# System test and callibration instruction

## Boar callibration and test

1. Measure resistor values (before soldering) and uC VCC voltage and include them in the charger code. R3 976, R5 976, R7 976, R4 4790, R2 4680, R6 9910

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| R2 | R3 | R4 | R5 | R6 | R7 | Vcc |
| 4680 | 976 | 4790 | 976 | 9910 | 976 | 5060 |

1. Upload callibration code and test all basic functionalities of the board

|  |  |  |  |
| --- | --- | --- | --- |
| **Digital Out** | LED indicator (ON/OFF) | Buzzer (ON/OFF) | LM enable (ON/OFF) |
| ✔️ | ✔️ | ✔️ |
| **Analog In** | Vbat (measurement) | Vpv (measurement) | Ipv (measurement) |
| ✔️  (+/- 0.02 V) | ✔️  (+/- 0.02 V) | ✔️  (+/- 0.05 A) |
| **Serial Port** | Bluetooth (test message) | Standard serial (test message) | |
| ✔️ | ✔️ | |
| **SPI** | Vfdbk (voltage level) | | |
| ✔️  (+/- 0.005 V) | | |
| **Calculations** | SOC (calculation) | Pin (calculation) | Pout (calculation) |
| ✔️ | ✔️ | ✔️ |