


CADDeck Pin Usage With ESP32-S3

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 CADDeck Pin Usage With ESP32-S3 - Spreadsheet

ESP32-S3 Default Pin Functions										CADDeck S3	Notes
GPIO	Input / Output / Tri-state	Default Function	ADC	DAC	RTC	Capacitive Touch	UART	SPI	I2C		
GPIO00	I/O/T	Strapping Pin							SCL0		
GPIO01	I/O/T		ADC1_CH0		RTC	T1			SDA0	Roll (X)	
GPIO02	I/O/T		ADC1_CH1		RTC	T2			SCL1	Pitch (Y)	
GPIO03	I/O/T	Strapping Pin	ADC1_CH2		RTC	T3			SDA1	Zoom (analog)	
GPIO04	I/O/T		ADC1_CH3		RTC	T4				Rotate (Analog)	
GPIO05	I/O/T		ADC1_CH4		RTC	T5				UART1_TX (SpaceMouse)	
GPIO06	I/O/T		ADC1_CH5		RTC	T6				UART1_RX (SpaceMouse)	
GPIO07	I/O/T		ADC1_CH6		RTC	T7				PC8575 and Touch SDA	
GPIO08	I/O/T		ADC1_CH7		RTC	T8				PC8575 and Touch SCL	
GPIO09	I/O/T		ADC1_CH8		RTC	T9		SPI2?		TOUCH_INT	Interrupts not currently used. Pin assigned for future use.
GPIO10	I/O/T		ADC1_CH9		RTC	T10		SPI2?		PCF8575 INT	Interrupts not currently used. Pin assigned for future use.
GPIO11	I/O/T		ADC2_CH0		RTC	T11		SPI2?		TFT_MISO	ADC2 doesn't work when WiFi is in use
GPIO12	I/O/T		ADC2_CH1		RTC	T12		SPI2?		TFT_MOSI	ADC2 doesn't work when WiFi is in use
GPIO13	I/O/T		ADC2_CH2		RTC	T13		SPI2?		TFT_SCLK	ADC2 doesn't work when WiFi is in use
GPIO14	I/O/T		ADC2_CH3		RTC	T14		SPI2?		TFT_CS	ADC2 doesn't work when WiFi is in use
GPIO15	I/O/T		ADC2_CH4		RTC		RTS0			TFT_DC/RS	ADC2 doesn't work when WiFi is in use
GPIO16	I/O/T		ADC2_CH5		RTC		CTS0			TFT_RST	ADC2 doesn't work when WiFi is in use
GPIO17	I/O/T		ADC2_CH6		RTC		TXD1			TFT_BL	ADC2 doesn't work when WiFi is in use
GPIO18	I/O/T		ADC2_CH7		RTC		RXD1			Dummy TOUCH_CS	ADC2 doesn't work when WiFi is in use. TOUCH_CS not used, but assignment to a pin is needed to avoid compiler warnings from TFT_eSPI.
GPIO19	I/O/T	USB_D-	ADC2_CH8		RTC		RTS1				ADC2 doesn't work when WiFi is in use
GPIO20	I/O/T	USB_D+	ADC2_CH9		RTC		CTS1				ADC2 doesn't work when WiFi is in use
GPIO21	I/O/T				RTC						
GPIO26	I/O/T	Flash/PSRAM									Do not use on modules with Flash or PSRAM
GPIO27	I/O/T	Flash/PSRAM									Do not use on modules with Flash or PSRAM
GPIO28	I/O/T	Flash/PSRAM									Do not use on modules with Flash or PSRAM
GPIO29	I/O/T	Flash/PSRAM									Do not use on modules with Flash or PSRAM
GPIO30	I/O/T	Flash/PSRAM									Do not use on modules with Flash or PSRAM
GPIO31	I/O/T	Flash/PSRAM									Do not use on modules with Flash or PSRAM
GPIO32	I/O/T	Flash/PSRAM									Do not use on modules with Flash or PSRAM
GPIO33		Flash/PSRAM									Do not use on modules with Octal SPI (8MB and 16MB PSRAM)
GPIO34		Flash/PSRAM									Do not use on modules with Octal SPI (8MB and 16MB PSRAM)
GPIO35	I/O/T	Flash/PSRAM									Do not use on modules with Octal SPI (8MB and 16MB PSRAM)
GPIO36	I/O/T	Flash/PSRAM									Do not use on modules with Octal SPI (8MB and 16MB PSRAM)
GPIO37	I/O/T	Flash/PSRAM									Do not use on modules with Octal SPI (8MB and 16MB PSRAM)
GPIO38	I/O/T										
GPIO39	I/O/T	JTAG-MTCK								UART2_TX (LCDKnob)	
GPIO40	I/O/T	JTAG-MTDO								UART2_RX (LCDKnob)	
GPIO41	I/O/T	JTAG-MTDI									
GPIO42	I/O/T	JTAG-MTMS									
GPIO43	I/O/T	U0TXD					U0TXD				
GPIO44	I/O/T	U0RXD					U0RXD				
GPIO45	I/O/T	Strapping Pin									
GPIO46	I/O/T	Strapping Pin									
GPIO47	I/O/T	GPIO47									
GPIO48	I/O/T	GPIO48								LED Control	

