

1. Description

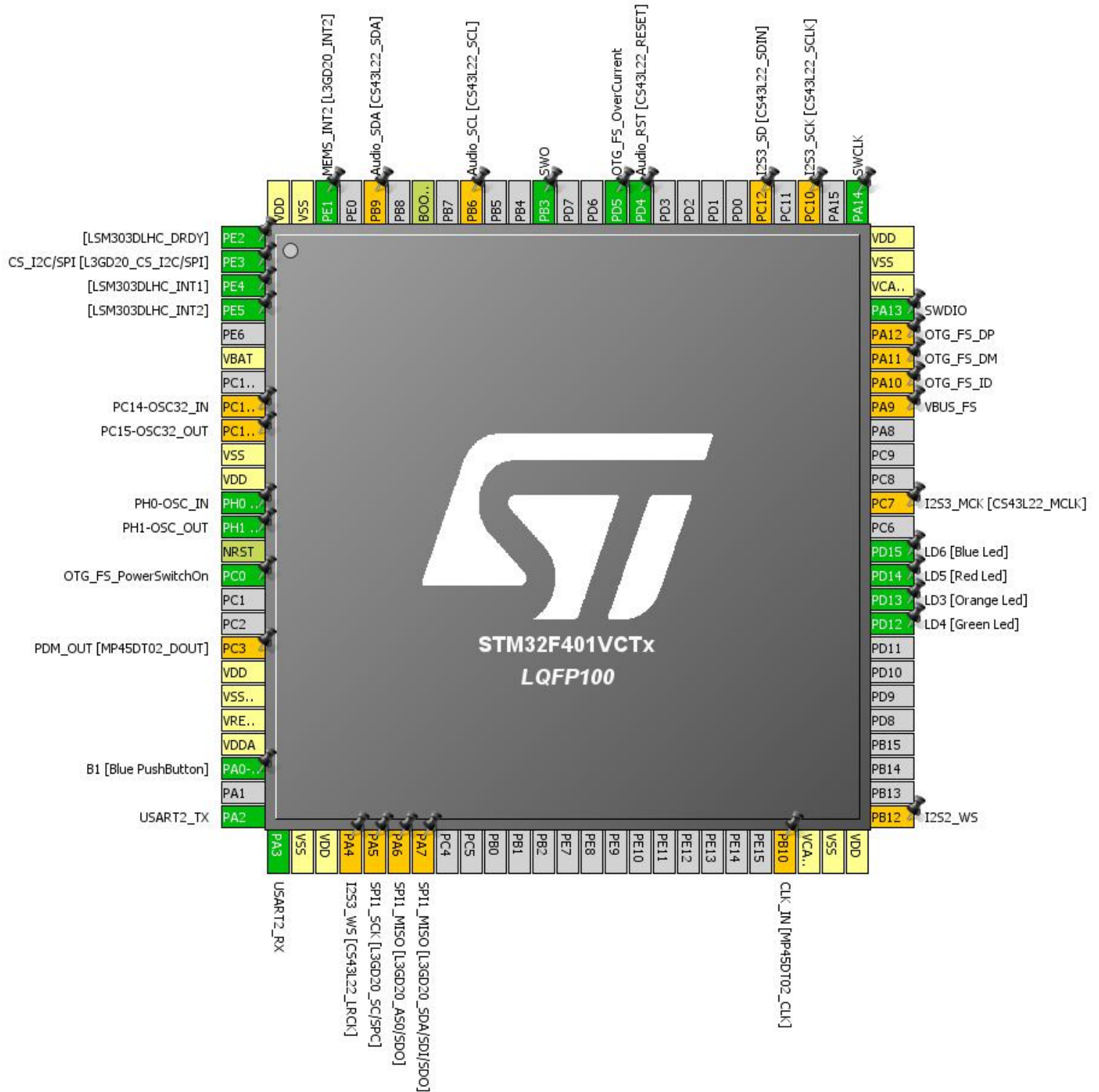
1.1. Project

Project Name	usart_test
Generated with:	STM32CubeMX 4.7.1
Date	06/01/2015

1.2. MCU

MCU Serie	STM32F4
MCU Line	STM32F401
MCU name	STM32F401VCTx
MCU Package	LQFP100
MCU Pin number	100

