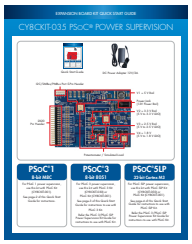
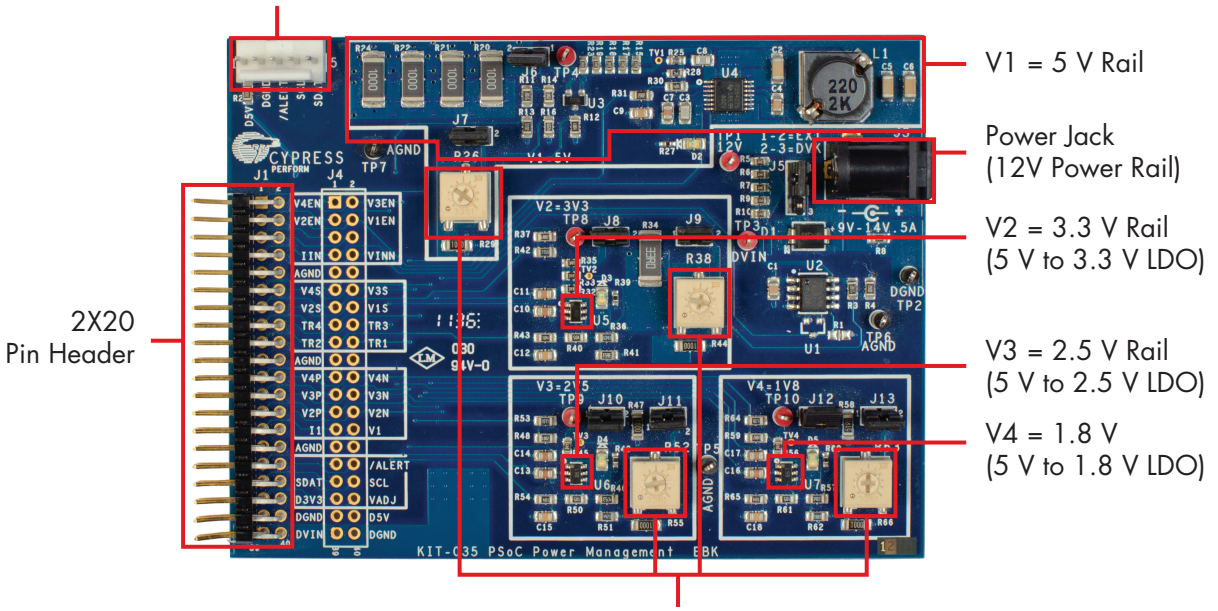
CY8CKIT-035 PSoC® POWER SUPERVISION



Quick Start Guide



DC Power Adapter 12V/2A



PSoC®1
8-bit M8C

For PSoC 1 power supervision, use this kit with PSoC Kit (CY8CKIT-001).

See page-2 of this Quick Start Guide for instructions.

PSoC®3
8-bit 8051

For PSoC 3 power supervision, use this kit with PSoC 3 Kit (CY8CKIT-030) or PSoC Kit (CY8CKIT-001).

See page-3 of this Quick Start Guide for instructions to use with PSoC 3 Kit.

Refer the PSoC 3/PSoC 5LP Power Supervision Kit Guide for instructions to use with PSoC Kit.

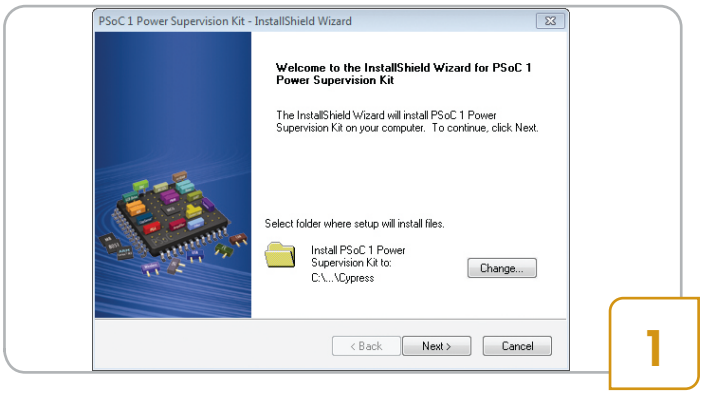
PSoC®5LP
32-bit Cortex M3

For PSoC 5LP power supervision, use this kit with PSoC 5LP Kit (CY8CKIT-050) or PSoC Kit (CY8CKIT-001).

See page-4 of this Quick Start Guide for instructions to use with PSoC 5LP Kit.

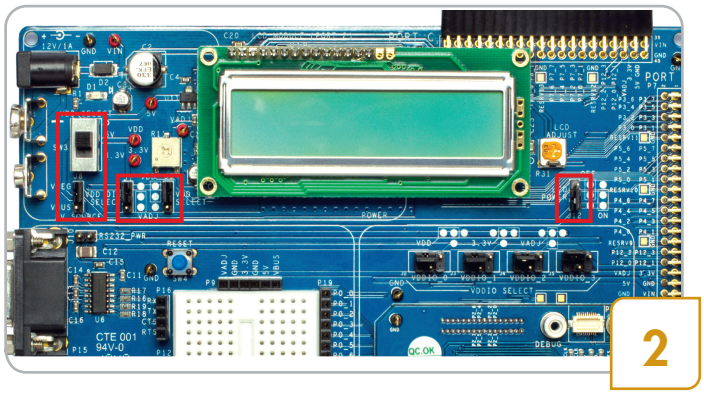
Refer the PSoC 3/PSoC 5LP Power Supervision Kit Guide for instructions to use with PSoC Kit.

