# 1. Description

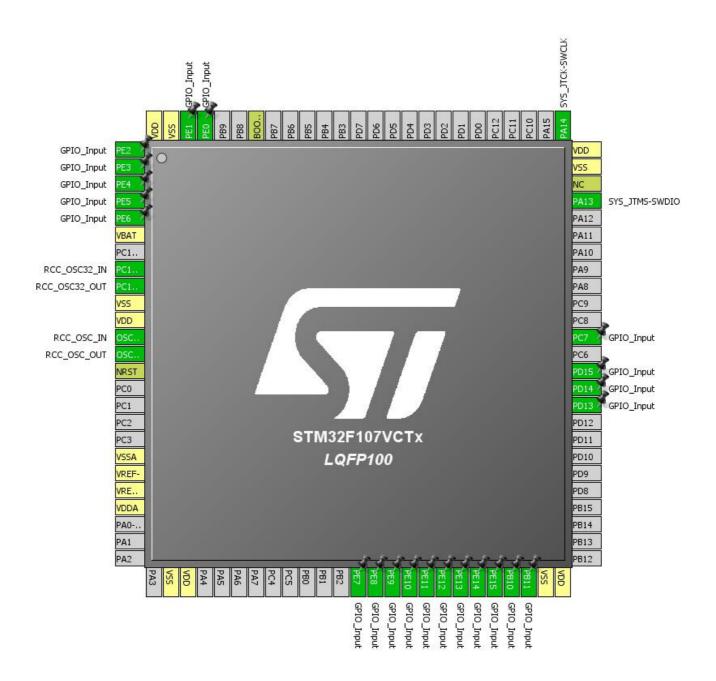
### 1.1. Project

Project Name	cube_prj
Board Name	cube_prj
Generated with:	STM32CubeMX 4.13.0
Date	03/31/2016

### 1.2. MCU

MCU Series	STM32F1
MCU Line	STM32F105/107
MCU name	STM32F107VCTx
MCU Package	LQFP100
MCU Pin number	100

