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*

LimiFrog v0.1

	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.

LimiFrog v0.2 (Production Version)   *(same signals as LimiFrog v0.1, some at different positions)*

	Signal Available	*Notes*
Position 1	MICOUT	*Analog output from microphone, DC-biased at VCC/2 = 1.5V*
Position 2	GPIO PA6	*shared with PIO from BTLE module (BTLE not driving by default)*
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	GND	*Ground power supply*
Position 10	GPIO PB8	
Position 11	GPIO PB9	

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.

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

LimiFrog -0.2	POS.1	POS.2	POS.3	POS.4	POS.5	POS.6	POS.7	POS.8	POS.9	POS.10	POS.11
LimiFrog -0.1	POS.2	POS.1	POS.3	POS.4	POS.5	POS.6	POS.7	POS.8	POS.11	POS.9	POS.10
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										