Questionnaire

| 項目 | 設定 |
| :---: | :---: |
| 1. <br> Are you a power source（provider）and a power sink（consumer）？ Are you a power sink（consumer）only？ |  |
| 2. <br> What is the maximum power that can be sourced？ | － |
| 3. <br> What is the required sink power or power consumed？ | 100W（20V） |
| 4. <br> What is the preferred power role？ | － |
| 5. <br> What is the supported USB Highest Speed？ | No USB data is being used |
| 6. <br> DO you have a pregerred data role？ | － |
| 7. <br> Do you have a Vendor ID provided by the USB－IF？ | No，use the TI Vendor ID in the Vendor Information File（VIF） |
| 8. <br> Do you have a desired Product ID？ | No，use＂0x0000＂as the Product ID |
| 9. <br> Select the battery charger component to integrate： | BQ25790 or BQ25792 |
| $10 .$ <br> What is the battery charging voltage？ <br> （Valid values： $3.00 \mathrm{~V}-18.80 \mathrm{~V}$ ） | 16.8 V |
| 11. <br> What is the battery charging current？ <br> （Valid values：0．050A－5．000A） | 1．6A |
| 12. <br> What si the charge temination current？ <br> （Valid values： $0.040 \mathrm{~A}-1.000 \mathrm{~A} /$ Value must be in steps of 0.04 A ） | 0．04A |
| 13. <br> What is the pre－charge current？ <br> （Valid values： $0.040 \mathrm{~A}-2.000 \mathrm{~A} /$ Value must be in steps of 0.04 A ） | 0．32A |

- Configuration

| Configuration Reqisters | resister name or hex address | Bit Position | \|Fileld | Value | Raw Field Value |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Customer Use ( $0 \times 6$ ) | Customer Use Group 0 | [0:32] | Customer Use Word 1 |  | \|Hex 0x0 Int:0 |
|  |  | [32:64] | Customer Use Word 2 |  | Hex 0x0 Int:0 |
| Interrupt Mask for I2C1 (0x16) | Interrupt Mask for I2C1 | [1] | PD Hardreset | ODefault | Hex: 0x1 Int: 1 |
|  |  | [3] | Plug Insert or Removal | ODefault | Hex: 0x1 Int: 1 |
|  |  | [4] | Power Swap Complete |  | Hex: 0x0 Int: 0 |
|  |  | [5] | Data Swap Complete |  | Hex: 0x0 Int: 0 |
|  |  | [12] | New Contract as Consumer | ODefaut | Hex: 0x1 Int: 1 |
|  |  | [13] | New Contract as Provider | ODefault | Hex: 0x1 Int: 1 |
|  |  | [14] | Source Cap Message Received |  | Hex: 0x0 Int: 0 |
|  |  | [17] | Power Swap Requested |  | Hex: 0x0 Int: 0 |
|  |  | [18] | Data Swap Requested |  | Hex: 0x0 Int: 0 |
|  |  | [20] | USB Host Present | ODefault | Hex: 0x1 Int: 1 |
|  |  | [21] | USB Host No Longer Present | ODefault | Hex: 0x1 Int: 1 |
|  |  | [22] | System Fautt Indicator |  | Hex: 0x0 Int: 0 |
|  |  | [23] | Power Path Switch Changed |  | Hex: 0x0 Int: 0 |
|  |  | [24] | Power Status Updated | ODefault | Hex: 0x1 Int: 1 |
|  |  | [26] | Status Updated | ODefault | Hex: 0x1 Int: 1 |
|  |  | [27] | PD Status Updated | ODefaut | Hex: 0x1 Int: 1 |
|  |  | [30] | CMD1 Complete | ODefault | Hex: 0x1 Int: 1 |
|  |  | [32] | Device Incompatible Error |  | Hex: 0x0 Int: 0 |
|  |  | [33] | Cannot Provide Voltage or Current Error |  | Hex: 0x0 Int: 0 |
|  |  | [34] | Can Provide Voltage or Current Later Error |  | Hex: $0 \times 0$ Int: 0 |
|  |  | [35] | Power Event Occuurred Emror |  | Hex: 0x0 Int: 0 |
|  |  | [36] | Missing Get Capabalities Message Error |  | Hex: $0 \times 0$ Int: 0 Hex: $0 \times 0$ Int: |
|  |  | [38] | Protocol Error |  | Hex: 0x0 Int: 0 |
