PIN #	GPIO #	F(x)	UART
G	PC10	Talk to 2nd ELKA	U3TX
H	PC11	Talk to 2nd ELKA	U3RX
I	PC12		

Pin #	GPIO #	F(x)	TIMERS	ADC/UART
1	PA1		TIM5,CH2 / TIM2, CH2	ADC1
2	PA2		TIM5,CH3 / TIM2, CH3 / TIM9, CH1	ADC2 / U2TX
3	PA3		TIM5, CH4 / TIM2, CH4 / TIM9, CH2	ADC3 / U2RX
4	PA5		TIM8, CH IN	ADC5
5	PA6		TIM3, CH1 / TIM13, CH1	ADC6
6	PA7		TIM3, CH2 / TIM14, CH1	ADC7
7	PB10		TIM2, CH3	I2C2_SCL / U3TX
8	PB11		TIM2, CH4	I2C2_SDA / U3RX
9	PB3		TIM2, CH2	
10	PB4		TIM3, CH1	
A	PA9	Transmitter	TIM1, CH2	U1TX
B	PA10	Receiver	TIM1, CH4	U1RX (Spektrum)
C		VCC		
D		GROUND		
E		Programmer		SWDIO
F		Programmer		SWCLK

550g Cyclocopter (2017)

spektrum_cyclocopter_flowprobe project

Pin #	GPIO #	F(x)	TIMERS
3	PA3	Motor Left	TIM5, CH4
5	PA6	Motor Right	TIM3, CH1
6	PA7	Servo Left	TIM3, CH2
7	PB10	Servo Right	TIM2, CH3
8	PB11	Motor Tail	TIM2, CH4

550g Cyclocopter V2* (2017)

Pin #	GPIO #	F(x)	TIMERS
3	PA3	Motor Left	TIM5, CH4
5	PA6	Motor Right	TIM3, CH1
6	PA7	Servo Left	TIM3, CH2
7	PB10	Servo Right	TIM2, CH3
8	PB11	Motor Tail	TIM2, CH4

ELKA 1

Pin #	GPIO #	F(x)	TIMERS
1	PA1	Sonar	TIM2
2	PA2	Hall Effect 1	TIM5
3	PA3	Hall Effect 2	TIM9 (?)
5	PA6	Hall Effect 3	TIM13
6	PA7	Flow Probe alpha	TIM14
10	PB4	Flow Probe beta	TIM3

ELKA 2

AHS MAV Quadrotor (2017)

AHS_MAV2017_quad_sonarV2 project

Pin #	GPIO #	F(x)	TIMERS
1	PA1	Sonar	TIM2, CH2
2	PA2	Servo camera	TIM5, CH3
3	PA3	Motor Left Front	TIM5, CH4
4	PA5	Motor Left Rear	TIM8, CH IN
5	PA6	Motor Right Rear	TIM13, CH1
6	PA7	Motor Right Front	TIM3, CH2
10	PB4	Servo claw	TIM3, CH1

Sonar changes:
- hw_config.c
  - Tim_config()
    - TIM2
    - GPIOA for Pin 1
    - Pin source 1
    - TIM2_IRQN
  - PWM_capture()
    - TIM2, CH2
    - Trigger: T12FP2
- main.c
  - TIM3_IRQ to TIM2_IRQ
  - TIM2, CC2 (Capture 1)

Sea Quadrotor (2016)

Spektrum_adc_biplane_vicon project

Pin #	GPIO #	F(x)	TIMERS
3	PA3	Motor Left Front	TIM2, CH4
4	PA5	Motor Left Rear	TIM8, CH IN
5	PA6	Motor Right Rear	TIM3, CH1
6	PA7	Motor Right Front	TIM3, CH2

All-Terrain Cyclocopter (2017)

spektrum_allterrain_cyclo project

Pin #	GPIO #	F(x)	TIMERS	
1	PA1	Motor Left Front	TIM5,CH2	
2	PA2	Motor Left Back	TIM5,CH3	
3	PA3	Motor Right Front	TIM5, CH4	
4	PA5	Servo Landing Gear 1	TIM8, CH IN	UNUSED
5	PA6	Servo Left Front	TIM13, CH1	
6	PA7	Servo Left Back	TIM3, CH2	
7	PB10	Servo Right Front	TIM2, CH3	
8	PB11	Servo Right Back	TIM2, CH4	
9	PB3	Servo Landing Gear 2	TIM2, CH2	
10	PB4	Motor Right Back	TIM3, CH1	