LimiFrog Extension Connector

Refer to the *STM32L476 datasheet, Table 15* for exhaustive list of alternate functions available on each STM32 GPIO routed to the extension port and for voltage tolerance (5V max or 3V6 max, depending on I/Os)

LimiFrog « Prototype version »

	Signal Available	*Notes*
Position 1	GPIO_PA5	
Position 2	GPIO PA6	
Position 3	GPIO PA7	
Position 4	MICOUT	*Analog output from microphone*
Position 5	GPIO PC10	
Position 6	GPIO PC11	
Position 7	GPIO PC12	*shared with PIO from BTLE module (BTLE not driving by default)*
Position 8	VCC_NUM	*3V (buck-regulated) power supply (same as used on board)*
Position 9	GPIO PB8	
Position 10	GPIO PB9	
Position 11	GND	*Ground power supply*

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	Signal Available	*Notes*
Position 1	GPIO PA6	*shared with PIO from BTLE module (BTLE not driving by default)*
Position 2	MICOUT	*Analog output from microphone, DC-biased at VCC/2 = 1.5V*
Position 3	GPIO PA4	
Position 4	GPIO PA3	
Position 5	GPIO PA2	
Position 6	VCC_LDO	*Independent voltage from LDO, 3V3 nominal*
Position 7	GPIO PA1	
Position 8	GPIO PA0	
Position 9	GPIO PB8	
Position 10	GPIO PB9	
Position 11	GND	*Ground power supply*

Interfaces and signals that can be made available over pins GPIO_xx of the extension connector include : I2C, 2xUART, USART/SPI, CAN bus, PWM, ADC, GPIO, IRQ, ADC, DAC, WakeUp, etc.

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Major functions configurable on extension port –
Not all listed, refer to STM32L4 User Manual for exhaustive list

	Extension Port Positions										
	POS.1	***POS.2***	***POS.3***	***POS.4***	***POS.5***	***POS.6***	***POS.7***	***POS.8***	***POS.9***	***POS.10***	***POS.11***
Power						VCC_LDO					GND
I2C (I2C1)									**SCL**	**SDA**	
U(S)ART2 / SPI	- / nCS		(CK)/SCK	RX/MISO	TX/MOSI		RTS	CTS			
UART4					RX		TX				
GPIO / ExtIT	PA6		PA4	PA3	PA2		PA1	PA0	PB8	PB9	
PWM	TIM16-CH1		LPTIM2	TIM2-CH4	TIM2-CH3		TIM2-CH2	TIM2-CH1	TIM4-CH3	TIM4-CH4	
CAN bus									RX	TX	
ADC			ADC_IN9	ADC_IN8	ADC_IN7		ADC_IN6	ADC_IN5			
DAC			DAC1_OUT1								
MIC_OUT		reserved									