13/05/2022

EXAMPLE JCD FOR START-UP MODEL

Specifications :

Batterie	3S	
I charge =	2,5	A
Vbat-CH-REG =	12,6	V
Pbat Maxi =	31,5	W
Rend chargeur =	0,85	
Pin-CH =	37,1	W
P-appareil (hypothèse) =	15	W
P =total Wall plug =	52,1	W

(Wall plug 60W Maxi)

The battery of the device must also be able to charge another battery,
connected to the USB-C-PD connector which normally receives the wall plus USB-C-PD.

Programming the DEMOBOARD, step by step :

STEP 1 :   Hard Config :

Jumper JP2 3S	selected
Jumper JP4 3S Température sens	selected

STEP 2 :   Solft Config :

→ *I launch the GUI application without connecting anything to the PC*
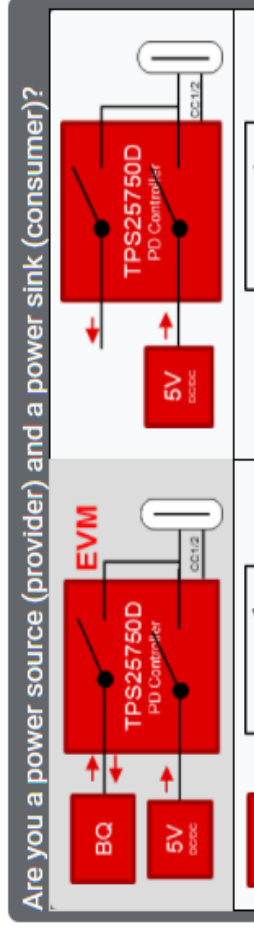
I configure the GUI according to the set specifications

TPS25750 Application Customization Tool

TPS25750 Application Customization Tool   Documents ▾   Help ▾

1. Select your configuration:

Are you a power source (provider) and a power sink (consumer)?

2. What is the maximum power that can be sourced?
- ○ 15W (5V)
- ● 27W (9V)
- ○ 45W (15V)
- ○ 60W (20V)
- ○ 100W (20V)

3. What is the required sink power or power consumed?
- ○ 15W (5V)
- ○ 27W (9V)
- ○ 45W (15V)
- ● 60W (20V)
- ○ 100W (20V)

4. What is the preferred power role?
- ○ Power source (provider)
- ● Power sink (consumer)

5. Do you have a preferred data role?
- ○ No
- ○ Host (PC, hub, etc.) to which devices are connected - Downstream Facing Port (DFP)
- ● Device (USB flash drive, USB monitor, USB mouse, etc.) that connects to another USB Host - Upstream Facing Port (UFP)
- ○ Host & Device - Dual Role Port (DRP)

6. What is the supported USB Highest Speed?

- ○ No USB data is being used
- ◉ USB 2
- ○ USB 3.2 Gen 1
- ○ USB 3.2 Gen 2

7. Do you have a Vendor ID provided by the USB-IF?

- ○ Yes, enter here as a 4-digit hexadecimal number: `0x` `e.g. 0a8f, BC23`
- ◉ No, use the TI Vendor ID in the Vendor Information File (VIF)

8. Do you have a desired Product ID?

- ○ Yes, enter here as a 4-digit hexadecimal number: `0x` `e.g. 123d, FA10`
- ◉ No, use "0x0000" as the Product ID

Battery Charger Configuration

9. Select the battery charger component to integrate:

- ◉ BQ25790 or BQ25792
- ○ BQ25713
- ○ BQ25731

10. What is the battery charging voltage?

`12.6` `∨`

Valid values: 3.00V - 18.80V

11. What is the battery charging current?

3	A

Valid values: 0.050A - 5.000A

12. What is the charge termination current?

0.12	A

Valid values: 0.040A - 1.000A

13. What is the pre-charge current?

0.12	A

Valid values: 0.040A - 2.000A

STEP 3 :   Generation of the binary file :

New Configuration

Advanced Configuration

Export Settings

Import Settings	Browse

Generate Low Region Binary	binary file generation
Generate Full Flash Binary	binary file generation

Flash To Device From Current Configuration
Flash To Device From Binary File
Select Binary File	Browse

JCD : From there I can generate 2 binary files. I choose which one ?

