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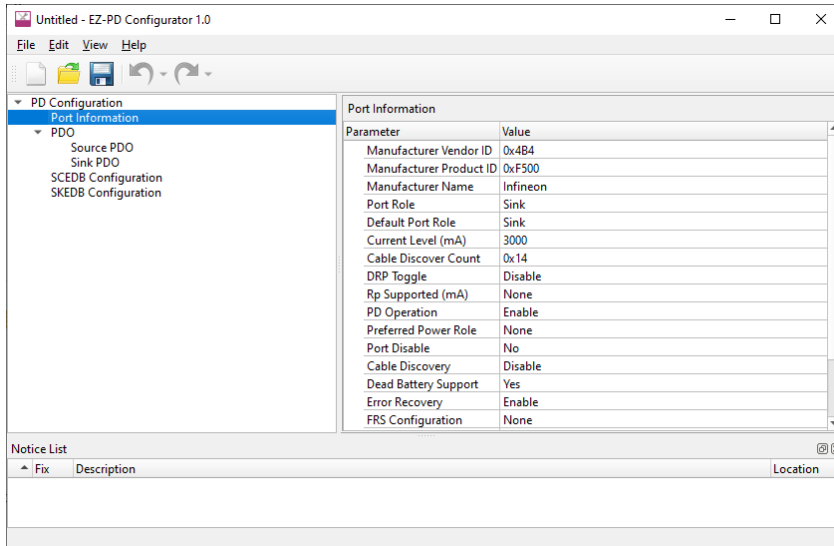
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## Overview

The Easy Power Delivery (EZ-PD) Configurator provides a user-friendly tool for selecting the features and configuring parameters of the PDStack middleware. The tool generates configuration code in c language which can be referenced in the PDStack middleware.



## Supported Software

| Name                               | Version | Link  |
|------------------------------------|---------|---|
| Cypress PDStack Middleware Library | 1.0.0   | <a href="https://github.com/cypresssemiconductorco/pdstack">https://github.com/cypresssemiconductorco/pdstack</a> |

## Definitions

- USBPD – Universal Serial Bus Power Delivery (See [USB Power Deliver Specification Revision 3.0](#))
- PMG1 – Power Delivery Microcontroller Generation 1
- PDO – Power Data Object
- VDO – Vendor Data Object
- SCEDB – Source Capabilities Extended Data Block
- SKEDB – Sink Capabilities Extended Data Block
- EPR – Extended Power Range
- SVID – Standard or Vendor ID
- BSP – Board Support Package

## Launch the EZ-PD Configurator

You can launch the EZ-PD Configurator various ways: as a stand-alone tool, from the Device Configurator, from the Eclipse IDE for ModusToolbox or from the command line. Then, you can either use the generated source with an Eclipse IDE application, or use it in any software environment you choose.

### As a Stand-Alone Tool

You can launch the EZ-PD Configurator as a stand-alone tool without the Eclipse IDE. By default, it is installed here:

```
<install_dir>/ModusToolbox/tools_<version>/ez-pd-configurator
```

On Windows, launch the tool from the **Start** menu.

For other operating systems, navigate to the install location and run the executable.

When opened this way, the EZ-PD Configurator opens with an untitled configuration file (\*.*mtbezpd*). Save it as a new file and provide a file name, or open another existing \*.*mtbezpd* file.

### From the Eclipse IDE

If you are using the Eclipse IDE included with ModusToolbox, you can launch the EZ-PD Configurator by right clicking on a project in the Project Explorer and selecting **ModusToolbox > EZ-PD Configurator**. Or you can use the IDE Quick Panel. Refer to the Eclipse IDE for ModusToolbox User Guide for more details.

Launching the EZ-PD Configurator from the IDE opens the EZ-PD configuration file (*design.mtbezpd*) related to the selected application.

### From the Command Line

You can run the ez-pd-configurator executable from the command line. There is also an ez-pd-configurator-cli executable, which re-generates the source code based on the configuration settings from a command-line prompt or from within batch files or shell scripts. The exit code for the ez-pd-configurator-cli executable is zero if the operation is successful, or non-zero if the operation encounters an error. To use the ez-pd-configurator -cli executable, you must provide at least the `--config` argument with a path to the configuration file.

For more information about the command-line options, run the ez-pd-configurator or ez-pd-configurator-cli executable using the `-h` option.

## Quick Start

This section provides a simple workflow for how to use the EZ-PD Configurator.

