

# Data Flash Programming Using the EV Software

Battery Management

This document applies to users that require a small quantity of battery packs for evaluation. For mass production methods, see *Using the BQTester Software* (SLUA352) and *Data Flash Programming/Calibrating the bq20z80 Gas Gauges* (SLUA355).

Values of data-flash parameters are determined based on bq20z80 data sheet (<u>SLUS625</u>). In most cases, the default settings are sufficient, while the most commonly changed values are described in *bq20z80 EVM Data Flash Settings for Num of Serial Cells/Pack Cap* (<u>SLVA208</u>).

## 1.1 Manually changing a value of data-flash constant

- 1. Apply voltage of about 16 V between Pack+ and Pack- pins to power up the PCB.
- 2. Connect the EV2300 board, and start the EV Software.
- 3. Go to the "Data flash" screen.
- 4. Find the class containing the required data-flash parameter, for example "1st Level Safety".
- 5. Find the required parameter in the class, for example "POV Threshold".
- 6. Type the new value directly into the table, and press enter.
- 7. Repeat with other constants if needed.

## 1.2 Saving the data-flash for use with other packs

1. While in the data-flash screen, use the File- $\rightarrow$  Export menu to save the data-flash to a (\*.gg) file

## 1.3 Loading previously saved data-flash constants from a file

- 1. While in the data-flash screen, use File-→ Import menu to load the data-flash from a (\*.gg) file into program memory.
- 2. Push the "write all" button to write all values into the bq20z80 data-flash.
- 3. If existing calibration values in bq20z80 are to be preserved rather than overwritten with the values from the file, use the "Write All, Preserve"→ Calibration button instead.
- 4. Go to the "SBS Screen" and send the "Reset" command (Manufacturer Access 0041) to be sure that all settings go into effect.

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