|  |  | [39] | Message Data Error |  | Hex: $0 \times 0$ Int: 0 |
|  |  | [42] | Sink Transition Completed |  | Hex: $0 \times 0$ Int: 0 Hex: $0 \times 0$ Int: 0 |
|  |  | [46] | Unable to Source Error |  | Hex: 0x0 Int: 0 |
|  |  | [65] | TX Memory Buffer Empty |  | Hex: 0x0 Int: 0 |
|  | Common Interrupt Mask for I2C: | [80] | Patch Loaded | ODefaut | Hex: 0x1 Int: 1 |
|  |  | [81] | Ready for Patch | ODefault | Hex: 0x1 Int: 1 |
|  |  | [82] | I2C Master NACKed |  | Hex: 0x0 Int: 0 |
| Transmint Sink Capabilities (0x33) | Number of Source PDOS | [0:3] | Number Valid PDOS | 0 | Hex: 0x0 Int: 0 |
|  | Number of Sink PDOS | [0:3] | Number Valid PDOs | 4 | Hex: 0x4 Int: 4 |
|  | Sink PDO 1 | [8:18] | Operating Current | 3 | Hex: 0x12C Int: 300 |
|  |  | [18:28] | Voltage | 5 | Hex: 0x64 Int: 100 |
|  |  | [28:30] | Peak Current | 100\% | Hex: 0x0 Int: 0 |
|  |  | [36] | Higher Capability | ODefault | Hex: 0x1 Int: 1 |
|  |  | [38:40] | Supply Type | Fiexed | Hex: 0x0 Int: 0 |
|  | Sink PDO 2 | [70:72] | Supply Type | Fiexed | Hex: 0x0 Int: 0 |
|  |  | [40:50] | Operating Current | 3 | Hex: 0x12C Int: 300 |
|  |  | [50:60] | Voltage | 9 | Hex: 0x84 Int: 180 |
|  |  | [60:62] | Peak Current Higher Capability | 100\% | Hex: 0x0 Int: 0 |
|  | Sink PDO 3 | [102:104] | Supply Type | Fiexed | Hex: 0x0 Int: 0 |
|  |  | [72:82] | Operating Current | 3 | Hex: 0x12C Int: 300 |
|  |  | [82:92] | Voltage | 15 | Hex: 0x12C Int: 300 |
|  |  | [92:94] | Peak Current Higher Capability | 100\% | Hex: 0x0 Int: 0 |
|  | Sink PDO 4 | [134:136] | Supply Type | Fiexed | Hex: 0x0 Int: 0 |
|  |  | [104:114] | Operating Current | 5 | Hex: 0x1144 Int: 500 |
|  |  | [114:124] | Voltage | 20 | Hex: 0x190 Int: 400 |
|  |  | [124:126] | Peak Current Higher Capability | 100\% | Hex: 0x0 Int: 0 |
| IOC Config (0x5C) | GPIo 0 | N/A | Muttiplexing for GPIO 0 Pin | Pin Mutiplexed to GPIO | Hex: 0x0 Int: 0 |
|  |  | [288:295] | GPIO Mapped Event | Disable | Hex: 0x0 Int: 0 |
|  |  | [64] | Initial Value |  | Hex: 0x0 Int: 0 |
|  |  | ${ }^{\text {[96] }}$ | Open Drain Output Enable |  | Hex: 0x0 Int: 0 |
|  |  | [160] | Internal Pull Down Enable |  | Hex: 0x0 Int: 0 |
|  |  | [192] | Internal Pull Up Enable |  | Hex: 0x0 Int: 0 |
|  |  | [256] | GPIO Event Polarity | Direct Mapped Event | Hex: 0x0 Int: 0 |
|  | GPIO 1 | N/A | Multiplexing for GPIO 1 Pin | Pin Multiplexed to GPIO | Hex: 0x0 Int: 0 |
|  |  | [296:303] | GPIO Mapped Event | Disable | Hex: $0 \times 0$ Int: 0 |
|  |  | [65] | Initia Value |  | Hex: 0x0 Int: 0 |
|  |  | ${ }^{[97]}$ [161] | Open Drain Output Enable |  | Hex: $0 \times 0$ Int: 0 |
|  |  | [193] | Internal Pull Up Enable |  | Hex: 0x0 Int: 0 |
|  |  | [257] | GPIO Event Polarity | Direct Mapped Event | Hex: 0x0 Int: 0 |
|  | GPIO 2 | N/A | Multiplexing for GPIO 2 Pin | Pin Multiplexed to GPIO | Hex: 0x0 Int: 0 |
|  |  | [304:311] | GPIO Mapped Event | Disable | Hex: 0x0 Int: 0 |
|  |  | [66] | Initial Value |  | Hex: 0x0 Int: 0 |
|  |  | [98] | Open Drain Output Enable |  | Hex: 0x0 Int: 0 |
|  |  | [162] | Internal Pull Down Enable |  | Hex: 0x0 Int: 0 |
|  |  | [194] | Internal Pull Up Enable |  | Hex: 0x0 Int: 0 |
|  |  | [258] | GPIO Event Polarity | Direct Mapped Event | Hex: 0x0 Int: 0 |