1. Launch the EZ-PD Configurator.
2. Configure parameters as required.
3. Save the configuration.

When you save changes in the EZ-PD Configurator, it updates/generates a \*.*mtbezpd* configuration file. The tool also updates/generates *mtbcfg\_ezpd.h* and *mtbcfg\_ezpd.c* files that contain configuration structures that can be used with the EZ-PD Middleware Library. The generated .h and .c files are located in the *GeneratedSource* folder next to the \*.*mtbezpd* file.

Refer to the EZ-PD Middleware Library for more information about this generated code.

## GUI Description

### Menus

#### *File*

- **New** – Creates a new file with new configuration.
- **Open** – Opens the configuration file.
- **Close** – Closes the configuration file.
- **Save** – Saves the existing file.
- **Save As** – Saves the existing file under a different name.
- **Exit** – Closes the configurator.

#### *Edit*

- **Undo** – Undoes the previous change.
- **Redo** – Redoes the last undone change.

#### *View*

- **Notice List** – Shows/hides Notice List. Refer to the [Device Configurator Guide](#) for more information.
- **Toolbar** – Shows/hides the toolbar.
- **Reset View** – Resets the view to the default.

#### *Help*

- **View Help** – Opens this document.
- **About** – Opens the About box for version information.

### Toolbar

The toolbar contains common commands from the File and Edit menus, such as New, Open, and Save. Use the check box under the View menu to show or hide the toolbar.

### Parameter Categories

The left side of the EZ-PD Configurator shows several parameter categories, as follows:

- [Port Information](#)
- [Source PDO](#)
- [Sink PDO](#)
- [Source Capabilities Extended Data Block \(SCEDB\) Configuration](#)
- [Sink Capabilities Extended Data Block \(SKEDB\) Configuration](#)

## Parameters and Values

When you select a parameter category, the right side of the EZ-PD Configurator displays that category’s individual parameters and values, as appropriate. The following sections describe the parameters available for each category.

### Port Information

The Port Information node consists of the following parameters.

