1. Description

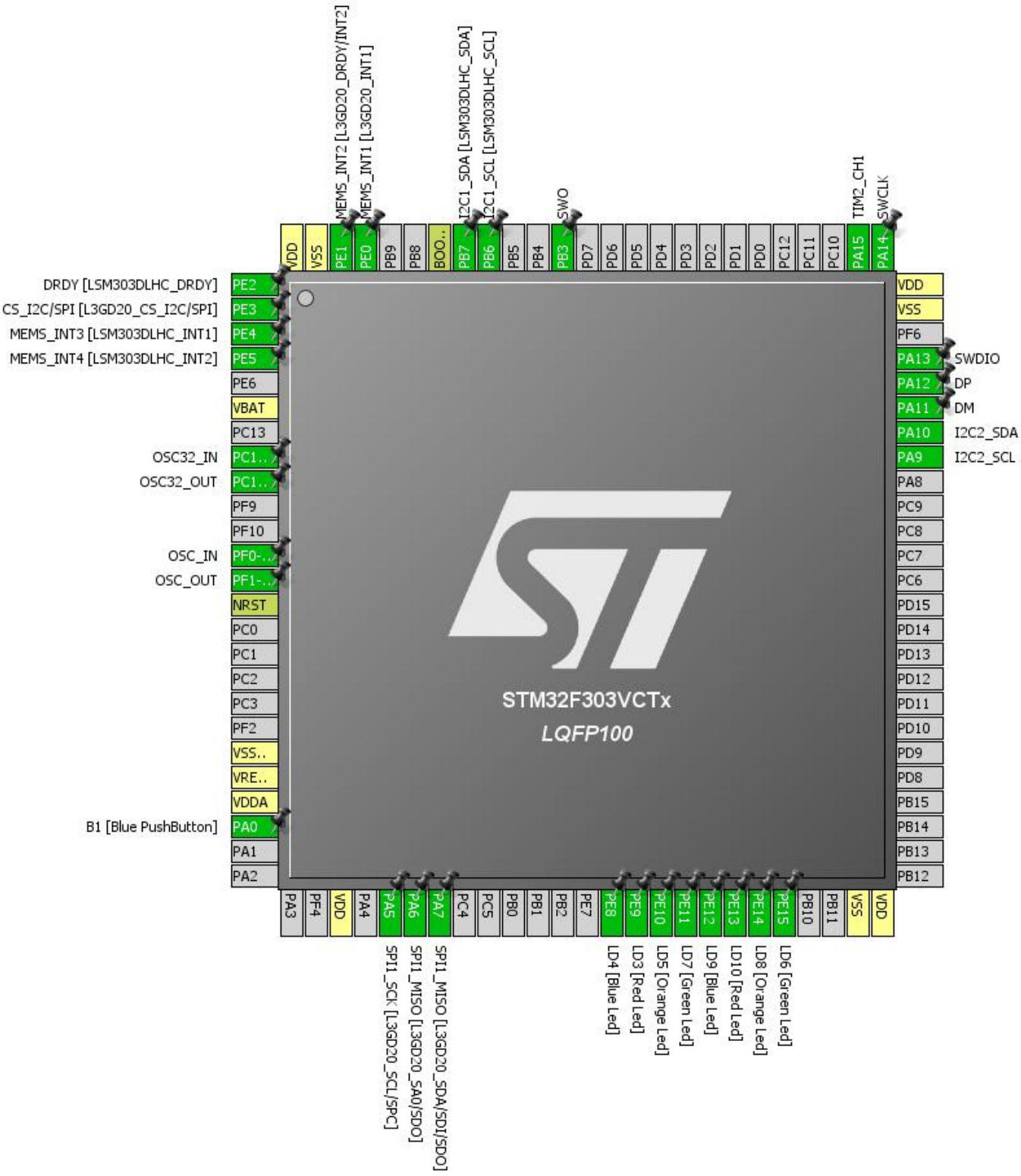
1.1. Project

Project Name	LegoArm
Generated with:	STM32CubeMX 4.3.0
Date	07/07/2014

1.2. MCU

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

2. Pinout Configuration



3. IPs and Middlewares Configuration

IP	Mode	Fonction	Pin
I2C1	I2C: I2C	I2C1_SCL	PB6
		I2C1_SDA	PB7
I2C2	I2C: I2C	I2C2_SCL	PA9
		I2C2_SDA	PA10
RCC	High Speed Clock (HSE): Crystal/Ceramic Resonator	RCC_OSC_IN	PF0-OSC_IN
		RCC_OSC_OUT	PF1-OSC_OUT
	Low Speed Clock (LSE) : Crystal/Ceramic Resonator	RCC_OSC32_IN	PC14-OSC32_IN
		RCC_OSC32_OUT	PC15-OSC32_OUT
SPI1	Mode: Full-Duplex Master	SPI1_MISO	PA6
		SPI1_MOSI	PA7
		SPI1_SCK	PA5
SYS	Debug: Trace Asynchronous Sw	SYS_JTCK-SWCLK	PA14
		SYS_JTMS-SWDIO	PA13
		SYS_JTDO-TRACESWO	PB3
TIM2	Clock Source : Internal Clock	N/A	N/A
	Channel1: PWM Generation CH1	TIM2_CH1	PA15
TIM3	Clock Source : Internal Clock	N/A	N/A
	Channel1: Output Compare No Output	N/A	N/A
USB	Device (FS)	USB_DM	PA11
		USB_DP	PA12

MiddleWare	Mode
USB_DEVICE	Class For FS IP: Communication Device Class (Virtual Port Com)

4. Pins Configuration

Pin	Pos	Function(s)	Label
PE2	1	GPIO_EXTI2	DRDY [LSM303DLHC_DRDY]
PE3 *	2	GPIO_Output	CS_I2C/SPI [L3GD20_CS_I2C/SPI]
PE4	3	GPIO_EXTI4	MEMS_INT3 [LSM303DLHC_INT1]
PE5	4	GPIO_EXTI5	MEMS_INT4 [LSM303DLHC_INT2]
PC14-OSC32_IN	8	RCC_OSC32_IN	OSC32_IN
PC15-OSC32_OUT	9	RCC_OSC32_OUT	OSC32_OUT
PF0-OSC_IN	12	RCC_OSC_IN	OSC_IN
PF1-OSC_OUT	13	RCC_OSC_OUT	OSC_OUT
