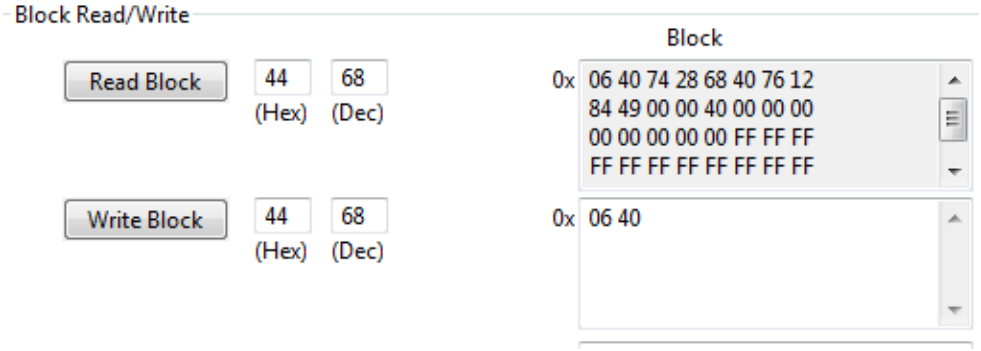
Here is an example of converting floating point numbers to store in the data flash on the bq40z50-R1, bq4050, bq28z610, etc.

Here is the bqStudio data input data.

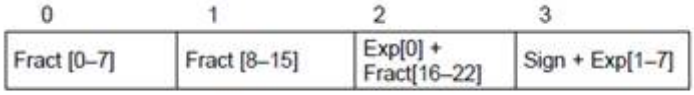
Current			
CC Gain		1.024	mOhm
Capacity Gain		1.024	mOhm

Here is the data as read from the data flash.



The CC Gain data flash data is: 74 28 68 40
The Capacity Gain data flash data is: 76 12 84 49

The floating point data is stored in the data flash in this format.



CC Gain:
Exponent = 40
Fract = 68 28 74

Using an online IEEE 754 convertor, enter 0x40682874 in the Hex field and it converts the data to Decimal: 3.627469

Decimal Representation	3.627469
Binary Representation	01000000011010000010100001110100
Hexadecimal Representation	0x40682874
After casting to double precision	3.627469062805176

Capacity Gain:
Exponent = 49
Fract = 84 12 76

Using an online IEEE 754 convertor, enter 0x49841276 in the Hex field and it converts the data to Decimal: 1081934.8

Decimal Representation	1081934.8
Binary Representation	01001001100001000001001001110110
Hexadecimal Representation	0x49841276
After casting to double precision	1081934.75

The conversion to mohm formulae are:
CC Gain = 3.714528 / x
Capacity Gain = 1107901.13 / x

CC Gain = 3.714528 / 3.627469 = 1.023999 or 1.024 mohm
Capacity Gain = 1107901.13 / 1081934.8 = 1.023999 or 1.024 mohm