## 2. Pinout Configuration



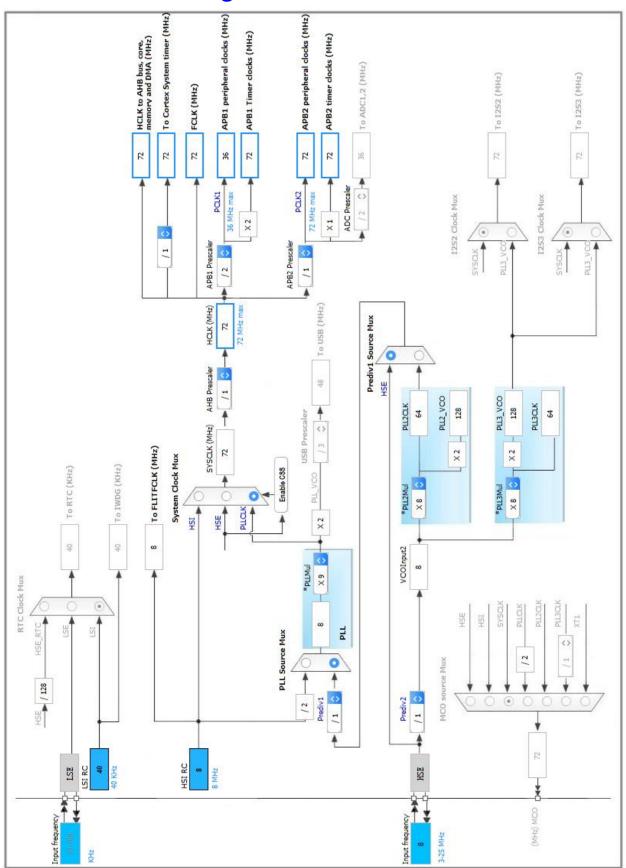
# 3. Pins Configuration

Pin Number	Pin Name	Pin Type	Alternate	Label
LQFP100	(function after		Function(s)	
	reset)			
1	PE2 *	I/O	GPIO_Input	
2	PE3 *	I/O	GPIO_Input	
3	PE4 *	I/O	GPIO_Input	
4	PE5 *	I/O	GPIO_Input	
5	PE6 *	I/O	GPIO_Input	
6	VBAT	Power		
8	PC14-OSC32_IN	I/O	RCC_OSC32_IN	
9	PC15-OSC32_OUT	I/O	RCC_OSC32_OUT	
10	VSS	Power		
11	VDD	Power		
12	OSC_IN	I/O	RCC_OSC_IN	
13	OSC_OUT	I/O	RCC_OSC_OUT	
14	NRST	Reset		
19	VSSA	Power		
20	VREF-	Power		
21	VREF+	Power		
22	VDDA	Power		
27	VSS	Power		
28	VDD	Power		
38	PE7 *	I/O	GPIO_Input	
39	PE8 *	I/O	GPIO_Input	
40	PE9 *	I/O	GPIO_Input	
41	PE10 *	I/O	GPIO_Input	
42	PE11 *	I/O	GPIO_Input	
43	PE12 *	I/O	GPIO_Input	
44	PE13 *	I/O	GPIO_Input	
45	PE14 *	I/O	GPIO_Input	
46	PE15 *	I/O	GPIO_Input	
47	PB10 *	I/O	GPIO_Input	
48	PB11 *	I/O	GPIO_Input	
49	VSS	Power		
50	VDD	Power		
60	PD13 *	I/O	GPIO_Input	
61	PD14 *	I/O	GPIO_Input	
62	PD15 *	I/O	GPIO_Input	
64	PC7 *	I/O	GPIO_Input	

Pin Number LQFP100	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
72	PA13	I/O	SYS_JTMS-SWDIO	
73	NC	NC		
74	VSS	Power		
75	VDD	Power		
76	PA14	I/O	SYS_JTCK-SWCLK	
94	воото	Boot		
97	PE0 *	I/O	GPIO_Input	
98	PE1 *	I/O	GPIO_Input	
99	VSS	Power		
100	VDD	Power		

<sup>\*</sup> 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) 2 WS (3 CPU cycle)

**RCC Parameters:** 

HSI Calibration Value 16

#### 5.2. SYS

**Debug: Serial-Wire** 

**Timebase Source: SysTick** 

<sup>\*</sup> 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_OU T	RCC_OSC32_O UT	n/a	n/a	n/a	
	OSC_IN	RCC_OSC_IN	n/a	n/a	n/a	
	OSC_OUT	RCC_OSC_OUT	n/a	n/a	n/a	
SYS	PA13	SYS_JTMS- SWDIO	n/a	n/a	n/a	
	PA14	SYS_JTCK- SWCLK	n/a	n/a	n/a	
GPIO	PE2	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	
	PE3	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	
	PE4	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	
	PE5	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	
	PE6	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	
	PE7	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	
	PE8	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	
	PE9	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	
	PE10	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	
	PE11	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	
	PE12	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	
	PE13	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	
	PE14	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	
	PE15	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	
	PB10	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	
	PB11	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	
	PD13	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	
	PD14	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	
	PD15	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	
	PC7	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	
	PE0	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	
	PE1	GPIO_Input	Input mode	No pull-up and no pull-down	n/a	

## 6.2. DMA configuration

nothing configured in DMA service

### 6.3. NVIC configuration

Interrupt Table	Enable Preenmption Priority		SubPriority
System tick timer	true	0	0
Non maskable interrupt		unused	
Hard fault interrupt		unused	
Memory management fault	unused		
Prefetch fault, memory access fault	unused		
Undefined instruction or illegal state	unused		
Debug monitor	unused		
PVD interrupt through EXTI line 16	unused		
Flash global interrupt	unused		
RCC global interrupt	unused		

<sup>\*</sup> User modified value

# 7. Power Plugin report

#### 7.1. Microcontroller Selection

Series	STM32F1
Line	STM32F105/107
мси	STM32F107VCTx
Datasheet	15274_Rev9

#### 7.2. Parameter Selection

Temperature	25
Vdd	3.3

## 8. Software Project

### 8.1. Project Settings

Name	Value
Project Name	cube_prj
Project Folder	F:\MDK_STM32\2STM32CubeMX\STM32F107VCT6\5LCD\1LCD_EXE\cube_prj
Toolchain / IDE	MDK-ARM V5
Firmware Package Name and Version	STM32Cube FW_F1 V1.3.1

### 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	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	No
consumption)	