| <ul style="list-style-type: none"> <li>PD Configuration                     <ul style="list-style-type: none"> <li>Port Information</li> <li> <ul style="list-style-type: none"> <li>PDO                             <ul style="list-style-type: none"> <li>Source PDO</li> <li>Sink PDO</li> </ul> </li> <li>SCEDB Configuration</li> <li>SKEDB Configuration</li> </ul> </li> </ul> </li> </ul> | <table border="1"> <thead> <tr> <th colspan="2">Port Information</th> </tr> <tr> <th>Parameter</th> <th>Value</th> </tr> </thead> <tbody> <tr><td>Manufacturer Vendor ID</td><td>0x4B4</td></tr> <tr><td>Manufacturer Product ID</td><td>0xF500</td></tr> <tr><td>Manufacturer Name</td><td>CYPRESS</td></tr> <tr><td>Port Role</td><td>Sink</td></tr> <tr><td>Default Port Role</td><td>Sink</td></tr> <tr><td>Current Level (mA)</td><td>3 A</td></tr> <tr><td>Cable Discover Count</td><td>0x14</td></tr> <tr><td>DRP Toggle</td><td>No</td></tr> <tr><td>Rp Supported (mA)</td><td>None</td></tr> <tr><td>PD Operation</td><td>Yes</td></tr> <tr><td>Preferred Power Role</td><td>No Try,Src or Try,Sink supported</td></tr> <tr><td>Port Disable</td><td>No</td></tr> <tr><td>Cable Discovery</td><td>No</td></tr> <tr><td>Dead Battery Support</td><td>Yes</td></tr> <tr><td>Error Recovery</td><td>Yes</td></tr> <tr><td>FRS Configuration</td><td>None</td></tr> <tr><td>VCONN Retain</td><td>No</td></tr> <tr><td>Accessory Mode</td><td>Yes</td></tr> <tr><td>Rp Detach</td><td>Yes</td></tr> <tr><td>PD Revision</td><td>0x01</td></tr> </tbody> </table> | Port Information |  | Parameter | Value | Manufacturer Vendor ID | 0x4B4 | Manufacturer Product ID | 0xF500 | Manufacturer Name | CYPRESS | Port Role | Sink | Default Port Role | Sink | Current Level (mA) | 3 A | Cable Discover Count | 0x14 | DRP Toggle | No | Rp Supported (mA) | None | PD Operation | Yes | Preferred Power Role | No Try,Src or Try,Sink supported | Port Disable | No | Cable Discovery | No | Dead Battery Support | Yes | Error Recovery | Yes | FRS Configuration | None | VCONN Retain | No | Accessory Mode | Yes | Rp Detach | Yes | PD Revision | 0x01 |
|---|--|------------------|--|-----------|-------|------------------------|-------|-------------------------|--------|-------------------|---------|-----------|------|-------------------|------|--------------------|-----|----------------------|------|------------|----|-------------------|------|--------------|-----|----------------------|----------------------------------|--------------|----|-----------------|----|----------------------|-----|----------------|-----|-------------------|------|--------------|----|----------------|-----|-----------|-----|-------------|------|
| Port Information  |  |                  |  |           |       |                        |       |                         |        |                   |         |           |      |                   |      |                    |     |                      |      |            |    |                   |      |              |     |                      |                                  |              |    |                 |    |                      |     |                |     |                   |      |              |    |                |     |           |     |             |      |
| Parameter   | Value  |                  |  |           |       |                        |       |                         |        |                   |         |           |      |                   |      |                    |     |                      |      |            |    |                   |      |              |     |                      |                                  |              |    |                 |    |                      |     |                |     |                   |      |              |    |                |     |           |     |             |      |
| Manufacturer Vendor ID  | 0x4B4  |                  |  |           |       |                        |       |                         |        |                   |         |           |      |                   |      |                    |     |                      |      |            |    |                   |      |              |     |                      |                                  |              |    |                 |    |                      |     |                |     |                   |      |              |    |                |     |           |     |             |      |
| Manufacturer Product ID   | 0xF500   |                  |  |           |       |                        |       |                         |        |                   |         |           |      |                   |      |                    |     |                      |      |            |    |                   |      |              |     |                      |                                  |              |    |                 |    |                      |     |                |     |                   |      |              |    |                |     |           |     |             |      |
| Manufacturer Name   | CYPRESS  |                  |  |           |       |                        |       |                         |        |                   |         |           |      |                   |      |                    |     |                      |      |            |    |                   |      |              |     |                      |                                  |              |    |                 |    |                      |     |                |     |                   |      |              |    |                |     |           |     |             |      |
| Port Role   | Sink   |                  |  |           |       |                        |       |                         |        |                   |         |           |      |                   |      |                    |     |                      |      |            |    |                   |      |              |     |                      |                                  |              |    |                 |    |                      |     |                |     |                   |      |              |    |                |     |           |     |             |      |
| Default Port Role   | Sink   |                  |  |           |       |                        |       |                         |        |                   |         |           |      |                   |      |                    |     |                      |      |            |    |                   |      |              |     |                      |                                  |              |    |                 |    |                      |     |                |     |                   |      |              |    |                |     |           |     |             |      |
| Current Level (mA)  | 3 A  |                  |  |           |       |                        |       |                         |        |                   |         |           |      |                   |      |                    |     |                      |      |            |    |                   |      |              |     |                      |                                  |              |    |                 |    |                      |     |                |     |                   |      |              |    |                |     |           |     |             |      |
| Cable Discover Count  | 0x14   |                  |  |           |       |                        |       |                         |        |                   |         |           |      |                   |      |                    |     |                      |      |            |    |                   |      |              |     |                      |                                  |              |    |                 |    |                      |     |                |     |                   |      |              |    |                |     |           |     |             |      |
| DRP Toggle  | No   |                  |  |           |       |                        |       |                         |        |                   |         |           |      |                   |      |                    |     |                      |      |            |    |                   |      |              |     |                      |                                  |              |    |                 |    |                      |     |                |     |                   |      |              |    |                |     |           |     |             |      |
| Rp Supported (mA)   | None   |                  |  |           |       |                        |       |                         |        |                   |         |           |      |                   |      |                    |     |                      |      |            |    |                   |      |              |     |                      |                                  |              |    |                 |    |                      |     |                |     |                   |      |              |    |                |     |           |     |             |      |
| PD Operation  | Yes  |                  |  |           |       |                        |       |                         |        |                   |         |           |      |                   |      |                    |     |                      |      |            |    |                   |      |              |     |                      |                                  |              |    |                 |    |                      |     |                |     |                   |      |              |    |                |     |           |     |             |      |
| Preferred Power Role  | No Try,Src or Try,Sink supported   |                  |  |           |       |                        |       |                         |        |                   |         |           |      |                   |      |                    |     |                      |      |            |    |                   |      |              |     |                      |                                  |              |    |                 |    |                      |     |                |     |                   |      |              |    |                |     |           |     |             |      |
| Port Disable  | No   |                  |  |           |       |                        |       |                         |        |                   |         |           |      |                   |      |                    |     |                      |      |            |    |                   |      |              |     |                      |                                  |              |    |                 |    |                      |     |                |     |                   |      |              |    |                |     |           |     |             |      |
| Cable Discovery   | No   |                  |  |           |       |                        |       |                         |        |                   |         |           |      |                   |      |                    |     |                      |      |            |    |                   |      |              |     |                      |                                  |              |    |                 |    |                      |     |                |     |                   |      |              |    |                |     |           |     |             |      |
| Dead Battery Support  | Yes  |                  |  |           |       |                        |       |                         |        |                   |         |           |      |                   |      |                    |     |                      |      |            |    |                   |      |              |     |                      |                                  |              |    |                 |    |                      |     |                |     |                   |      |              |    |                |     |           |     |             |      |
| Error Recovery  | Yes  |                  |  |           |       |                        |       |                         |        |                   |         |           |      |                   |      |                    |     |                      |      |            |    |                   |      |              |     |                      |                                  |              |    |                 |    |                      |     |                |     |                   |      |              |    |                |     |           |     |             |      |
| FRS Configuration   | None   |                  |  |           |       |                        |       |                         |        |                   |         |           |      |                   |      |                    |     |                      |      |            |    |                   |      |              |     |                      |                                  |              |    |                 |    |                      |     |                |     |                   |      |              |    |                |     |           |     |             |      |
| VCONN Retain  | No   |                  |  |           |       |                        |       |                         |        |                   |         |           |      |                   |      |                    |     |                      |      |            |    |                   |      |              |     |                      |                                  |              |    |                 |    |                      |     |                |     |                   |      |              |    |                |     |           |     |             |      |
| Accessory Mode  | Yes  |                  |  |           |       |                        |       |                         |        |                   |         |           |      |                   |      |                    |     |                      |      |            |    |                   |      |              |     |                      |                                  |              |    |                 |    |                      |     |                |     |                   |      |              |    |                |     |           |     |             |      |
| Rp Detach   | Yes  |                  |  |           |       |                        |       |                         |        |                   |         |           |      |                   |      |                    |     |                      |      |            |    |                   |      |              |     |                      |                                  |              |    |                 |    |                      |     |                |     |                   |      |              |    |                |     |           |     |             |      |
| PD Revision   | 0x01   |                  |  |           |       |                        |       |                         |        |                   |         |           |      |                   |      |                    |     |                      |      |            |    |                   |      |              |     |                      |                                  |              |    |                 |    |                      |     |                |     |                   |      |              |    |                |     |           |     |             |      |

