

BQ78350 Authentication and unseal Key

1. Calibration

Must use the 3.18 version battery manage studio and BQ78350 005 version firmware

2. Authentication

Default Key is 01 23 45 67 89 AB CD EF FE DC BA 98 76 54 32 10

A. How to change the SHA-1 KEY

Write 0x37, 0x00+16 bytes SHA-1 KEY to 0x44

Write Block 44 (Hex) 68 (Dec)

0x 37 00 00 01 02 03 04 05
06 07 08 09 0A 0B 0C 0D
0E 0F

B. Authenticate

Write 20 bytes random message to 0x2F ,and read 20 bytes data from 0x2F()

Block Read/Write

Read Block 2F (Hex) 47 (Dec) Type: Hex

0x 4B BB 0C AC 43 86 BD EE
E1 DC 91 28 D1 C4 61 45
86 EB 49 F5

Write Block 2F (Hex) 47 (Dec)

0x 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00
00 00 00 00

Compare the result with the host

Host Authentication Challenge

Key: 0F 0E 0D 0C 0B 0A 09 08 07 06 05 04 03 02 01

Message: 00

Digest: F5 49 EB 86 45 61 C4 D1 28 91 DC E1 EE BD 86 43 AC 0C 88 48

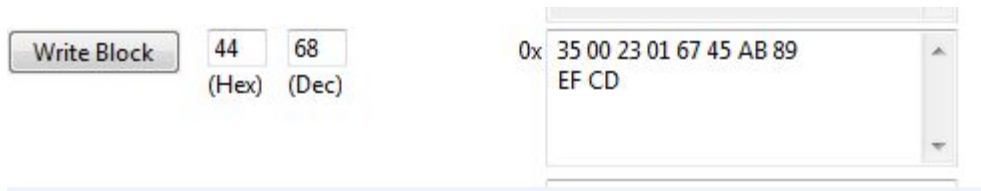
C. Read the SHA-1 key

Can't read the key because of security exposure

3. Seal/Unseal the gauge

A. How to change the unseal KEY

Write 0x35,0x00+8 bytes unseal/Full access KEY to 0x44



B. How to read the unseal KEY

Write 0x35 to 0x00, read 8 bytes from 0x23



C. unseal the gauge

Use the Unseal/full_access button and input the Key.