Case 1 :

"Generate Low Region Binary "   **Choice ".C file"**

→ I call my binary file :'' example JCD CHG 1''
It is affected by the extension ''.c''

File : **example JCD CHG 1.c**

"Generate Low Region Binary "   **Choice "Binary"**

File : **example JCD CHG 1.bin**

Case 2 :

"Generate Full Flash Binary "

File : example JCD CHG 1FF.c

File : example JCD CHG 1.bin

→ ChucK, please give me your answer : From there, which file do I retain?

Reminder of guidelines :

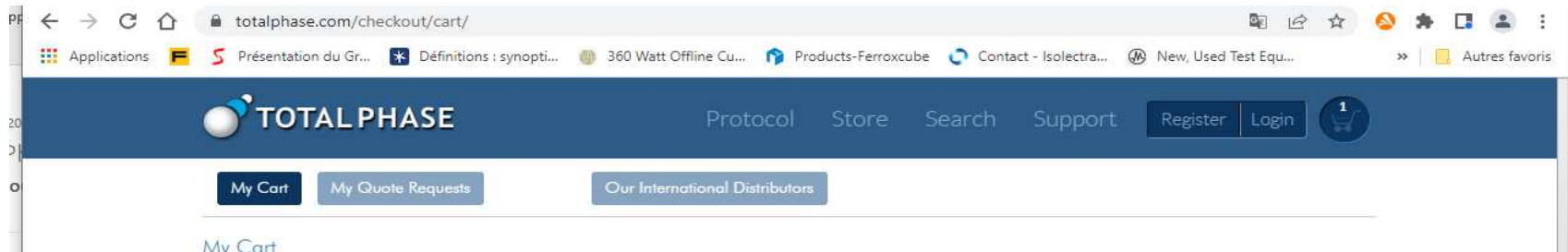*Online* **Chuck Branch** *21 hours ago in reply to jean-claude DESCHAMPS*

TI   Mastermind 22440 points

Jean,

The TPS25750 GUI direct write does not work with the Aardvark, it is designed to only work directly with the TPS25750EVM.. You will need to save off a full flash binary using the GUI and then use the Flash Center application from totalphase to download it to the USB-PD-CHG-EVM

* I have find :   https://www.totalphase.com/products/flash-center/

* I created my account according to the instructions given by ''Total Phase''.

Product Name		Unit Price	Qty	Subtotal	
Aardvark I2C/SPI Host Adapter Part Number: TP240141		$330.00	1	$330.00	🗑

Continue Shopping   Request for Quote   Clear Shopping Cart   Update Shopping Cart

Customers with your items frequently purchase:

I2C/SPI Activity Board	Promira Serial Platform	I2C Development Kit	
Price: $60.00 Add to Cart	From: $900.00 To: $4,950.00 Add to Cart	Price: $705.00 Add to Cart	Subtotal $330.00 Grand Total $330.00 **Proceed to Checkout**

Promira Serial Pl...   I2C/SPI Activity ...   Level Shifter Boo...   10-Pin Grabber Cl...   10-Pin Split Cabl...

Add Checked Items to Shopping Cart

Obviously, since the EEProm is on the master bus of the TPS25750 which is connected to BQ25792 and to the EEPROM,
and to the Aardvark connector, you have to go through the AardVarkk connector and the module
Aardvark I2C/SPI Host Adapter
Part Number: TP240141

Conclusion :

If I want to be able to program the demoboard, I have to buy the AardVark adapter.
In the end, the USB2ANY adapter is therefore of no use!

Chuck , can you confirm it to me
If it is absolutely necessary il will buy it.