PCF8575 Pinout (10 Buttons)

Pin	Function	Pin	Function
P0	BUTTON_0	P8	BUTTON_6
P1	BUTTON_1	P9	BUTTON_7
P2	BUTTON_2	P10	BUTTON_8
P3	BUTTON_3	P11	BUTTON_9
P4	BUTTON_4	P12	BUTTON_10
P5	BUTTON_5	P13	

P6			P14	
P7			P15	

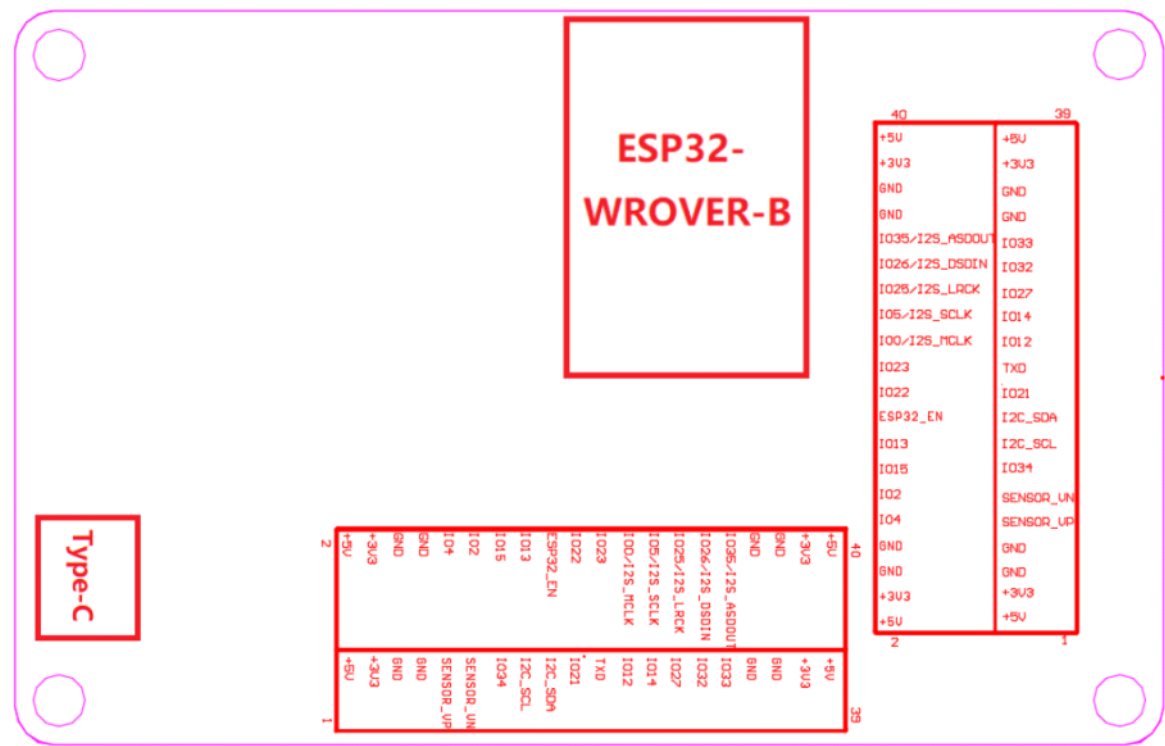


Figure 3-3: WT32-SC01 board interface definition diagram

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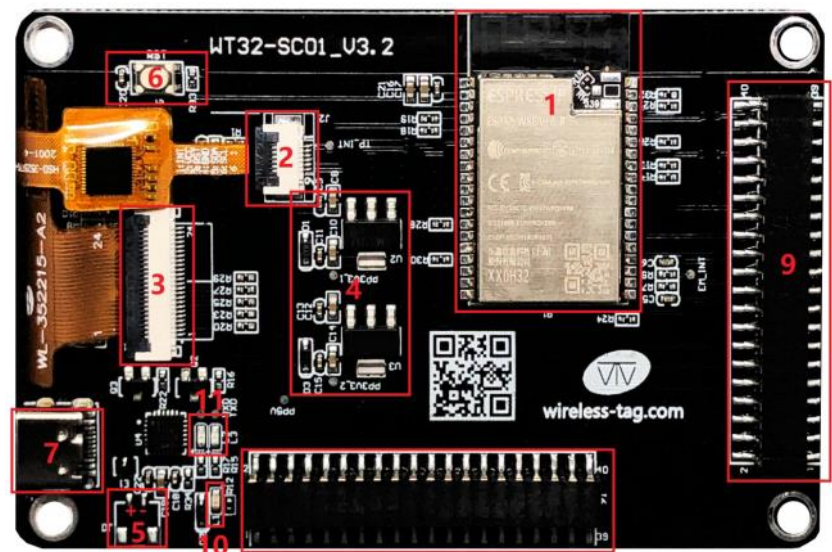


Figure 3-1: Rear view of WT32-SC01 development board