

CN7 Odd Pins							CN7 Even Pins						
Harness	Assignment	Com	Tim	ADC	Pin	Name	Name	Pin	ADC	Tim	Com	Assignment	Harness
		<i>TX_3</i>			1	<i>PC10</i>	<i>PC11</i>	2			<i>RX_3</i>		
					3	PC12	PD2	4					
					5	VDD	<i>E5V</i>	6					
					7	BOOT0	<i>GND</i>	8					
					9	-	-	10					
					11	-	IOREF	12					
	SWD				13	PA13	RESET	14					
	SWD				15	PA14	+3.3V	16					
			2.1		17	PA15	+5V	18					
					19	<i>GND</i>	<i>GND</i>	20					
		<i>SDA_1/RX_1</i>	4.2		21	<i>PB7</i>	<i>GND</i>	22					
					23	PC13	<i>VIN</i>	24					
	RTC				25	PC14	-	26					
	RTC				27	PC15	<i>PA0</i>	28	5	2.1/5.1			
					29	<i>PH0</i>	<i>PA1</i>	30	6	2.2/5.2			
					31	<i>PH1</i>	<i>PA4</i>	32	9				
					33	VBAT	<i>PB0</i>	34	15	3.3			
				3	35	<i>PC2</i>	<i>PC1</i>	36	2		<i>SDA_3</i>		
				4	37	<i>PC3</i>	<i>PC0</i>	38	1		<i>SCL_3</i>		

Legend
Reserved
Power
Analog
I2C/UART
Timer
GPIO
Unused

CN10 Odd Pins							CN10 Even Pins						
Harness	Assignment	Com	Tim	ADC	Pin	Name	Name	Pin	ADC	Tim	Com	Assignment	Harness
			3.4/8.4		1	<i>PC9</i>	<i>PC8</i>	2		3.3/8.3			
		<i>SCL_1</i>	4.3		3	<i>PB8</i>	<i>PC6</i>	4		3.1/8.1			
		<i>SDA_1</i>	4.4		5	<i>PB9</i>	<i>PC5</i>	6	14		<i>RX_3</i>		
					7	<i>AVDD</i>	U5V	8					
					9	<i>GND</i>	-	10					
			2.1		10	<i>PA5</i>	<i>PA12</i>	12				USB	
			3.1		11	<i>PA6</i>	<i>PA11</i>	14		1.4		USB	
			3.2		12	<i>PA7</i>	<i>PB12</i>	16					
		<i>SCL_1/TX_1</i>	4.1		17	<i>PB6</i>	<i>PB11</i>	18		2.4	<i>SDA_2/RX_3</i>		
			3.2/8.2		19	<i>PC7</i>	GND	20					
		<i>RX_1</i>	1.2		21	<i>PA9</i>	<i>PB2</i>	22					
					23	<i>PA8</i>	<i>PB1</i>	24	16	3.4			
		<i>SCL_2/TX_3</i>	2.3		25	<i>PB10</i>	<i>PB15</i>	26					
			3.1		27	<i>PB4</i>	<i>PB14</i>	28			<i>SDA_2</i>		
			3.2		29	<i>PB5</i>	<i>PB13</i>	30			<i>SCL_2</i>		
			2.2		31	<i>PB3</i>	<i>AGND</i>	32					
		<i>TX_1</i>	1.3		33	<i>PA10</i>	<i>PC4</i>	34	13		<i>TX_3</i>		
	STLINK_UART	<i>TX_2</i>	2.3/5.3	7	35	<i>PA2</i>	-	36					
	STLINK_UART	<i>RX_2</i>	2.4/5.4	8	37	<i>PA3</i>	-	38					

IR_ODD Harness			
IR Pins	MCU Pin	Nucleo Pin	Color
GND	GND		Blk
VCC	+3.3V		Red
ODD	IR_ODD		
1	IR_1 (ADC6)		
3	IR_3 (ADC9)		
5	IR_5 (ADC15)		
7	IR_7 (ADC3)		
9	IR_9 (ADC2)		
11	IR_11 (ADC4)		
13	IR_13 (ADC1)		

PDB Harness			
PDB Pins	MCU Pin	Nucleo Pin	Color
VSW/GND	BTRY_MON (ADC5)		
VSW	VIN		Red
GND	GND		Blk

BT Harness			
BT Pins	MCU Pin	Nucleo Pin	Color
EN	NC		
VDD	E5V		Red
GND	GND		Blk
TX	RX_3		
RX	TX_3		
STATE	NC		

BUMP_L Harness			
BUMP_L Pins	MCU Pin	Nucleo Pin	Color
GND	AGND		Blk
BMP5	BUMP_1_L		
BMP4	BUMP_2_L		
BMP3	BUMP_3_L		

BUMP_R Harness			
BUMP_R Pins	MCU Pin	Nucleo Pin	Color
GND	GND		Blk
BMP0	BUMP_1_R		
BMP1	BUMP_2_R		
BMP2	BUMP_3_R		

IR_EVN Harness			
IR Pins	MCU Pin	Nucleo Pin	Color
EVN	IR_EVN		
2	IR_2 (ADC14)		
4	IR_4 (ADC10)		
6	IR_6 (ADC11)		
8	IR_8 (ADC12)		
10	IR_10 (ADC16)		
12	IR_12 (ADC13)		

IMU Harness			
IMU Pins	MCU Pin	Nucleo Pin	Color
Vin	AVDD		Red
3vo	NC		
GND	GND		Blk
SDA	SDA_1		
SCL	SCL_1		
RST	NC		

MOT_L Harness			
MOT Pins	MCU Pin	Nucleo Pin	Color
PWM	PWM_L (8.2)		
DIR	DIR_L		
nSLP	EN_L		

MOT_R Harness			
MOT Pins	MCU Pin	Nucleo Pin	Color
PWM	PWM_R (8.1)		
DIR	DIR_R		
nSLP	EN_R		

ENC_L Harness			
ENC_L Pins	MCU Pin	Nucleo Pin	Color
ELA	ENC_A_L (1.2)		
ELB	ENC_B_L (1.1)		

ENC_R Harness			
ENC_R Pins	MCU Pin	Nucleo Pin	Color
ERA	ENC_A_R (3.2)		
ERB	ENC_B_R (3.1)		

Legend
Reserved
Power
Analog
I2C/UART
Timer
GPIO
Unused