Read out *.dfi in EVSW



The file should be output to : "C:\Program Files (x86)\Texas Instruments\bq Evaluation Software\Plugins\Projects" for Windows 7 (make sure you run EVSW as an admin) or "C:\Program Files\Texas Instruments\bq Evaluation Software\Plugins\Projects" for Windows XP

Click on the I2C Pro button to go to the I2C Pro screen.

| IEXAS INSTRUME | NTS | | | RE | AL WO | RLD S | IGN | ΑL | Р | RO | CES |
|--|--|--|-------------------------|--|--|--|---|-------------------|---|-------------------|-----|
| Refresh Start Start Logging | p 🗖 ing Sc | <u>K</u> eep anning | | | | <u>G</u> raphs | | | | | |
| Name | Value | Unit | Log | Scan | Name | | Value | Unit | Log | Scan | _ |
| Control | | hex | • | | Standby Ti | me To Empty | 48 | min | | | |
| Control Status | 0294 | hex | $\overline{}$ | | MaxLoad C | urrent | -500 | mΑ | \checkmark | | |
| At Rate | 0 | mΑ | $\overline{}$ | | MaxLoad T | ime To Empty | 0 | min | \checkmark | | |
| At Rate Time To Empty | 65535 | min | $\overline{\mathbf{v}}$ | | Available E | nergy | 3 | m₩H | $\mathbf{\nabla}$ | $\mathbf{\nabla}$ | |
| Temperature | 22.05 | degC | $\overline{}$ | | Average Po | wer | 0 | mW | | | |
| Voltage | 3358 | m٧ | $\overline{}$ | | TimeToEmp | ity Const Power | 65535 | min | $\mathbf{\nabla}$ | | |
| Flags | 013C | hex | $\overline{\mathbf{v}}$ | | SOH Statu | 5 | 1 | num | $\mathbf{\nabla}$ | | |
| Nominal Avail. Capacity | 8 | mAH | ☑ | | State of He | alth | 98 | % | ☑ | | |
| Full Available Capacity | 986 | mAH | ☑ | V | State of Ch | arge | 1 | % | | 1 | |
| Remaining Capacity | 1 | mAH | $\overline{}$ | | Operation | Config | 0973 | hex | $\mathbf{\nabla}$ | | |
| Full Charge Capacity | 979 | mAH | $\overline{\mathbf{v}}$ | | Application | Status | 00 | hex | $\overline{\mathbf{v}}$ | | |
| Average Current | 0 | mA | $\overline{}$ | | Normalized | Impedance | 288 | mohm | | $\mathbf{\nabla}$ | |
| Time To Empty | 65535 | min | $\overline{}$ | | Instantaneo | ous Current | 4 | mA | $\mathbf{\nabla}$ | | |
| Time To Full | 65535 | min | | | Desta Law To | alar. | | - | | | |
| | | | 1 | | Data Log Ir | IDEX | 0 | num | I.A. | | |
| Standby Current | -10 | mA | V | V | Data Log Ir Data Log Bi | udex uffer | 32767 | mA | V V | V | |
| Standby Current Flags / Status Bits - Control Status - SCANN DLOGEN FAS | -10 ING | mA | | CSV | Data Log Ir Data Log Bi | udex uffer BCA (| 32767 | mA mA | | | |
| Standby Current Flags / Status Bits - Control Status - SCANN DLOGEN FAS INITCOMP HIBERNA | -10 ING | mA SS DOZE | | CSV SLEEP | CCA | JFFER JFFER BCA C RUP_DIS | 32767 | mA mA | | | |
| Standby Current Flags / Status Bits Control Status - SCANN DLOGEN FAS INTCOMP HIBERNA Flags - SCANNING | -10 ING TE SNO | mA ss DOZE | | CSV SLEEP | CCA | BCA C RUP_DIS | 32767 | MP (| | | |
| Standby Current Flags / Status Bits Control Status - SCANN DLOGEN FAS INITCOMP HIBERNA Flags - SCANNING OTC OTD | -10 ING TE SNO | mA ss boze | | CSV SLEEP RSVD | CCA CCA CCA CCA CHG_INH | BCA C RUP_DIS XCHG | 32767 | Mam MA WP C | | | |
| Standby Current Flags / Status Bits Control Status - SCANN DLOGEN FAS INITCOMP HIBERNA Flags - SCANNING OTC OTD RSVD RSVD | -10 ING TE SNC R: OCC | mA SSS DOZE | | CSV SLEEP RSVD VAIT_ID | CCA CCA LDMD CHG_INH BAT_DET | BCA C RUP_DIS XCHG SOC1 | 0 32767 00000000 VOK FC SYSDOWN | MP C | CVFA1 QEN CHG DSG | | |