2. Pinout Configuration



3. IPs and Middlewares Configuration

IP	Mode	Fonction	Pin
RCC	High Speed Clock (HSE): Crystal/Ceramic Resonator	RCC_OSC_IN	PH0 - OSC_IN
		RCC_OSC_OUT	PH1 - OSC_OUT
SYS	Debug: SWD and Asynchronous Trace	SYS_JTMS-SWDIO	PA13
		SYS_JTCK-SWCLK	PA14
		SYS_JTDO-SWO	PB3
USART2	Mode: Asynchronous	USART2_RX	PA3
		USART2_TX	PA2

4. Pins Configuration

Pin	Pos	Function(s)	Label
PE2 *	1	GPIO_Input	[LSM303DLHC_DRDY]
PE3 *	2	GPIO_Output	CS_I2C/SPI [L3GD20_CS_I2C/SPI]
PE4	3	GPIO_EXTI4	[LSM303DLHC_INT1]
PE5	4	GPIO_EXTI5	[LSM303DLHC_INT2]
PC14-OSC32_IN **	8	RCC_OSC32_IN	PC14-OSC32_IN
PC15-OSC32_OUT **	9	RCC_OSC32_OUT	PC15-OSC32_OUT
PH0 - OSC_IN	12	RCC_OSC_IN	PH0-OSC_IN
PH1 - OSC_OUT	13	RCC_OSC_OUT	PH1-OSC_OUT
PC0 *	15	GPIO_Output	OTG_FS_PowerSwitchOn
PC3 **	18	I2S2_SD	PDM_OUT [MP45DT02_DOUT]
PA0-WKUP	23	GPIO_EXTI0	B1 [Blue PushButton]
PA2	25	USART2_TX	
PA3	26	USART2_RX	
PA4 **	29	I2S3_WS	I2S3_WS [CS43L22_LRCK]
PA5 **	30	SPI1_SCK	SPI1_SCK [L3GD20_SC/SPC]
PA6 **	31	SPI1_MISO	SPI1_MISO [L3GD20_AS0/SDO]
PA7 **	32	SPI1_MOSI	SPI1_MISO [L3GD20_SDA/SDI/SDO]
PB10 **	47	I2S2_CK	CLK_IN [MP45DT02_CLK]
PB12 **	51	I2S2_WS	
PD12 *	59	GPIO_Output	LD4 [Green Led]
PD13 *	60	GPIO_Output	LD3 [Orange Led]
PD14 *	61	GPIO_Output	LD5 [Red Led]
PD15 *	62	GPIO_Output	LD6 [Blue Led]
PC7 **	64	I2S3_MCK	I2S3_MCK [CS43L22_MCLK]
PA9 **	68	USB_OTG_FS_VBUS	VBUS_FS
PA10 **	69	USB_OTG_FS_ID	OTG_FS_ID
PA11 **	70	USB_OTG_FS_DM	OTG_FS_DM
PA12 **	71	USB_OTG_FS_DP	OTG_FS_DP
PA13	72	SYS_JTMS-SWDIO	SWDIO
PA14	76	SYS_JTCK-SWCLK	SWCLK
PC10 **	78	I2S3_CK	I2S3_SCK [CS43L22_SCLK]
PC12 **	80	I2S3_SD	I2S3_SD [CS43L22_SDIN]
PD4 *	85	GPIO_Output	Audio_RST [CS43L22_RESET]
PD5 *	86	GPIO_Input	OTG_FS_OverCurrent
PB3	89	SYS_JTDO-SWO	SWO
PB6 **	92	I2C1_SCL	Audio_SCL [CS43L22_SCL]
PB9 **	96	I2C1_SDA	Audio_SDA [CS43L22_SDA]
PE1	98	GPIO_EXTI1	MEMS_INT2 [L3GD20_INT2]

* The pin is affected with an I/O function

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

5. Power Plugin report

5.1. Microcontroller Selection

Serie	STM32F4
Line	STM32F401
MCU	STM32F401VCTx
Datasheet	024738_Rev4

5.2. Parameter Selection

Temperature	25
Vdd	null

6. Software Project

6.1. Project Settings

Name	Value
Project Name	usart_test
Project Folder	C:\Users\work\Desktop\stm32f4workspace\usart_test
Toolchain / IDE	SW4STM32
Firmware Package Name and Version	STM32Cube FW_F4 V1.5.0

6.2. 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

6.3. Toolchains Settings

Name	Value
Compiler Optimizations	Balanced Size/Speed