FREENOVE ESP32-S3 WROOM Pinout

Legend:

PWD	ADC1_CH3
GND	Ground
Serial	Serial for Debugging/Programming
ADCX_CH	Analog-to-Digital Converter
RESET	Reset the chip
GPIOX	GPIO Input and Output
TOUCHX	Touch Sensor Input Channel
STRAP	Strapping Pin Functions
SD	On-board SD Card Pin
LED	On-board LED Pin
WS2812	On-board WS2812 Pin
PSRAM	Built-in expansion memory chip pin
USB	USB Function Pin
CAMERA	Camera Pin
JTAG	Jtag for Debugging
∿	PWM Capable Pin

Left side pins (top to bottom):

			3V3	
			RST	
T4	ADC1_CH3	CAM_SIOD	GPIO4	
T5	ADC1_CH4	CAM_SIOD	GPIO5	
T6	ADC1_CH5	CAM_VYSNC	GPIO6	
T7	ADC1_CH6	CAM_HREF	GPIO7	
U0RTS	ADC2_CH4	CAM_XCLK	GPIO15	
U0CTS	ADC2_CH5	CAM_Y9	GPIO16	
U1TXD	ADC2_CH6	CAM_Y8	GPIO17	
U1RXD	ADC2_CH7	CAM_Y7	GPIO18	
T8	ADC1_CH7	CAM_Y4	GPIO8	
T3	ADC1_CH2	JTAG EN	GPIO3	
		LOG	GPIO46	
T9	ADC1_CH8	CAM_Y3	GPIO9	
T10	ADC1_CH9	CAM_Y5	GPIO10	
T11	ADC2_CH0	CAM_Y2	GPIO11	
T12	ADC2_CH1	CAM_Y6	GPIO12	
T13	ADC2_CH2	CAM_PCLK	GPIO13	
T14	ADC2_CH3		GPIO14	
			5V	

Right side pins (top to bottom):

GPIO43	U0TXD	LED TX		
GPIO44	U0RXD	LED RX		
GPIO1	ADC1_CH0		T1	
GPIO2	ADC1_CH1	LED ON	T2	
GPIO42		MTMS		
GPIO41		MTDI		
GPIO40	SD_DATA	MTDO		
GPIO39	SD_CLK	MTCK		
GPIO38	SD_CMD			
GPIO37	PSRAM			
GPIO36	PSRAM			
GPIO35	PSRAM			
GPIO0	Boot			
GPIO45	VSPI			
GPIO48	WS2812			
GPIO47				
GPIO21				
GPIO20	USB_D-	ADC2_CH9	U1CTS	
GPIO19	USB_D+	ADC2_CH8	U1RTS	
GND				

Center module: ESP32-S3 WROOM FREENOVE