| Standby Current Flags / Status Bits Control Status - SCANN DLOGEN FAS INITCOMP HIBERNA Flags - SCANNING OTC OTD RSVD RSVD Operation Config - SCA | | mA ss DOZE SVD /_GD | | CSV SLEEP RSVD WAIT_ID | CCA CCA LDMD CHG_INH BAT_DET | BCA C RUP_DIS XCHG SOC1 | U 32767 VOK VOK FC SYSDOW | MP (| CHG DSG | | |
| Standby Current Flags / Status Bits Control Status - SCANN DLOGEN FAS INITCOMP HIBERNA Flags - SCANNING OTC OTD RSVD RSVD Operation Config - SCA RESCAP BATG_OT DT EOV | -10 ING TE SNO R INT R INT | mA SS DOZE SVD /_GD | | CSV SLEEP RSVD AAIT_ID | CCA CCA LDMD CHG_INH BAT_DET PFC_CF60 SOCT_POL | BCA C RUP_DIS XCHG SOC1 IWAKE BATG POL | 22767 32767 VOK FC SYSDOWN RSNS1 RSNS1 | MP (| | | |
| Standby Current Flags / Status Bits Control Status - SCANN DLOGEN FAS INITCOMP HIBERNA Flags - SCANNING OTC OTD RSVD RSVD Operation Config - SCA RESCAP BATG_O INT_FOCV IDSELE Amblicition Config - CO | -10 ING RE SNO NNING R INT. SL | mA SSS DOZE V_GD _BREM EEP | | CSV SLEEP RSVD VAIT_ID FC_CFG1 RMFCC | CCA CCA LDMD CHG_INH BAT_DET PFC_CFG0 SOCI_POL | BCA C RUP_DIS XCHG SOC1 IW/AKE BATG_POL | U 32767 VOK VOK FC SYSDOWN RSNS1 BATL_PO | MP C | CVFA1 QEN CHG DSG RSNSC TEMPS | | |
| Standby Current Flags / Status Bits Control Status - SCANN DLOGEN FAS INITCOMP HIBERNA Flags - SCANNING OTC OTD RSVD RSVD Operation Config - SCA RESCAP BATG_O INT_FOCV IDSELE Application Status - SCA | -10 ING IE SNO NNING R INT. SL ANNING | mA sss coze svb /_GD | | CSV SLEEP RSVD /AIT_ID FC_CFG1 RMFCC | CCA CCA LDMD CHG_INH BAT_DET PFC_CF60 SOCI_POL | BCA C RUP_DIS XCHG SOC1 IWAKE BATG_POL | U 32767 VOK VOK FC SYSDOWN RSNS1 BATL_POI DSVID | MP C | CVFA1 QEN CHG DSG RSNS0 TEMP3 | | |
| Standby Current Flags / Status Bits Control Status - SCANN DLOGEN FAS INITCOMP HIBERNA Flags - SCANNING OTC OTD RSVD RSVD Operation Config - SCA RESCAP BATG_O INT_FOCV IDSELE Application Status - SC, RSVD RSVD | -10 ING TE SNO OCA NNING R INT. A SLANNING R SLA | mA SS DOZE | | CSV SLEEP RSVD RSVD RAIT_ID RMFCC RSVD | CCA CCA LDMD CHG_INH BAT_DET PFC_CF00 SOCI_POL RSVD | BCA C RUP_DIS XCHG SOCI IWAKE BATG_POL RSVD | CVCMDCO 32767 VOK FC SYSDOWN RSNS1 BATL_PO | | CHG DSG CHG DSG RSNSG TEMPS | | |
| Standby Current Flags / Status Bits Control Status - SCANN DLOGEN FAS INITCOMP HIBERNA Flags - SCANNING OTC OTD RSVD RSVD Operation Config - SCA RESCAP BATG_OT INT_FOV IDSELE Application Status - SC. RSVD RSVD | -10 ING TE SNG OCC NNING R INT. 4 SL ANNING R Show F | mA SS DOZE SVD /_GD EEP SVD | | CSV SLEEP RSVD /AIT_ID FC_CFG1 RMFCC | CCA CCA LDMD CHG_INH BAT_DET PFC_CF60 SOCI_POL RSVD | BCA C BCA C RUP_DIS XCHØ SOCI IWAKE BATG_POL RSVD | 0 32767 VOK FC SYSDOWN RSNS1 BATL_POI RSVD | | CHG DSG RSNSC U_PRC | | |
| Standby Current Flags / Status Bits Control Status - SCANN DUOGEN FAS INITCOMP HIBERNA Flags - SCANNING OTC OTD RSVD RSVD Operation Config - SCA RESCAP BATG_OU INT_FOCV IDSELE Application Status - SC. RSVD RSVD | -10 ING TE SNG OC NNING R INT. A SL ANNING R Show F | mA mA sss sooze svb j_gb svb svb svb | | CSV SLEEP RSVD /AIT_ID RMFCC RSVD | CCA CCA LDMD CHG_INH BAT_DET PFC_CF00 SOCI_POL RSVD | BCA C BCA C RUP_DIS XCHG SOCI IWAKE BATG_POL RSVD | U 32767 VOK VOK FC SYSDOWN RSNS1 BATL_POI RSVD | MP C | CHG QEN CHG DSG RSNSG CHG DSG | | |

