B6

0-1.es/B6

ESP-WROOM-32 Pinout

Legend:
- Power
- GND
- Physical PIN
- Port PIN
- Analog PIN
- Touch Pin
- Serial PIN
- PIN Function
- Interrupt PIN
- Control PIN
- IDE
- DAC Pin

PWM Pin

Absolute MAX per pin
12mA, 6mA recommended

Chip Enable. High: (High: ON, Low: OFF – minimum power) Never leave CHIP^{PU} floating!

Left side:

				GND		
				3.3V		
			CHIP^{PU}	9		
ADC^{PA}	RTCIO^0	ADC1_0	SENS^{VP}	IO36	5	
ADC^{PA}	RTCIO^3	ADC1_3	SENS^{VN}	IO39	8	
	RTCIO^4	ADC1_6	VDET^1	IO34	10	
	RTCIO^5	ADC1_7	VDET^2	IO35	11	
XTAL^{32}	TOUCH^9	RTCIO^9	ADC1_4	IO32	12	
XTAL^{32}	TOUCH^8	RTCIO^8	ADC1_5	IO33	13	
DAC_1	RTCIO^6	ADC2_8	EMAC^{RXD0}	IO25	14	
DAC_2	RTCIO^7	ADC2_9	EMAC^{RXD1}	IO26	15	
TOUCH^7	RTCIO^{17}	ADC2_7	EMAC^{RXDV}	IO27	16	
HS2^{CLK} SD^{CLK} HSPI^{CLK} MT^{MS} TOUCH^6	RTCIO^{16}	ADC2_6	EMAC^{TXD2}	IO14	17	
HS2^{DATA2} SD^{DATA2} HSPI^Q MT^{DI} TOUCH^5	RTCIO^{15}	ADC2_5	EMAC^{TXD3}	IO12	18	

Bottom left:

	GND	
HS2^{DATA3} SD^{DATA3} HSPI^{ID} MT^{CK} TOUCH^4 RTCIO^{14} ADC2_4 EMAC^{RXER}	IO13	20
SD^{DATA2} HS1^{DATA2} U1^{RXD} SPI^{HD}	IO9	28
SD^{DATA3} HS1^{DATA3} U1^{TXD} SPI^{WP}	IO10	29
SD^{CMD} HS1^{CMD} U1^{RTS} SPI^{CS0}	IO11	30

Right side:

GND		
36	IO23	VSPI^D HS1^{STROBE}
39	IO22	EMAC^{TXD1} U0^{RTS} VSPI^{WP}
41	IO1	EMAC^{TXD2} U0^{TXD} CLK^{OUT3}
40	IO3	U0^{RXD} CLK^{OUT2}
42	IO21	EMAC^{TXEN} VSPI^{HD}
	NC	
38	IO19	EMAC^{TXD0} U0^{CTS} VSPI^Q
35	IO18	VSPI^{CLK} HS1^{DATA7}
34	IO5	EMAC^{RXCLK} VSPI^{CS0} HS1^{DATA6}
27	IO17	EMAC^{CO180} U2^{TDX} HS1^{DATA5}
25	IO16	EMAC^{CLKOUT} U2^{RDX} HS1^{DATA4}
24	IO4	EMAC^{TXER} ADC2_0 RTCIO^{10} TOUCH^0 HSPI^{HD} SD^{DATA1} HS2^{DATA1}
23	IO0	EMAC^{TXCLK} ADC2_1 RTCIO^{11} TOUCH^1 CLK^{OUT1}

Programming Port

Bottom right:

22	IO2	HSPI^{WP} ADC2_2 RTCIO^{12} TOUCH^2
21	IO15	EMAC^{RXD3} ADC2_3 RTCIO^{13} TOUCH^3 MT^{D0} HSPI^{CS0} SD^{CMD} HS2^{CMD}
33	IO8	SPI^D U2^{CTS} HS1^{DATA1} SD^{DATA1}
32	IO7	SPI^Q U2^{RTS} HS1^{DATA0} SD^{DATA0}
31	IO6	SPI^{CLK} U1^{CTS} HS1^{CLK} SD^{CLK}