

1. Description

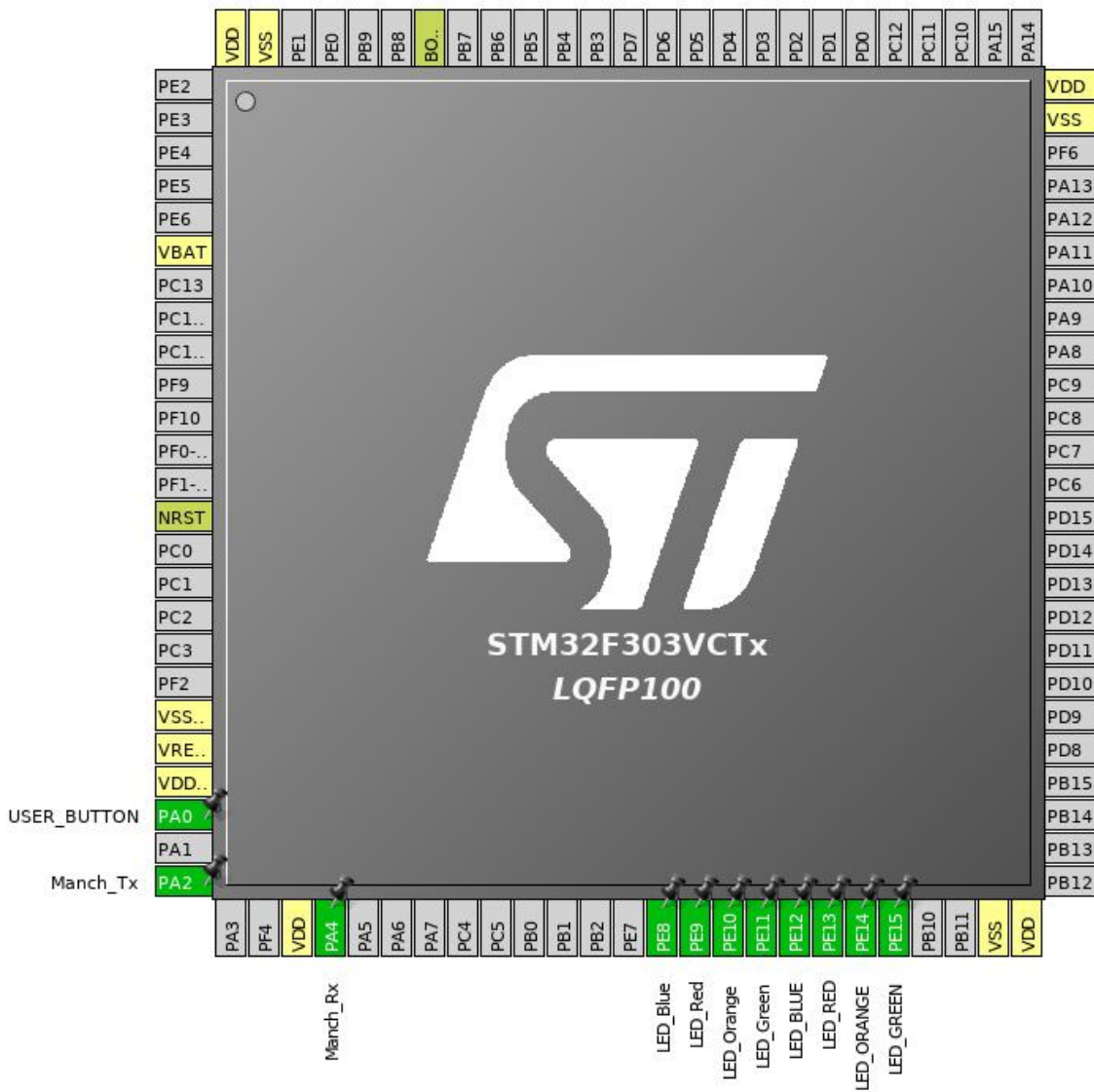
1.1. Project

Project Name	DALI_Basic
Board Name	DALI_Basic
Generated with:	STM32CubeMX 4.23.0
Date	12/19/2017

