EV2200 PC Interface Board for Gas Gauge Evaluation

1 Hardware

- Interface Board for Texas Instruments HDQ and SMBus Gas Gauge ICs (ex. bq2060A) (See Table 1 for Supported Products)
- Connects to the Serial Communications Port of a PC (RS232)

2 Software

- On-Screen Display and Programming of Gas Gauge Register Functions
- Programs EEPROM and Calibrates Current, Temperature, and Voltage

3 General Description

The EV2200 interface board enables an IBM-compatible PC to communicate with Texas Instruments SMBus, HDQ, or DQ interface gas gauges via a RS232 serial bus port.

In addition to this board, PC software and an evaluation module or self designed battery monitoring board is required to interpret the gas gauge data to complete the evaluation system. Figure 1 shows the necessary components and Table 1 lists the products supported with this connection board and the ordering information for complete kits.

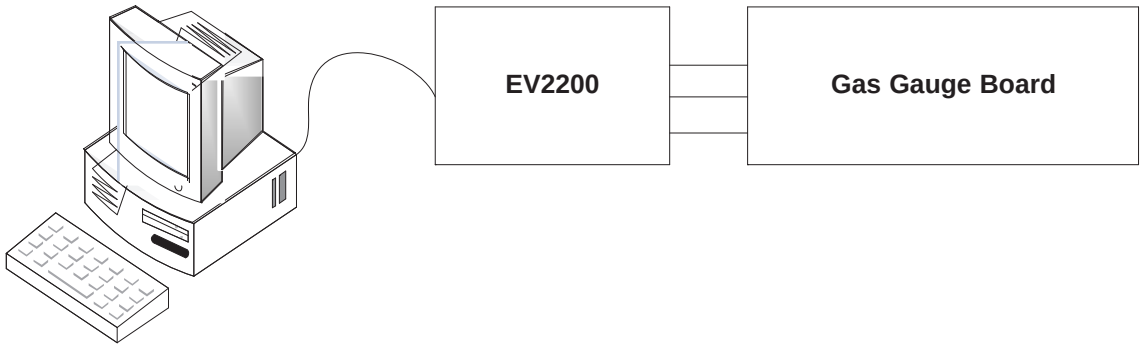

Figure 1. Component Setup

With the EV2200, the user can read/write the gas gauge registers of each IC and monitor the battery's status. In the SBS SMBus environment, the interface board and software allow the battery pack designer to evaluate the function of the ICs, calibrate the intelligent battery circuit for current, temperature, and voltage measurements, and program the external EEPROM.

See the evaluation module user's guides for the respective devices listed in Table 1. Download the PC software in the EV2200 product folder on the Texas Instruments web site.

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Table 1. Devices and Associated EVM's

Gas Gauge IC's	Orderable Part Numbers
bq2013H	bq2013HEVM-001
bq2014H	bq2014HEVM-001
bq2018	bq2018EVM-001
bq2019	bq2019EVM-001
bq2023	bq2023EVM-001
bq2040	bq2040EVM-001
bq2050H	bq2050HEVM-002
bq2052	bq2052EVM-001
bq2060A	bq2060AEVM-001
bq2060A	bq2060AEVM-002
bq2083	bq2083EVM-001
bq26200	bq26200EVM-001
bq26220	bq26220EVM-001
bq26231	bq26231EVM-001

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