

E32R28T 2.8" ESP32-32E Display – Pin Assignments

Category	Signal	ESP32 Pin	Notes
LCD	TFT_CS	IO15	LCD chip select, active LOW
LCD	TFT_RS	IO2	LCD Command/Data select
LCD	TFT_SCLK	IO14	SPI clock
LCD	TFT_MOSI	IO13	SPI MOSI
LCD	TFT_MISO	IO12	SPI MISO
LCD	TFT_RST	EN	LCD reset (shared)
LCD	TFT_BL	IO21	Backlight control
Resistive Touch	TP_SCK	IO25	Touch SPI clock
Resistive Touch	TP_MOSI	IO32	Touch MOSI
Resistive Touch	TP_MISO	IO39	Touch MISO
Resistive Touch	TP_CS	IO33	Touch CS
Resistive Touch	TP_IRQ	IO36	Touch interrupt
RGB LED	LED_R	IO22	Red LED (LOW=ON)
RGB LED	LED_G	IO16	Green LED (LOW=ON)
RGB LED	LED_B	IO17	Blue LED (LOW=ON)
MicroSD	SD_CS	IO5	SD chip select
MicroSD	SD_MOSI	IO23	SD MOSI
MicroSD	SD_SCK	IO18	SD clock
MicroSD	SD_MISO	IO19	SD MISO
Audio	AUDIO_EN	IO4	Audio enable
Audio	AUDIO_DAC	IO26	DAC output
Key	BOOT	IO0	Boot button
Reset	RESET	EN	Reset button
Serial	RXD0	IO3	UART RX
Serial	TXD0	IO1	UART TX
Battery	BAT_ADC	IO34	Battery ADC
SPI Header	SPI_CS	IO27	SPI CS
SPI Header	SPI_SCK	IO18	SPI SCK
SPI Header	SPI_MISO	IO19	SPI MISO
SPI Header	SPI_MOSI	IO23	SPI MOSI
Expand Pin	EXP_IO	IO35	Input-only IO

Source: LCDWIKI (https://www.lcdwiki.com/2.8inch_ESP32-32E_Display). Formatted by Micro Robotics. Report issues: admin@microgroup.co.za.