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The I2C address should be 0xAA. This is representative of the gauge address 0x55 with a write bit. However, EVSW takes care of the read/write bit, so regardless of read/write you can have the address set to 0xAA.

To enter ROM mode send command 0x0F00 to 0x00.

Please note that commands written and read in the I2C pro are in Little Endian format (LSB to MSB)

Please note that information in the Data Block does not automatically clear, so make sure that you backspace to clear out any previous data sent.



Change the I2C address to 0x16. This is representative of the gauge address in ROM mode, 0x0B, with a write bit. However, EVSW takes care of the read/write bit, so regardless of read/write you can have the address set to 0x16.

Read some data to verify the gauge is in ROM mode.

I2CPro should pop-up a small window with the data that was read.





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After the read ou has completed, EVSW should pop up a message window declaring the read successful.

| | q Texas Instruments bq Gas Gauge Evaluation Software - bq27520G3 v3.24 - [Pro screen: I2C over | I2C lines] |
|---------------------------------------|---|---|
| | 🔋 File Window Help | _ <i>8</i> × |
| ter the read out s completed. | Image: Note of the second se | SIGNAL PROCESSIN to hardware. |
| SW should pop- | Read I2C Data Block | |
| a message ndow declaring | I2C Command 00 Read Data Size 02 Read Data | Caution: This screen is for advanced users. Some commands may cause permanent damage to hardware. All Values in hexadecimal(No I2C 16 |
| e read ccessful. | Data I2CPro Firsh I2 Read completed successfully! Write Data | A A |
| | Calibrate I2C Bute Byte Byte 00 Write Byte | Data -Write 12C Data Block 12C Command 00 Data 000f Write Data |
| | | I2C Pro Calibrate Read/Write I2C Byte I2C Command I2C Command I2C Command |
| | 0% Z:\major_customers\Google\Google Glasses\3 configurec Fuel Gauge 0% | bqEASY - bq275xx Programming (Not compatible with bq27350) [C:\Documents and Settings\a0133128\My Documents\B!] Program |
| | Communication OK. DF Task Proj | 100% Execute Program on ba8032 |
| To exit ROM mode bq8032 button, or | e click the Execute Program on power cycle the device. | ³¹ Fuel Gauge |
| | | Communication OK Task Progress: 02 11:46:58.6M |