

## ***1. Description***

### 1.1. Project

Project Name	Cuddlebot
Generated with:	STM32CubeMX 4.3.0
Date	08/01/2014

### 1.2. MCU

MCU Serie	STM32F4
MCU Line	STM32F405/415
MCU name	STM32F405RGTx
MCU Package	LQFP64
MCU Pin number	64



### 3. IPs and Middlewares Configuration

IP	Mode	Fonction	Pin
ADC2	IN0	ADC2_IN0	PA0-WKUP
	IN1	ADC2_IN1	PA1
	IN2	ADC2_IN2	PA2
	IN3	ADC2_IN3	PA3
	IN4	ADC2_IN4	PA4
	IN5	ADC2_IN5	PA5
	IN6	ADC2_IN6	PA6
	IN7	ADC2_IN7	PA7
	IN8	ADC2_IN8	PB0
	IN9	ADC2_IN9	PB1
	IN10	ADC2_IN10	PC0
	IN11	ADC2_IN11	PC1
	IN12	ADC2_IN12	PC2
	IN13	ADC2_IN13	PC3
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
TIM1	Combined Channels: Encoder Mode	TIM1_CH1	PA8
		TIM1_CH2	PA9

## 4. Pins Configuration

Pin	Pos	Function(s)	Label
PC13-ANTI_TAMP *	2	EVENTOUT	
PC14-OSC32_IN *	3	EVENTOUT	
PC15-OSC32_OUT *	4	EVENTOUT	
PH0-OSC_IN	5	RCC_OSC_IN	
PH1-OSC_OUT	6	RCC_OSC_OUT	
PC0	8	ADC2_IN10	
PC1	9	ADC2_IN11	
PC2	10	ADC2_IN12	
PC3	11	ADC2_IN13	
PA0-WKUP	14	ADC2_IN0	
PA1	15	ADC2_IN1	
PA2	16	ADC2_IN2	
PA3	17	ADC2_IN3	
PA4	20	ADC2_IN4	
PA5	21	ADC2_IN5	
PA6	22	ADC2_IN6	
PA7	23	ADC2_IN7	
PC4 *	24	EVENTOUT	
PC5 *	25	EVENTOUT	
PB0	26	ADC2_IN8	
PB1	27	ADC2_IN9	
PB10 **	29	USART3_TX	
PB11 **	30	USART3_RX	
PB12 *	33	EVENTOUT	
PB13 *	34	EVENTOUT	
PB14 *	35	EVENTOUT	
PC6 *	37	EVENTOUT	
PC7 *	38	EVENTOUT	
PC8 *	39	EVENTOUT	
PC9 *	40	EVENTOUT	
PA8	41	TIM1_CH1	
PA9	42	TIM1_CH2	
PA13	46	SYS_JTMS-SWDIO	
PA14	49	SYS_JTCK-SWCLK	
PC10 *	51	EVENTOUT	
PC11 *	52	EVENTOUT	
PB3	55	SYS_JTDO-SWO	
PB5 *	57	EVENTOUT	
PB6 *	58	EVENTOUT	

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## Cuddlebot Project

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Pin	Pos	Function(s)	Label
PB7 *	59	EVENTOUT	

\* 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	STM32F405/415
MCU	STM32F405RGTx
Datasheet	022152_Rev5

### 5.2. Parameter Selection

Temperature	25
Vdd	3.3

### 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	Cuddlebot
Project Folder	\\vmware-host\Shared
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