# SETZ PCB Component List (for Part Production)

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| Component | Part Name | Purpose / Function |
| Microcontroller | ESP32-S3 Mini | Handles BLE communication, button control, and display logic |
| Display Driver | TM1637 | Drives 2-digit 7-segment LED display using minimal pins |
| 7-Segment Display | 2-digit green LED | Displays current set count from 00 to 99 |
| Status LED | Red Bar LED | Always ON, indicates device in use |
| Buttons | 3x SMD Tactile Switches (3x6mm) | UP, DOWN, RESET physical controls |
| Power Input | USB-C Connector | Used for charging and power |
| Charging Circuit | TP4056 Module | Manages 3.7V Li-ion battery charging via USB-C |
| Battery | 3.7V Li-ion / LiPo (300–600mAh) | Powers device when USB is not connected |
| Voltage Regulator | AMS1117-3.3 or HT7333 | Steps down voltage to 3.3V for ESP32 and logic |
| Resistors | Various (100–10k Ohm) | Used for LEDs, buttons, pull-ups |
| Capacitors | Various (0.1µF–10µF) | Used for filtering and voltage regulation |
| PCB Substrate | FR-4, 2-layer, 1.6mm, Black Solder Mask | Main circuit board platform |
| Connectors | JST 2-pin (for battery) | Battery connection point |
| Mounting | Screw holes / magnetic pad (optional) | Optional mechanical stability or magnetic back |