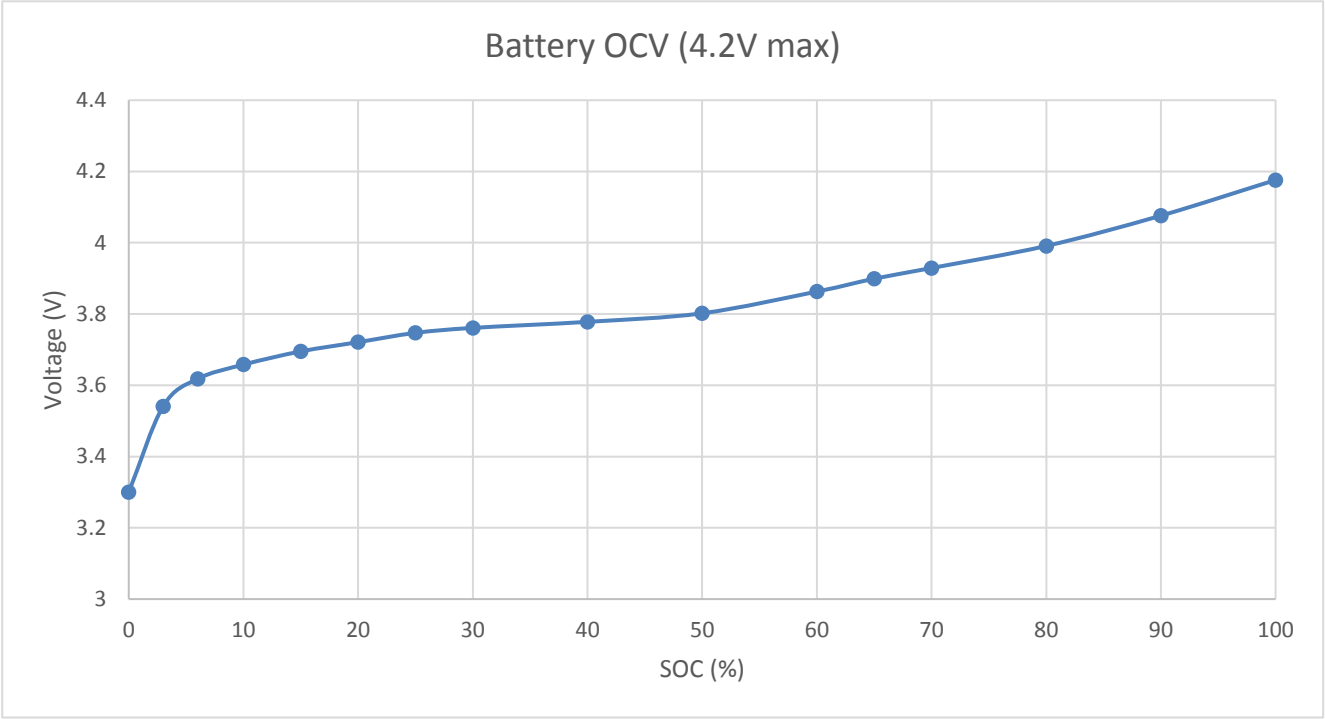


STC3117 OCV registers:
How to fill the STC3117 registers depending on battery characteristics

- Example for a 3.7V battery (4.2V max charge voltage)

| register Address | SOC (%) | register REG_SOCTAB | |
|---------------------|---------|------------------------|------------|
| | | Dec (0.5%) | Hex (0.5%) |
| 0x50 | 0 | 0 | 00 |
| 0x51 | 3 | 6 | 06 |
| 0x52 | 6 | 12 | 0C |
| 0x53 | 10 | 20 | 14 |
| 0x54 | 15 | 30 | 1E |
| 0x55 | 20 | 40 | 28 |
| 0x56 | 25 | 50 | 32 |
| 0x57 | 30 | 60 | 3C |
| 0x58 | 40 | 80 | 50 |
| 0x59 | 50 | 100 | 64 |
| 0x5A | 60 | 120 | 78 |
| 0x5B | 65 | 130 | 82 |
| 0x5C | 70 | 140 | 8C |
| 0x5D | 80 | 160 | A0 |
| 0x5E | 90 | 180 | B4 |
| 0x5F | 100 | 200 | C8 |