| Field Name                   | Valid Range  |
|------------------------------|--|
| Manufacturer Vendor ID (0x)  | 0x0000 – 0xFFFF  |
| Manufacturer Product ID (0x) | 0x0000 – 0xFFFF  |
| Manufacturer Name            | Maximum 21 ASCII Characters  |
| Port role                    | 0 -> Sink<br>1 -> Source<br>2 -> Dual Role                             |
| Default port role            | 0 -> Sink<br>1 -> Source   |
| Current level                | 0 -> 900 mA<br>1 -> 1.5 A<br>2 -> 3 A                                  |
| Cable Discover count         | 0x00 – 0x14  |
| DRP toggle enable            | 0 -> No<br>1 -> Yes  |
| Rp supported                 | Bit Mask<br>Bit 0 -> 900 mA Rp<br>Bit 1 -> 1.5 A Rp<br>Bit 2 -> 3 A Rp |
| PD operation enable          | 0 -> No<br>1 -> Yes  |

| Field Name             | Valid Range  |
|------------------------|--|
| Preferred Power role   | 0 -> No Try.Src or Try.Sink supported<br>1 -> Try.Src supported<br>2 -> Try.Sink supported |
| Port disable           | 0 -> No<br>1 -> Yes  |
| Cable Discovery Enable | 0 -> No<br>1 -> Yes  |
| Dead battery support   | 0 -> No<br>1 -> Yes  |
| Error recovery enable  | 0 -> No<br>1 -> Yes  |
| FRS config             | 0 -> None<br>1 -> FRS receive enable<br>2 -> FRS transmit enable                           |
| VCONN retain           | 0 -> No<br>1 -> Yes  |
| Accessory mode enable  | 0 -> No<br>1 -> Yes  |
| Rp detach enable       | 0 -> No<br>1 -> Yes  |

### Source PDO

Source PDO node consists of the following configuration parameters. For more information about Source PDO, refer to USB Power Delivery Specification Revision 3.