PA0 *	23	GPIO_Input	B1 [Blue PushButton]
PA5	30	SPI1_SCK	SPI1_SCK [L3GD20_SCL/SPC]
PA6	31	SPI1_MISO	SPI1_MISO [L3GD20_SA0/SDO]
PA7	32	SPI1_MOSI	SPI1_MISO [L3GD20_SDA/SDI/SDO]
PE8 *	39	GPIO_Output	LD4 [Blue Led]
PE9 *	40	GPIO_Output	LD3 [Red Led]
PE10 *	41	GPIO_Output	LD5 [Orange Led]
PE11 *	42	GPIO_Output	LD7 [Green Led]
PE12 *	43	GPIO_Output	LD9 [Blue Led]
PE13 *	44	GPIO_Output	LD10 [Red Led]
PE14 *	45	GPIO_Output	LD8 [Orange Led]
PE15 *	46	GPIO_Output	LD6 [Green Led]
PA9	68	I2C2_SCL	
PA10	69	I2C2_SDA	
PA11	70	USB_DM	DM
PA12	71	USB_DP	DP
PA13	72	SYS_JTMS-SWDIO	SWDIO
PA14	76	SYS_JTCK-SWCLK	SWCLK
PA15	77	TIM2_CH1	
PB3	89	SYS_JTDO-TRACESWO	SWO
PB6	92	I2C1_SCL	I2C1_SCL [LSM303DLHC_SCL]
PB7	93	I2C1_SDA	I2C1_SDA [LSM303DLHC_SDA]
PE0	97	GPIO_EXTI0	MEMS_INT1 [L3GD20_INT1]
PE1	98	GPIO_EXTI1	MEMS_INT2 [L3GD20_DRDY/INT2]

* The pin is affected with an I/O function

5. Power Plugin report

5.1. Microcontroller Selection

Serie	STM32F3
Line	STM32F303
MCU	STM32F303VCTx
Datasheet	023353_Rev8

5.2. Parameter Selection

Temperature	25
Vdd	3.6

5.3. Battery Selection

Battery	Not set
Capacity	0.0 mAh
Self discharge	0.0 %/month
Nominal voltage	0.0 V
Max Cont Current	0.0 mA
Max Pulse Current	0.0 mA
Cells in series	1
Cells in parallel	1

6. Software Project

6.1. Project Settings

Name	Value
Project Name	LegoArm
Project Folder	C:\Users\gama\Documents\STM32CubeMX\LegoArm
Toolchain / IDE	
Firmware Package Name and Version	

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