| register Address | correspon ding SOC (%) | Default OCV curve voltage (V) | register REG_OCVTAB Value | |
|---------------------|------------------------------|-------------------------------------|---------------------------|---------------|
| | | STC3117 (4.2V max battery) | Dec (0.55 mV) | Hex (0.55 mV) |
| 0x30, 0x31 | 0 | 3.3 | 6000 | 1770 |
| 0x32, 0x33 | 3 | 3.541 | 6438 | 1926 |
| 0x34, 0x35 | 6 | 3.618 | 6578 | 19B2 |
| 0x36, 0x37 | 10 | 3.658 | 6651 | 19FB |
| 0x38, 0x39 | 15 | 3.695 | 6718 | 1A3E |
| 0x3A, 0x3B | 20 | 3.721 | 6765 | 1A6D |
| 0x3C, 0x3D | 25 | 3.747 | 6813 | 1A9D |
| 0x3E, 0x3F | 30 | 3.761 | 6838 | 1AB6 |
| 0x40, 0x41 | 40 | 3.778 | 6869 | 1AD5 |
| 0x42, 0x43 | 50 | 3.802 | 6913 | 1B01 |
| 0x44, 0x45 | 60 | 3.863 | 7024 | 1B70 |
| 0x46, 0x47 | 65 | 3.899 | 7089 | 1BB1 |
| 0x48, 0x49 | 70 | 3.929 | 7144 | 1BE8 |
| 0x4A, 0x4B | 80 | 3.991 | 7256 | 1C58 |
| 0x4C, 0x4D | 90 | 4.076 | 7411 | 1CF3 |
| 0x4E, 0x4F | 100 | 4.176 | 7593 | 1DA9 |



- Example for a 3.8V battery (4.35V max):

| register Address | SOC (%) | register REG_SOCTAB | |
|---------------------|---------|------------------------|------------|
| | | Dec (0.5%) | Hex (0.5%) |
| 0x50 | 0 | 0 | 00 |
| 0x51 | 3 | 6 | 06 |
| 0x52 | 6 | 12 | 0C |
| 0x53 | 10 | 20 | 14 |
| 0x54 | 15 | 30 | 1E |
| 0x55 | 20 | 40 | 28 |
| 0x56 | 25 | 50 | 32 |
| 0x57 | 30 | 60 | 3C |
| 0x58 | 40 | 80 | 50 |
| 0x59 | 50 | 100 | 64 |
| 0x5A | 60 | 120 | 78 |
| 0x5B | 65 | 130 | 82 |
| 0x5C | 70 | 140 | 8C |
| 0x5D | 80 | 160 | A0 |
| 0x5E | 90 | 180 | B4 |
| 0x5F | 100 | 200 | C8 |

| register Address | correspon ding SOC (%) | Default OCV curve voltage (V) | register REG_OCVTAB Value | |
|---------------------|------------------------------|-------------------------------------|---------------------------|---------------|
| | | STC3117 (4.35V max battery) | Dec (0.55 mV) | Hex (0.55 mV) |
| 0x30, 0x31 | 0 | 3.3 | 6000 | 1770 |
| 0x32, 0x33 | 3 | 3.571 | 6493 | 195D |
| 0x34, 0x35 | 6 | 3.651 | 6638 | 19EE |
| 0x36, 0x37 | 10 | 3.675 | 6682 | 1A1A |
| 0x38, 0x39 | 15 | 3.71 | 6745 | 1A59 |
| 0x3A, 0x3B | 20 | 3.743 | 6805 | 1A95 |
| 0x3C, 0x3D | 25 | 3.761 | 6838 | 1AB6 |
| 0x3E, 0x3F | 30 | 3.77 | 6855 | 1AC7 |
| 0x40, 0x41 | 40 | 3.79 | 6891 | 1AEB |
| 0x42, 0x43 | 50 | 3.825 | 6955 | 1B2B |
| 0x44, 0x45 | 60 | 3.914 | 7116 | 1BCC |
| 0x46, 0x47 | 65 | 3.953 | 7187 | 1C13 |
| 0x48, 0x49 | 70 | 3.99 | 7255 | 1C57 |
| 0x4A, 0x4B | 80 | 4.088 | 7433 | 1D09 |
| 0x4C, 0x4D | 90 | 4.197 | 7631 | 1DCF |
| 0x4E, 0x4F | 100 | 4.313 | 7842 | 1EA2 |

