

Parts for Smart Pomodoro Timer

- Arduino Uno
- Breadboard
- Electrical Components
- PIR Motion Sensor → Detects your presence at your workspace
- Passive Buzzer → For audio alerts (session end)
- Push Button → For starting/resetting Pomodoro timer
- 3 LEDs (Red, Green, and Orange) → Color for focus/break/pause sessions
- DS3231 RTC Module → Real-time clock to timestamp focus sessions
- MicroSD Card Module → Writes session logs to a text file
- MicroSD Card (FAT32) → 1GB+ storage for logs
- OLED Display (SSD1306) → I2C screen to show countdown timer
- AMS1117 3.3V Voltage Regulator → Steps down 5V from Arduino to 3.3V for use with logic level shifter and MicroSD card.
- Bi-Directional Logic Level Shifter (4-Channel) → Converts 5V (Arduino) to 3.3V for SD card SPI lines
- Small plastic enclosure (optional) → for protection and portability