| Source PDO          |            |
|---------------------|------------|
| Parameter           | Value      |
| Source PDO Count    | 2          |
| Source PDO 0 Enable | Yes        |
| Source PDO 0        | 0x2701912C |
| Source PDO 1 Enable | Yes        |
| Source PDO 1        | 0x0002D12C |

- Option to select Source PDO count. Maximum count value is 7.
- Option to enable/disable each Source PDO.
- Text box to enter 32-bit value for each Source PDO

### Sink PDO

Sink PDO node consists of following configuration parameters. For more information about Sink PDO, refer to USB Power Delivery Specification Revision 3.

| <ul style="list-style-type: none"> <li>PD Configuration                     <ul style="list-style-type: none"> <li>Port Information</li> <li>PDO                             <ul style="list-style-type: none"> <li>Source PDO</li> <li><b>Sink PDO</b></li> <li>SCEDB Configuration</li> <li>SKEDB Configuration</li> </ul> </li> </ul> </li> </ul> | <table border="1"> <thead> <tr> <th colspan="2">Sink PDO</th> </tr> <tr> <th>Parameter</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Sink PDO Count</td> <td>2</td> </tr> <tr> <td>Sink PDO 0 Enable</td> <td>Yes</td> </tr> <tr> <td>Sink PDO 0</td> <td>0x0001905A</td> </tr> <tr> <td>Sink PDO 0 Min/Max Current</td> <td>0x005A</td> </tr> <tr> <td>Sink PDO 1 Enable</td> <td>Yes</td> </tr> <tr> <td>Sink PDO 1</td> <td>0x9AA42305A</td> </tr> <tr> <td>Sink PDO 1 Min/Max Current</td> <td>0x005A</td> </tr> </tbody> </table> | Sink PDO |  | Parameter | Value | Sink PDO Count | 2 | Sink PDO 0 Enable | Yes | Sink PDO 0 | 0x0001905A | Sink PDO 0 Min/Max Current | 0x005A | Sink PDO 1 Enable | Yes | Sink PDO 1 | 0x9AA42305A | Sink PDO 1 Min/Max Current | 0x005A |
|--|--|----------|--|-----------|-------|----------------|---|-------------------|-----|------------|------------|----------------------------|--------|-------------------|-----|------------|-------------|----------------------------|--------|
| Sink PDO   |  |          |  |           |       |                |   |                   |     |            |            |                            |        |                   |     |            |             |                            |        |
| Parameter  | Value  |          |  |           |       |                |   |                   |     |            |            |                            |        |                   |     |            |             |                            |        |
| Sink PDO Count   | 2  |          |  |           |       |                |   |                   |     |            |            |                            |        |                   |     |            |             |                            |        |
| Sink PDO 0 Enable  | Yes  |          |  |           |       |                |   |                   |     |            |            |                            |        |                   |     |            |             |                            |        |
| Sink PDO 0   | 0x0001905A   |          |  |           |       |                |   |                   |     |            |            |                            |        |                   |     |            |             |                            |        |
| Sink PDO 0 Min/Max Current   | 0x005A   |          |  |           |       |                |   |                   |     |            |            |                            |        |                   |     |            |             |                            |        |
| Sink PDO 1 Enable  | Yes  |          |  |           |       |                |   |                   |     |            |            |                            |        |                   |     |            |             |                            |        |
| Sink PDO 1   | 0x9AA42305A  |          |  |           |       |                |   |                   |     |            |            |                            |        |                   |     |            |             |                            |        |
| Sink PDO 1 Min/Max Current   | 0x005A   |          |  |           |       |                |   |                   |     |            |            |                            |        |                   |     |            |             |                            |        |

- Option to select Sink PDO count. Maximum count value is 7.
- Option to enable/disable each Sink PDO.
- Text box to enter 32-bit value for each Sink PDO
- Text box to enter 16-bit Sink min/max current value for each PDO

### SCEDB Configuration

The Source Capabilities Extended Data Block capabilities node configuration parameter is based on the USB Power Delivery Specification Revision 3, Section 6.5.1.

