

1. Description

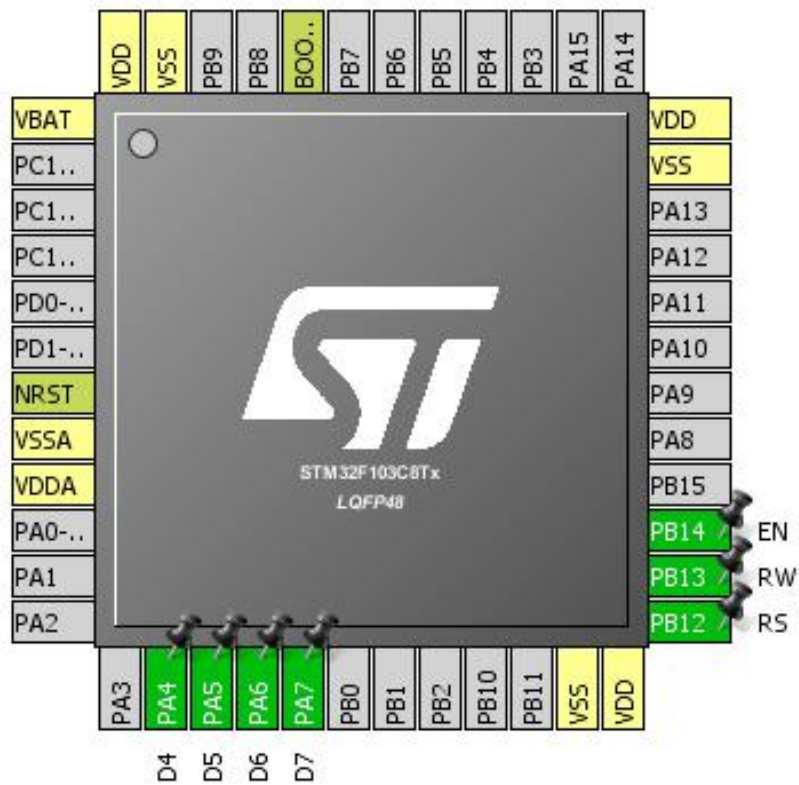
1.1. Project

Project Name	LCD_16x2
Board Name	LCD_16x2
Generated with:	STM32CubeMX 4.23.0
Date	08/13/2019

1.2. MCU

MCU Series	STM32F1
MCU Line	STM32F103
MCU name	STM32F103C8Tx
MCU Package	LQFP48
MCU Pin number	48

2. Pinout Configuration



3. Pins Configuration

Pin Number LQFP48	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
1	VBAT	Power		
7	NRST	Reset		
8	VSSA	Power		
9	VDDA	Power		
14	PA4 *	I/O	GPIO_Output	D4
15	PA5 *	I/O	GPIO_Output	D5
16	PA6 *	I/O	GPIO_Output	D6
17	PA7 *	I/O	GPIO_Output	D7
23	VSS	Power		
24	VDD	Power		
25	PB12 *	I/O	GPIO_Output	RS
26	PB13 *	I/O	GPIO_Output	RW
27	PB14 *	I/O	GPIO_Output	EN
35	VSS	Power		
36	VDD	Power		
44	BOOT0	Boot		
47	VSS	Power		
48	VDD	Power		

* The pin is affected with an I/O function

5. IPs and Middleware Configuration

5.1. SYS

Debug: No Debug

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
GPIO	PA4	GPIO_Output	Output Push Pull	n/a	Low	D4
	PA5	GPIO_Output	Output Push Pull	n/a	Low	D5
	PA6	GPIO_Output	Output Push Pull	n/a	Low	D6
	PA7	GPIO_Output	Output Push Pull	n/a	Low	D7
	PB12	GPIO_Output	Output Push Pull	n/a	Low	RS
	PB13	GPIO_Output	Output Push Pull	n/a	Low	RW
	PB14	GPIO_Output	Output Push Pull	n/a	Low	EN

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
Prefetch 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
PVD interrupt through EXTI line 16	unused		
Flash global interrupt	unused		
RCC global interrupt	unused		

* User modified value

7. Power Consumption Calculator report

7.1. Microcontroller Selection

Series	STM32F1
Line	STM32F103
MCU	STM32F103C8Tx
Datasheet	13587_Rev17

7.2. Parameter Selection

Temperature	25
Vdd	3.3

8. Software Project

8.1. Project Settings

Name	Value
Project Name	LCD_16x2
Project Folder	C:\Users\Hao\Desktop\STM32_CLB\LCD_16x2
Toolchain / IDE	MDK-ARM V5
Firmware Package Name and Version	STM32Cube FW_F1 V1.6.1

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	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