|  | GPIO 3 | N/A | Multiplexing for GPIO 3 Pin | Pin Multiplexed to GPIO | Hex: 0x0 Int: 0 |
|  |  | [312:319] | GPIO Mapped Event | Disable | Hex: $0 \times 0$ Int: 0 |
|  |  | [67] | Initial Value |  | Hex: $0 \times 0$ Int: 0 Hex: $0 \times 0$ Int: |
|  |  | ${ }^{\text {[99] }}$ | Open Drain Output Enable |  | Hex: $0 \times 0$ Int: Hex: $0 \times 0$ Int: |
|  |  | ${ }^{\text {[163] }}$ | Internal Pull Down Enable |  | Hex: $0 \times 0$ Int: 0 |
|  |  | [259] | GPIo Event Polarity | Direct Mapped Event | Hex: 0x0 Int: 0 |
|  | GPIO 4 | N/A | Multiplexing for GPIO 4 Pin | tiplexed to Alternate Function( $\mathrm{D}^{\text {a }}$ | Hex: 0x2 Int: 2 |
|  | GPIO 6 | N/A | Multiplexing for GPIO 5 Pin | Itiplexed to Alternate Function(D) | Hex: 0x2 Int: 2 |
|  |  | N/A | Multiplexing for GPIo 6 Pin | Pin Multiplexed to GPIO | Hex: 0x0 Int: 0 |
|  |  | [336:343] | GPIO Mapped Event | Disable | Hex: 0x0 Int: 0 |
|  |  | [70] | Initial Value |  | Hex: 0x0 Int: 0 |
|  |  | [102] | Open Drain Output Enable |  | Hex: 0x0 Int: 0 |
|  |  | [166] | Internal Pull Down Enable |  | Hex: 0x0 Int: 0 |
|  |  | [198] | Internal Pull Up Enable |  | Hex: $0 \times 0$ Int: 0 Hex: $0 \times 0$ Int: |
|  |  | [262] | GPIO Event Polarity | Direct Mapped Event | Hex: 0x0 Int: 0 |
|  | GPIO 7 | N/A | Multiplexing for GPIO 7 Pin GPIo Mapped Event | Pin Multiplexed to GPIO | Hex: 000 Int: 0 |
|  |  | [344:351] | GpIO Mapped Event | Disable | Hex: $0 \times 0$ Int: 0 |
|  |  | [103] | Open Drain Output Enable |  | Hex: $0 \times 0$ Int: 0 |
|  |  | [167] | Internal Pull Down Enable |  | Hex: 0x0 Int: 0 |
|  |  | [199] | Intermal Pull Up Enable |  | Hex: 0x0 Int: 0 |
|  |  | [263] | GPIO Event Polarity | Direct Mapped Event | Hex: 0x0 Int: 0 |
|  | GPIO 10 | N/A | Multiplexing for GPIO 10 Pin | Pin Multiplexed to GPIO | Hex: 0x0 Int: 0 |
|  |  | [368:375] | GpIO Mapped Event | Disable | Hex: $0 \times 0$ Int: 0 |
|  |  | ${ }^{\text {[103] }}$ | Open Drain Output Enable |  | Hex: $0 \times 0$ O Int: 0 |
|  |  | [167] | Internal Pull Down Enable |  | Hex: 0x0 Int: 0 |
|  |  | [199] | Internal Pull Up Enable | ODefault | Hex: 0x1 Int: 1 |
|  |  | [263] | GPIO Event Polarity | Direct Mapped Event | Hex: 0x0 Int: 0 |
|  | GPIO 11 | N/A | Multiplexing for GPIO 11 Pin | Pin Multiplexed to GPIO | Hex: 0x0 Int: 0 |
|  |  | [376:383] | GPIO Mapped Event | Disable | Hex: $0 \times 0$ Int: 0 |
|  |  | [75] ${ }^{\text {[107] }}$ | Initial Value |  | Hex: $0 \times 0$ Int: 0 Hex: $0 \times 0$ Int: 0 |
|  |  | [171] | Internal Pull Down Enable |  | Hex: 0x0 Int: 0 |
|  |  | [203] | Internal Pull Up Enable | ODefault | Hex: 0x1 Int: 1 |
|  |  | [267] | GPIO Event Polarity | Direct Mapped Event | Hex: $0 \times 0$ Int: 0 |
|  | GPIO 12 | N/A | Multiplexing for GPIO 12 Pin | Pin Multiplexed to GPIO | Hex: $0 \times 0$ Int: 0 |
|  |  | [ [384:391] | GPIO Mapped Event | Disable ODefaut | Hex: $0 \times 0$ Int: 0 |
|  |  | ${ }^{[7108]}$ | Open Drain Output Enable |  | Hex: 0x0 Int: 0 |
|  |  | [172] | Internal Pull Down Enable |  | Hex: 0x0 Int: 0 |
|  |  | [204] | Internal Punt Polaraty | Direct Mapped Event | Hex: ${ }^{\text {Hex: } 0 \times 0 \text { Int: }}$ |