| <ul style="list-style-type: none"> <li>PD Configuration                     <ul style="list-style-type: none"> <li>Port Information</li> <li>PDO                             <ul style="list-style-type: none"> <li>Source PDO</li> <li>Sink PDO</li> <li><b>SCEDB Configuration</b></li> <li>SKEDB Configuration</li> </ul> </li> </ul> </li> </ul> | <table border="1"> <thead> <tr> <th colspan="2">SCEDB Configuration</th> </tr> <tr> <th>Parameter</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>SCEDB Enable</td> <td>Yes</td> </tr> <tr> <td>VID</td> <td>0x0000</td> </tr> <tr> <td>PID</td> <td>0x0000</td> </tr> <tr> <td>XID</td> <td>0x00000000</td> </tr> <tr> <td>FW Version</td> <td>0</td> </tr> <tr> <td>HW Version</td> <td>0</td> </tr> <tr> <td>Voltage Regulation-Load Step Slew Rate (mA/μs)</td> <td>150</td> </tr> <tr> <td>Voltage Regulation-Load Step Magnitude (%IoC)</td> <td>25</td> </tr> <tr> <td>Holdup Time (ms)</td> <td>0</td> </tr> <tr> <td>LPS Compliant</td> <td>No</td> </tr> <tr> <td>PS1 Compliant</td> <td>No</td> </tr> <tr> <td>PS2 Compliant</td> <td>No</td> </tr> <tr> <td>Low Touch Current EPS</td> <td>No</td> </tr> <tr> <td>Ground Pin</td> <td>Not supported</td> </tr> <tr> <td>Peak Current 1</td> <td>0</td> </tr> <tr> <td>Peak Current 2</td> <td>0</td> </tr> <tr> <td>Peak Current 3</td> <td>0</td> </tr> <tr> <td>Touch Temperature</td> <td>Default</td> </tr> <tr> <td>Source Inputs-External Supplies</td> <td>No external supply</td> </tr> <tr> <td>Source Inputs-Internal Batteries</td> <td>No</td> </tr> <tr> <td>Hot Swappable Batteries</td> <td>0</td> </tr> <tr> <td>Fixed Batteries</td> <td>0</td> </tr> <tr> <td>Source PD Power</td> <td>0</td> </tr> </tbody> </table> | SCEDB Configuration |  | Parameter | Value | SCEDB Enable | Yes | VID | 0x0000 | PID | 0x0000 | XID | 0x00000000 | FW Version | 0 | HW Version | 0 | Voltage Regulation-Load Step Slew Rate (mA/μs) | 150 | Voltage Regulation-Load Step Magnitude (%IoC) | 25 | Holdup Time (ms) | 0 | LPS Compliant | No | PS1 Compliant | No | PS2 Compliant | No | Low Touch Current EPS | No | Ground Pin | Not supported | Peak Current 1 | 0 | Peak Current 2 | 0 | Peak Current 3 | 0 | Touch Temperature | Default | Source Inputs-External Supplies | No external supply | Source Inputs-Internal Batteries | No | Hot Swappable Batteries | 0 | Fixed Batteries | 0 | Source PD Power | 0 |
|--|---|---------------------|--|-----------|-------|--------------|-----|-----|--------|-----|--------|-----|------------|------------|---|------------|---|--|-----|---|----|------------------|---|---------------|----|---------------|----|---------------|----|-----------------------|----|------------|---------------|----------------|---|----------------|---|----------------|---|-------------------|---------|---------------------------------|--------------------|----------------------------------|----|-------------------------|---|-----------------|---|-----------------|---|
| SCEDB Configuration  |   |                     |  |           |       |              |     |     |        |     |        |     |            |            |   |            |   |  |     |   |    |                  |   |               |    |               |    |               |    |                       |    |            |               |                |   |                |   |                |   |                   |         |                                 |                    |                                  |    |                         |   |                 |   |                 |   |
| Parameter  | Value   |                     |  |           |       |              |     |     |        |     |        |     |            |            |   |            |   |  |     |   |    |                  |   |               |    |               |    |               |    |                       |    |            |               |                |   |                |   |                |   |                   |         |                                 |                    |                                  |    |                         |   |                 |   |                 |   |
| SCEDB Enable   | Yes   |                     |  |           |       |              |     |     |        |     |        |     |            |            |   |            |   |  |     |   |    |                  |   |               |    |               |    |               |    |                       |    |            |               |                |   |                |   |                |   |                   |         |                                 |                    |                                  |    |                         |   |                 |   |                 |   |
| VID  | 0x0000  |                     |  |           |       |              |     |     |        |     |        |     |            |            |   |            |   |  |     |   |    |                  |   |               |    |               |    |               |    |                       |    |            |               |                |   |                |   |                |   |                   |         |                                 |                    |                                  |    |                         |   |                 |   |                 |   |
| PID  | 0x0000  |                     |  |           |       |              |     |     |        |     |        |     |            |            |   |            |   |  |     |   |    |                  |   |               |    |               |    |               |    |                       |    |            |               |                |   |                |   |                |   |                   |         |                                 |                    |                                  |    |                         |   |                 |   |                 |   |
| XID  | 0x00000000  |                     |  |           |       |              |     |     |        |     |        |     |            |            |   |            |   |  |     |   |    |                  |   |               |    |               |    |               |    |                       |    |            |               |                |   |                |   |                |   |                   |         |                                 |                    |                                  |    |                         |   |                 |   |                 |   |
| FW Version   | 0   |                     |  |           |       |              |     |     |        |     |        |     |            |            |   |            |   |  |     |   |    |                  |   |               |    |               |    |               |    |                       |    |            |               |                |   |                |   |                |   |                   |         |                                 |                    |                                  |    |                         |   |                 |   |                 |   |
| HW Version   | 0   |                     |  |           |       |              |     |     |        |     |        |     |            |            |   |            |   |  |     |   |    |                  |   |               |    |               |    |               |    |                       |    |            |               |                |   |                |   |                |   |                   |         |                                 |                    |                                  |    |                         |   |                 |   |                 |   |
| Voltage Regulation-Load Step Slew Rate (mA/μs)   | 150   |                     |  |           |       |              |     |     |        |     |        |     |            |            |   |            |   |  |     |   |    |                  |   |               |    |               |    |               |    |                       |    |            |               |                |   |                |   |                |   |                   |         |                                 |                    |                                  |    |                         |   |                 |   |                 |   |
| Voltage Regulation-Load Step Magnitude (%IoC)  | 25  |                     |  |           |       |              |     |     |        |     |        |     |            |            |   |            |   |  |     |   |    |                  |   |               |    |               |    |               |    |                       |    |            |               |                |   |                |   |                |   |                   |         |                                 |                    |                                  |    |                         |   |                 |   |                 |   |
