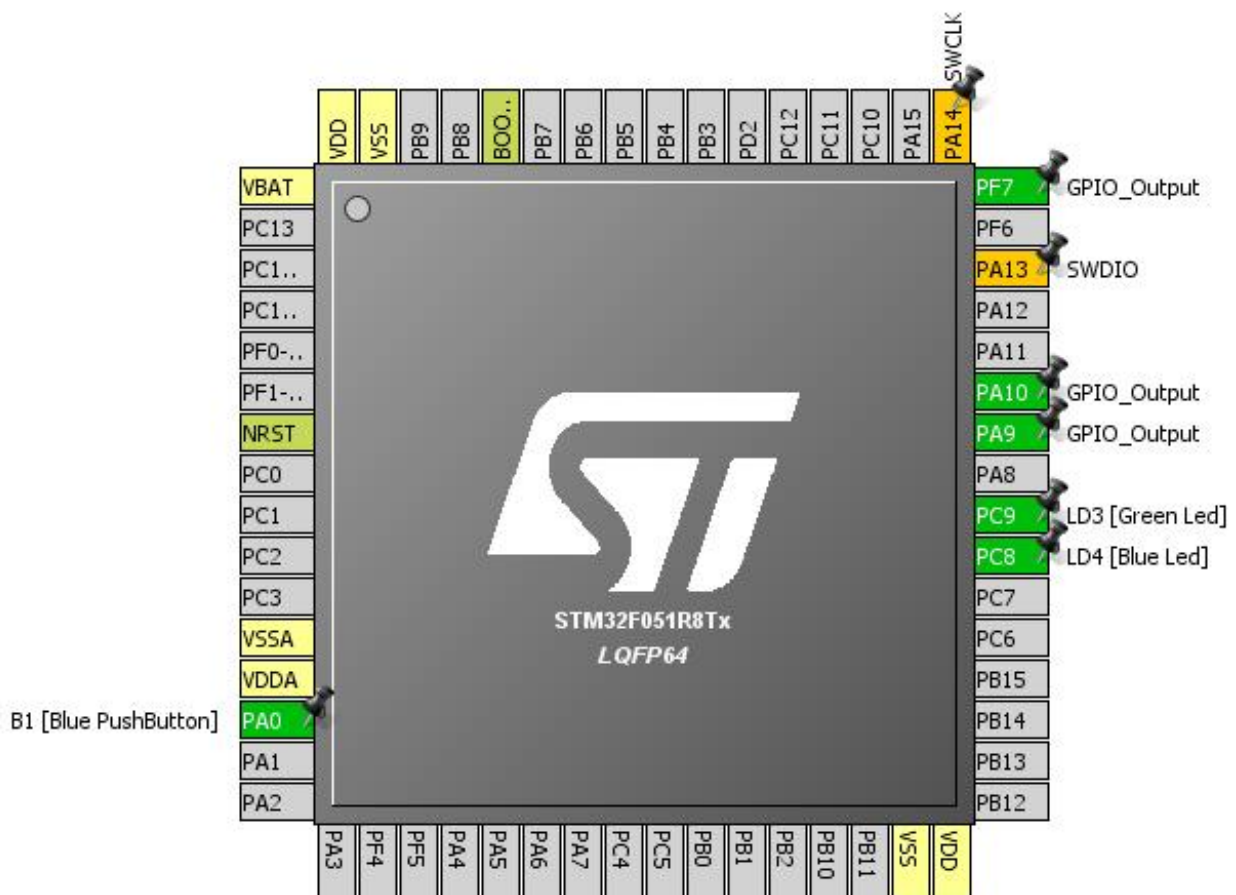
1.1. Project

Project Name	GenOut
Board Name	STM32F0DISCOVERY
Generated with:	STM32CubeMX 4.16.0
Date	10/15/2016

1.2. MCU

MCU Series	STM32F0
MCU Line	STM32F0x1
MCU name	STM32F051R8Tx
MCU Package	LQFP64
MCU Pin number	64