1.2. MCU

MCU Series	STM32F3
MCU Line	STM32F303
MCU name	STM32F303VCTx
MCU Package	LQFP100
MCU Pin number	100

2. Pinout Configuration

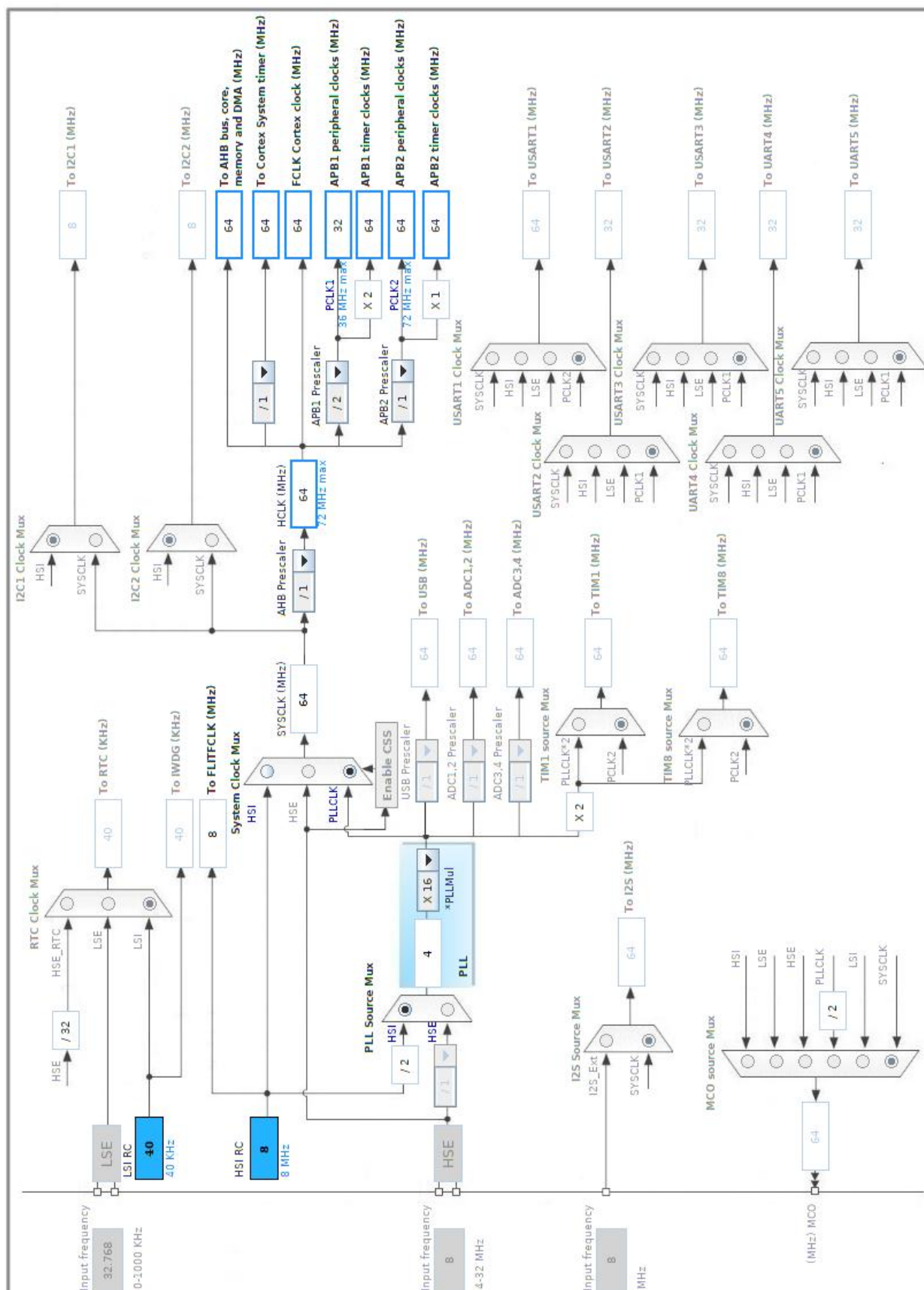


3. Pins Configuration

Pin Number LQFP100	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
6	VBAT	Power		
14	NRST	Reset		
20	VSSA/VREF-	Power		
21	VREF+	Power		
22	VDDA	Power		
23	PA0	I/O	GPIO_EXTI0	USER_BUTTON
25	PA2 *	I/O	GPIO_Output	Manch_Tx
28	VDD	Power		
29	PA4	I/O	GPIO_EXTI4	Manch_Rx
39	PE8 *	I/O	GPIO_Output	LED_Blue
40	PE9 *	I/O	GPIO_Output	LED_Red
41	PE10 *	I/O	GPIO_Output	LED_Orange
42	PE11 *	I/O	GPIO_Output	LED_Green
43	PE12 *	I/O	GPIO_Output	LED_BLUE
44	PE13 *	I/O	GPIO_Output	LED_RED
45	PE14 *	I/O	GPIO_Output	LED_ORANGE
46	PE15 *	I/O	GPIO_Output	LED_GREEN
49	VSS	Power		
50	VDD	Power		
74	VSS	Power		
75	VDD	Power		
94	BOOT0	Boot		
99	VSS	Power		
100	VDD	Power		

* The pin is affected with an I/O function

4. Clock Tree Configuration



5. IPs and Middleware Configuration

5.1. SYS

Timebase Source: SysTick

5.2. TIM2

Clock Source : Internal Clock

5.2.1. Parameter Settings:

Counter Settings:

Prescaler (PSC - 16 bits value)	63 *
Counter Mode	Up
Counter Period (AutoReload Register - 32 bits value)	103 *
Internal Clock Division (CKD)	No Division
auto-reload preload	Enable *

Trigger Output (TRGO) Parameters:

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

* User modified value

6. System Configuration

6.1. GPIO configuration

IP	Pin	Signal	GPIO mode	GPIO pull/up pull down	Max Speed	User Label
GPIO	PA0	GPIO_EXTI0	External Interrupt Mode with Rising edge trigger detection	Pull down *	n/a	USER_BUTTON
