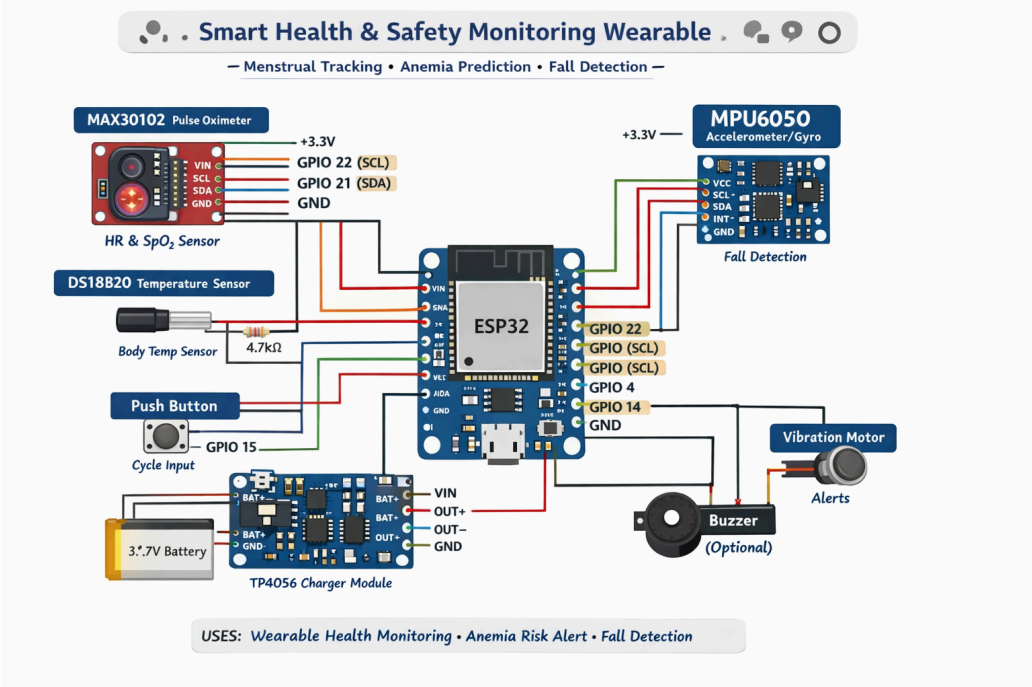
Circuit Diagram



Connections

MAX30102 – Anaemia Prediction Sensor

MAX30102 Pin	ESP32 Pin	Why
VIN	**3.3V**	Sensor operates at 3.3V
GND	**GND**	Common reference
SDA	**GPIO 21**	I2C data line
SCL	**GPIO 22**	I2C clock line

DS18B20 – Temperature Sensor

DS18B20 Pin	ESP32 Pin	Why
VCC	**3.3V**	Power
DATA	**GPIO 4**	Digital input
GND	**GND**	Common ground
4.7kΩ resistor	Between VCC & DATA	Pull-up for stable data

MPU6050 – Fall Detection Sensor

MPU6050 Pin	ESP32 Pin	Why
VCC	**3.3V**	Power
GND	**GND**	Common ground
SDA	**GPIO 21**	I2C data
SCL	**GPIO 22**	I2C clock
INT	**GPIO 14**	Interrupt pin for fall detection

MPU6050 shares **same I2C bus** as MAX30102 (this is allowed)

PUSH BUTTON – Menstrual Cycle Input

Button Pin	ESP32 Pin	Why
One side	**GPIO 15**	Input signal
Other side	**GND**	Reference