2. Pinout Configuration



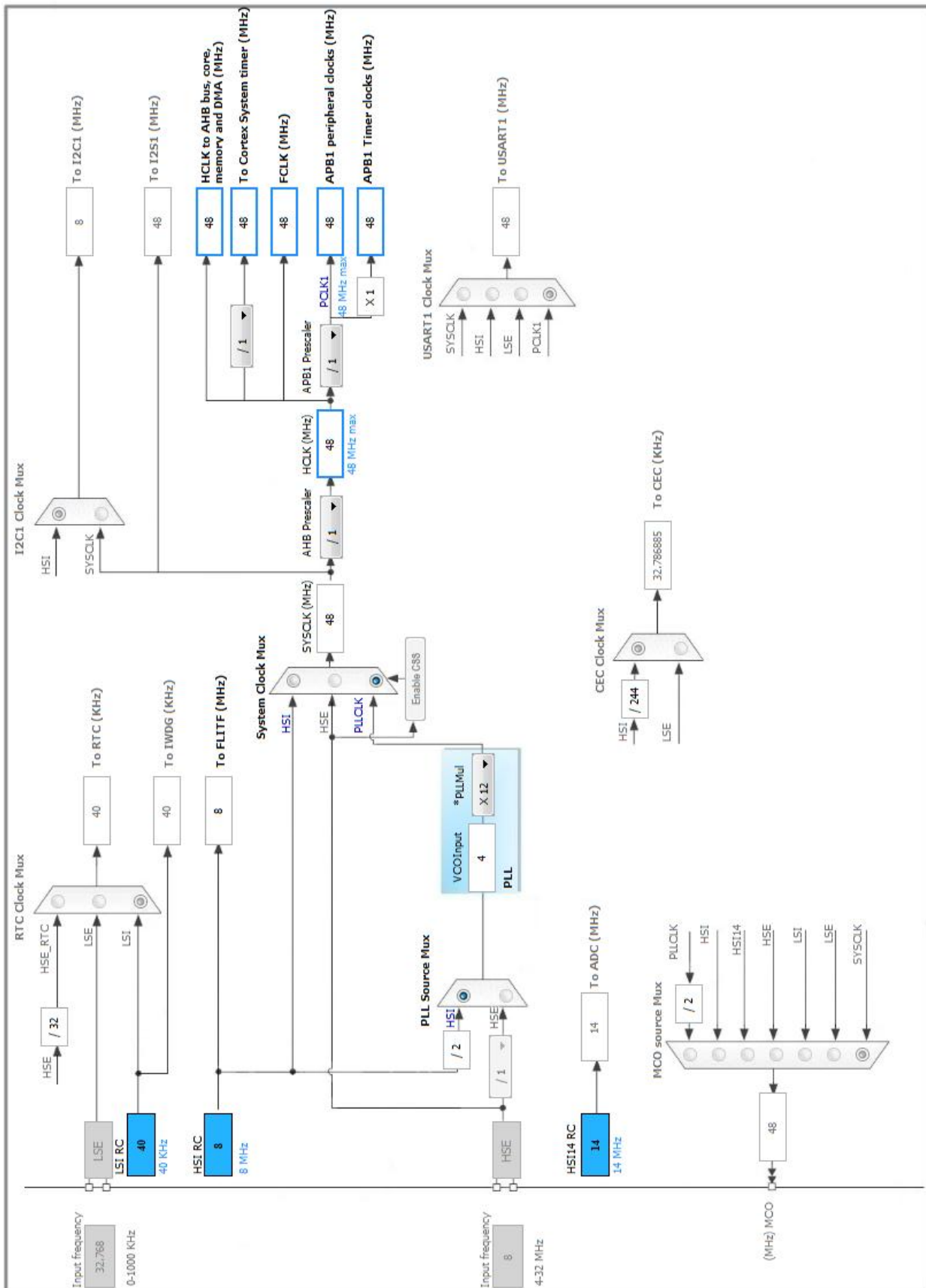
3. Pins Configuration

Pin Number LQFP64	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
1	VBAT	Power		
7	NRST	Reset		
12	VSSA	Power		
13	VDDA	Power		
14	PA0	I/O	GPIO_EXTI0	B1 [Blue PushButton]
31	VSS	Power		
32	VDD	Power		
39	PC8 *	I/O	GPIO_Output	LD4 [Blue Led]
40	PC9 *	I/O	GPIO_Output	LD3 [Green Led]
42	PA9 *	I/O	GPIO_Output	
43	PA10 *	I/O	GPIO_Output	
46	PA13 **	I/O	SYS_SWDIO	SWDIO
48	PF7 *	I/O	GPIO_Output	
49	PA14 **	I/O	SYS_SWCLK	SWCLK
60	BOOT0	Boot		
63	VSS	Power		
64	VDD	Power		

* The pin is affected with an I/O function

** The pin is affected with a peripheral function but no peripheral mode is activated

4. Clock Tree Configuration



5. IPs and Middleware Configuration

5.1. SYS

Timebase Source: SysTick

*** User modified value**

6. System Configuration

6.1. GPIO configuration

IP	Pin	Signal	GPIO mode	GPIO pull/up pull down	Max Speed	User Label
Single Mapped Signals	PA13	SYS_SWDIO	n/a	n/a	n/a	SWDIO
	PA14	SYS_SWCLK	n/a	n/a	n/a	SWCLK
GPIO	PA0	GPIO_EXTIO	External Event Mode with Rising edge trigger detection *	No pull-up and no pull-down	n/a	B1 [Blue PushButton]
	PC8	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	LD4 [Blue Led]
	PC9	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	LD3 [Green Led]
	PA9	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	
	PA10	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	
	PF7	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	

6.2. DMA configuration

nothing configured in DMA service

6.3. NVIC configuration

Interrupt Table	Enable	Preenmption Priority	SubPriority
Non maskable interrupt	true	0	0
Hard fault interrupt	true	0	0
System service call via SWI instruction	true	0	0
Pendable request for system service	true	0	0
System tick timer	true	0	0
PVD interrupt through EXTI Line16	unused		
Flash global interrupt	unused		
RCC global interrupt	unused		

* User modified value

7. Power Consumption Calculator report

7.1. Microcontroller Selection

Series	STM32F0
Line	STM32F0x1
MCU	STM32F051R8Tx
Datasheet	022265_Rev6

7.2. Parameter Selection

Temperature	25
Vdd	3.6

8. Software Project

8.1. Project Settings

Name	Value
Project Name	GenOut
Project Folder	C:\Projects\STM32F0\GenOut
Toolchain / IDE	MDK-ARM V5
Firmware Package Name and Version	STM32Cube FW_F0 V1.6.0

8.2. Code Generation Settings

Name	Value
STM32Cube Firmware Library Package	Copy all used libraries into the project folder
Generate peripheral initialization as a pair of '.c/.h' files	No
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