Pin Number	Pin Name	User Label	Notes
1	PC10	I2C5_SDA	
3	PC12	DIR_OPT1	15
5	3V3_VDD		
7	BOOT0(1)		
9	PF6	STEP_OPT1	TIM16_CH1
11	PF7	STEP_OPT0	TIM17_CH1
13	PA13(3)	DEBUG	
15	PA14(3)	DEBUG	
17	PA15		bizarre
19	GND		
21	PB7		
23	PC13	Blue_User_Buttor	
25	PC14	RCC	
27	PC15	RCC	
29	PH0		
31	PH1		
33	VBAT		Batt to power rtc
35	PC2	USB	
37	PC3	USB	
39	PD4	ENABLE_STEPPE	
41	PD5		
43	PD6		
45	PD7		
47	PE3		
49	GND		
51	PF1	DIR_REAR	
53	PF0	DIR_RIGHT	
55	PD1		
57	PD0		
59	PG0	uart9	
61	PE1	LED_YELLOW	
63	PG9		
65	PG12	USART10_TX	
67	NC		
69	PD9	STLINK	

Pin Number	Pin Name	User Label	Notes
2	PC11	I2C5_SDL	
4	PD2		
6	5V_EXT		
8	GND		
10	NC		
12	IOREF		
14	NRST		
16	3V3		
18	5V		
20	GND		
22	GND		
24	VIN		
26	NC		
28	PA0	DIR_OPT0	5
30	PA1		5
32	PA4		
34	PB0	USB	
36	PC1		
38	PC0	USB	
40	PD3		
42	PG2		
44	PG3		
46	PE2		
48	PE4		
50	PE5		15
52	PF2		
54	PF8	STEP_REAR	TIM13_CH1
56	PF9	STEP_RIGHT	TIM14_CH1
58	PG1		uart9
60	GND		
62	PE6	STEP_LEFT	TIM15_CH2
64	PG15	DIR_LEFT	
66	PG10		
68	PG13		
70	PG11	USART10_RX	

Pin Number	Pin Name	User Label	Notes
1	PC9	I2C3_SDA	
3	PB8	I2C4_SCL	
5	PB9	I2C4_SDA	
7	VREFP		
9	GND		
11	PA5	USB	
13	PA6		3 / 13
15	PA7	XSHUT0	
17	PB6	XSHUT1	
19	PC7	XSHUT2	
21	PA9	VBUS USB	
23	PA8	I2C3_SCL	
25	PB10	USB	
27	PB4	RESET	
29	PB5	USB	
31	PB3	DEBUG	
33	PA10		
35	PA2		5/15
37	PA3	USB	
39	GND		
41	PD13		4
43	PD12	BUZZER	TIM4_CH1
45	PD11		
47	PE10	SPI4_SS0	GPIO output
49	PE12	SPI4_SCK	
51	PE14	SPI4_MOSI	
53	PE15		
55	PE13	SPI4_MISO	
57	PF13		
59	PF12	D7	
61	PG14	D6	
63	GND		
65	PG10	USB	
67	PG7	USB	
69	PG4	D5	

Pin Number	Pin Name	User Label	Notes
2	PC8		
4	PC6	LED_STRIP	TIM3_CH1
6	PC5		
8	5V_USB_STLK(2)		
10	PD8	USART STLINK	
12	PA12	TTL_SERVOS	Used by USB
14	PA11	ENABLE_SERVOS	Used by USB
16	PB12	USB	
18	PB11	USB	
20	GND		
22	PB2	XSHUT3	
24	PB1	USB	
26	PB15		12
28	PB14	RED_LED	
30	PB13	USB	
32	AGND		
34	PC4		
36	PF5		
38	PF4		
40	PE8	UART7_TX	
42	PF10		
44	PE7	UART7_RX	
46	PD14	x	
48	PD15		
50	PF14		
52	PE9		
54	GND		
56	PE11		
58	PF3	BAU	
60	PF15	TIRETTE	
62	PF11	D4	
64	PE0	D3	
66	PG8	D2	
68	PG5	D1	
70	PG6	D0	

Legend:
Color	Meaning
(pink)	Attribution non flexible
(purple)	Même pas besoin en vrai
(orange)	Power
(gray)	Not usable

A4988 stepper driver module

EN — VMOT
MS1 — GND
MS2 — 2B
MS3 — 2A
RST — 1A
SLP — 1B
STEP — VDD
DIR — GND
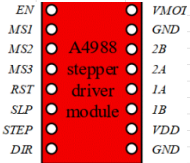
Led strips
5V
60mA/led
20 leds = 1.2A