

Pinning ESP-12E Gateway

PCB# 012/00

redlabs.de

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Signal	Typ	Input / Output	Function	Pin	Pin Num	Pullup/ pulldown	Remark	Functionalblock
Reset		IN	RST		1	intern PU		RESET Button
ADC	analog	IN	ADC		2	x	input range 0V->1V (10 bit ADC)	Analog input
x		IN	EN		3	10k PU PCB	Chip enable, active high	
PWM_B	PWM	OUT	GPIO16		4			RGB LEDs
PWM_G	PWM	OUT	GPIO14		5			
PWM_R	PWM	OUT	GPIO12		6			
433_Rx		IN	GPIO13		7	15k PD PCB	output of "XY-MK-5V" (shifted to 3.3V level)	433MHz Transmitter / Receiver
433_Tx		OUT	GPIO15	config*	10	3k PD PCB	input of "XY-FST FS100A"	
PCF_INT	open-drain	IN	GPIO2	config*	11	47k PU PCB		PCF8574 port expander interrupt output
OneWire Data	open-drain	IN/ OUT	GPIO0	config*	12	47k PU PCB		OneWire Bus / "Bootloader" Button
I2C_SCL	open-drain	IN / OUT	GPIO4		13	10k PU PCB		I2C / to PCF8574 / to connector
I2C_SDA	open-drain	IN / OUT	GPIO5		14	10k PU PCB		
UART_RXD		IN	RxD_0		15	x	Bootloader interface	UART
UART_TXD		OUT	TxD_0		16	x		

Supply:								
VCC3V			VCC		8		3.3V supply	Supply
GND			GND		9			Supply

Unused Pins:								
x			CS0		17			serial Flash on ESP board
x			MISO		18			
x			IO9		19			
x			IO10		20			
x			MOSI		21			
x			SCLK		22			

*Config Pin	GPIO 0	GPIO 2	GPIO 15
Flash Startup (Normal)	1	1	0
UART Download Mode (Programming)	0	1	0
SD-Card Boot	0	0	1

Normal configuration
"Bootloader" Button pressed