| Holdup Time (ms)   | 0   |                     |  |           |       |              |     |     |        |     |        |     |            |            |   |            |   |  |     |   |    |                  |   |               |    |               |    |               |    |                       |    |            |               |                |   |                |   |                |   |                   |         |                                 |                    |                                  |    |                         |   |                 |   |                 |   |
| LPS Compliant  | No  |                     |  |           |       |              |     |     |        |     |        |     |            |            |   |            |   |  |     |   |    |                  |   |               |    |               |    |               |    |                       |    |            |               |                |   |                |   |                |   |                   |         |                                 |                    |                                  |    |                         |   |                 |   |                 |   |
| PS1 Compliant  | No  |                     |  |           |       |              |     |     |        |     |        |     |            |            |   |            |   |  |     |   |    |                  |   |               |    |               |    |               |    |                       |    |            |               |                |   |                |   |                |   |                   |         |                                 |                    |                                  |    |                         |   |                 |   |                 |   |
| PS2 Compliant  | No  |                     |  |           |       |              |     |     |        |     |        |     |            |            |   |            |   |  |     |   |    |                  |   |               |    |               |    |               |    |                       |    |            |               |                |   |                |   |                |   |                   |         |                                 |                    |                                  |    |                         |   |                 |   |                 |   |
| Low Touch Current EPS  | No  |                     |  |           |       |              |     |     |        |     |        |     |            |            |   |            |   |  |     |   |    |                  |   |               |    |               |    |               |    |                       |    |            |               |                |   |                |   |                |   |                   |         |                                 |                    |                                  |    |                         |   |                 |   |                 |   |
| Ground Pin   | Not supported   |                     |  |           |       |              |     |     |        |     |        |     |            |            |   |            |   |  |     |   |    |                  |   |               |    |               |    |               |    |                       |    |            |               |                |   |                |   |                |   |                   |         |                                 |                    |                                  |    |                         |   |                 |   |                 |   |
| Peak Current 1   | 0   |                     |  |           |       |              |     |     |        |     |        |     |            |            |   |            |   |  |     |   |    |                  |   |               |    |               |    |               |    |                       |    |            |               |                |   |                |   |                |   |                   |         |                                 |                    |                                  |    |                         |   |                 |   |                 |   |
| Peak Current 2   | 0   |                     |  |           |       |              |     |     |        |     |        |     |            |            |   |            |   |  |     |   |    |                  |   |               |    |               |    |               |    |                       |    |            |               |                |   |                |   |                |   |                   |         |                                 |                    |                                  |    |                         |   |                 |   |                 |   |
| Peak Current 3   | 0   |                     |  |           |       |              |     |     |        |     |        |     |            |            |   |            |   |  |     |   |    |                  |   |               |    |               |    |               |    |                       |    |            |               |                |   |                |   |                |   |                   |         |                                 |                    |                                  |    |                         |   |                 |   |                 |   |
| Touch Temperature  | Default   |                     |  |           |       |              |     |     |        |     |        |     |            |            |   |            |   |  |     |   |    |                  |   |               |    |               |    |               |    |                       |    |            |               |                |   |                |   |                |   |                   |         |                                 |                    |                                  |    |                         |   |                 |   |                 |   |
| Source Inputs-External Supplies  | No external supply  |                     |  |           |       |              |     |     |        |     |        |     |            |            |   |            |   |  |     |   |    |                  |   |               |    |               |    |               |    |                       |    |            |               |                |   |                |   |                |   |                   |         |                                 |                    |                                  |    |                         |   |                 |   |                 |   |
| Source Inputs-Internal Batteries   | No  |                     |  |           |       |              |     |     |        |     |        |     |            |            |   |            |   |  |     |   |    |                  |   |               |    |               |    |               |    |                       |    |            |               |                |   |                |   |                |   |                   |         |                                 |                    |                                  |    |                         |   |                 |   |                 |   |
| Hot Swappable Batteries  | 0   |                     |  |           |       |              |     |     |        |     |        |     |            |            |   |            |   |  |     |   |    |                  |   |               |    |               |    |               |    |                       |    |            |               |                |   |                |   |                |   |                   |         |                                 |                    |                                  |    |                         |   |                 |   |                 |   |
| Fixed Batteries  | 0   |                     |  |           |       |              |     |     |        |     |        |     |            |            |   |            |   |  |     |   |    |                  |   |               |    |               |    |               |    |                       |    |            |               |                |   |                |   |                |   |                   |         |                                 |                    |                                  |    |                         |   |                 |   |                 |   |
| Source PD Power  | 0   |                     |  |           |       |              |     |     |        |     |        |     |            |            |   |            |   |  |     |   |    |                  |   |               |    |               |    |               |    |                       |    |            |               |                |   |                |   |                |   |                   |         |                                 |                    |                                  |    |                         |   |                 |   |                 |   |

