

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, DAC, WakeUp, etc.

Ext Port Details

LimiFrog -0.1

HISTORY 21-Dec-15 Corrected mistakes on position of UART4_RX and UART4_TX

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											