

Updated Pin Mapping Table

Component	Pin Name	Raspberry Pi GPIO Pin	Physical Pin
Waveshare E-Ink Display (via Driver HAT)	VCC	3.3V	Pin 1
	GND	Ground	Pin 6
	CS	GPIO8 (CE0)	Pin 24
	CLK	GPIO11 (SCLK)	Pin 23
	DIN (MOSI)	GPIO10	Pin 19
	DC	GPIO25	Pin 22
	RST	GPIO17	Pin 11
	BUSY	GPIO24	Pin 18
Rotary Encoder (EC11)	VCC	3.3V	Pin 1
	GND	Ground	Pin 9
	CLK	GPIO5	Pin 29
	DT	GPIO6	Pin 31
	SW (Button)	GPIO27	Pin 13
Adafruit PiOLED Display (I2C)	VCC	3.3V	Pin 17
	GND	Ground	Pin 14
	SDA	GPIO2 (SDA1)	Pin 3
	SCL	GPIO3 (SCL1)	Pin 5
Geekworm X728 UPS HAT	VCC/GND	Connected via HAT	-
	I2C SDA	GPIO2	Pin 3
	I2C SCL	GPIO3	Pin 5