## SKEDB Configuration

The Sink Capabilities Extended Data Block capabilities node configuration parameter is based on the USB Power Delivery Specification Revision 3, Section 6.5.13.

| Parameter                    | Value          |
|------------------------------|----------------|
| SKEDB Enable                 | Yes            |
| VID                          | 0x4B4          |
| PID                          | 0xF500         |
| XID                          | 0x00000000     |
| FW Version                   | 1              |
| HW Version                   | 1              |
| SKEDB Version                | 1              |
| Load Step Slew Rate (mA/μs)  | 150 (mA/us)    |
| Percent Overload             | 0              |
| Overload Period (ms)         | 0              |
| Duty Cycle                   | 0              |
| VBUS Voltage Droop Tolerance | No             |
| LPS Compliant                | No             |
| PS1 Compliant                | No             |
| PS2 Compliant                | No             |
| Touch Temperature            | Not applicable |
| Hot Swappable Batteries      | 0              |
| Fixed Batteries              | 0              |
| PPS Charging Supported       | No             |
| VBUS Powered                 | Yes            |
| Mains Powered                | No             |
| Battery Powered              | Yes            |
| Unlimited Battery Powered    | No             |
| Sink Minimum PDP             | 0x05           |
| Sink Operational PDP         | 0x05           |
| Sink Maximum PDP             | 0x14           |

## Notice List

The Notice List pane combines notices (errors, warnings, tasks, and notes) from many places in the configuration into a centralized list. If a notice shows a location, you can double-click the entry to edit the parameter. The Notice List pane contains the following columns:

- Icon – Displays the icons for the error, warning, task, or note.
- Fix – This may display a wrench icon that can be used to automatically address the required notice.
- Description – Displays a brief description of the notice.
- Location – Displays the specific tab of the message, when applicable.

For more information about the Notice List, refer to the [Device Configurator Guide](#).

## References

Refer to the following documents for more information, as needed:

- [USB Power Deliver Specification Revision 3.0](#)
- [Cypress PDStack Middleware Library](#)
- [ModusToolbox Device Configurator Guide](#)
- [Eclipse IDE for ModusToolbox User Guide](#)
- Device Datasheets
- Device Technical Reference Manuals



## Version Changes

This section lists and describes the changes for each version of this tool.

| Version | Change Descriptions | Notes |
|---------|---------------------|-------|
| 1.0     | New tool.           |       |

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