	PA2	GPIO_Output	Output Push Pull	Pull down *	Low	Manch_Tx
	PA4	GPIO_EXTI4	External Interrupt Mode with Rising edge trigger detection	Pull down *	n/a	Manch_Rx
	PE8	GPIO_Output	Output Push Pull	Pull down *	Low	LED_Blue
	PE9	GPIO_Output	Output Push Pull	Pull down *	Low	LED_Red
	PE10	GPIO_Output	Output Push Pull	Pull down *	Low	LED_Orange
	PE11	GPIO_Output	Output Push Pull	Pull down *	Low	LED_Green
	PE12	GPIO_Output	Output Push Pull	Pull down *	Low	LED_BLUE
	PE13	GPIO_Output	Output Push Pull	Pull down *	Low	LED_RED
	PE14	GPIO_Output	Output Push Pull	Pull down *	Low	LED_ORANGE
	PE15	GPIO_Output	Output Push Pull	Pull down *	Low	LED_GREEN

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
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	0	0
System tick timer	true	0	0
EXTI line0 interrupt	true	1	0
EXTI line4 interrupt	true	1	0
TIM2 global interrupt	true	1	0
PVD interrupt through EXTI line16	unused		
Flash global interrupt	unused		
RCC global interrupt	unused		
Floating point unit interrupt	unused		

* User modified value

7. Power Consumption Calculator report

7.1. Microcontroller Selection

Series	STM32F3
Line	STM32F303
MCU	STM32F303VCTx
Datasheet	023353_Rev13

7.2. Parameter Selection

Temperature	25
Vdd	3.6

8. Software Project

8.1. Project Settings

Name	Value
Project Name	DALI_Basic
Project Folder	/home/saicharan/Dropbox/arbeit/lichtsteuer-
Toolchain / IDE	Makefile
Firmware Package Name and Version	STM32Cube FW_F3 V1.9.0

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	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