PSoC 1 POWER SUPERVISION USING POWER SUPERVISION KIT (CY8CKIT-035) AND PSoC KIT (CY8CKIT-001)



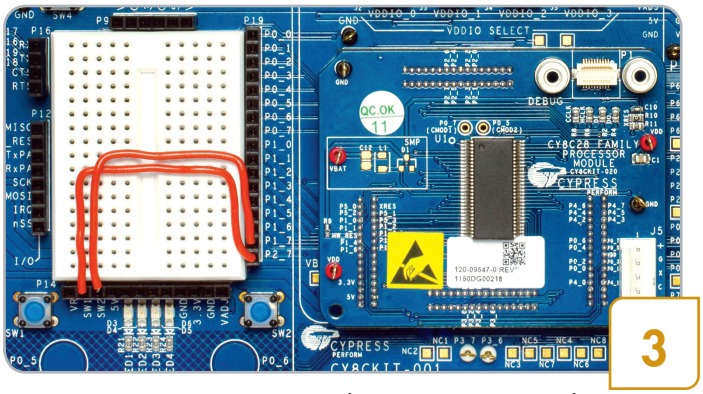
1

- Download and install the PSoC Power Supervision Kit software from www.cypress.com/go/CY8CKIT-015



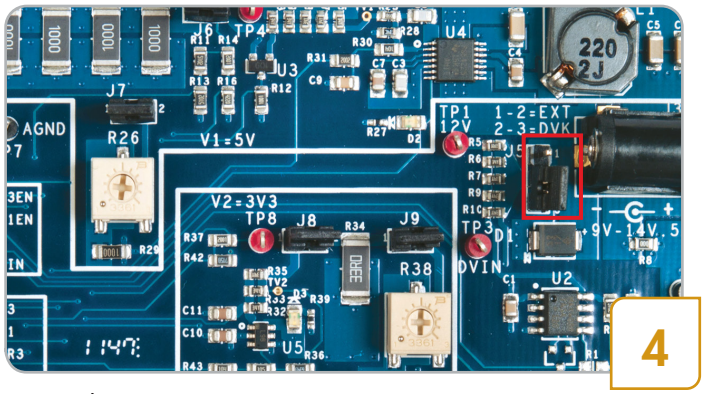
2

- On the PSoC Kit (CY8CKIT-001), set VDD to 5V using SW3, set J8 to VREG, set J7 and J6 to VDD. Attach the LCD to CY8CKIT-001 and set jumper J12 to ON. All other jumpers are 'don't care'



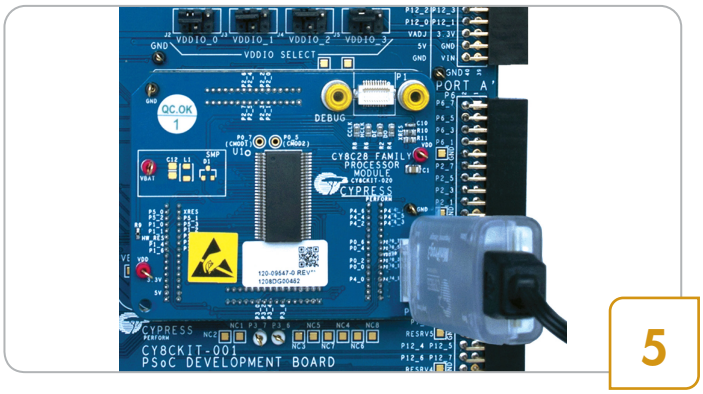
3

- Connect SW1 to P1_7 and SW2 to P2_7 on the CY8CKIT-001
- Connect the CY8C28 family processor module to CY8CKIT-001



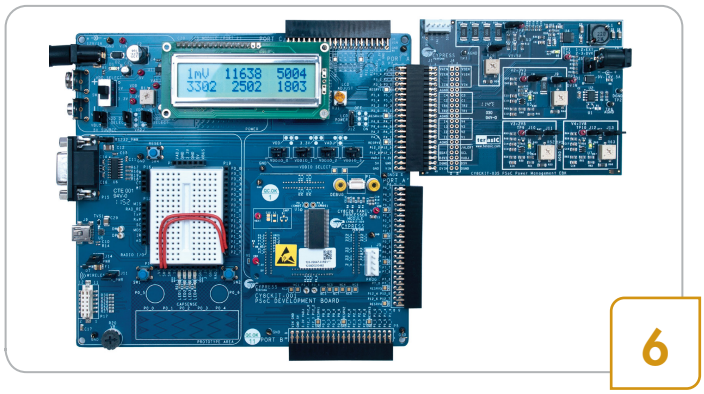
4

- On the Power Supervision Kit (CY8CKIT-035) set jumpers as follows: Insert J5 in position 2-3 and populate J6, J7, J8, J9, J10, J11, J12, and J13



5

- Connect Miniprog3 to the CY8C28 processor module
- Launch PSoC Programmer; load CY8CKIT_015_Example_Project.hex, located at C:\Program Files (x86)\Cypress\PSoC 1 Power Supervision Kit\1.0\Firmware\Hex_File
- In PSoC Programmer, set Programming Mode – Reset; Auto Detection – ON; Protocol – ISSP; Voltage – 5.0
- Power the CY8CKIT-001 and click on Program



6

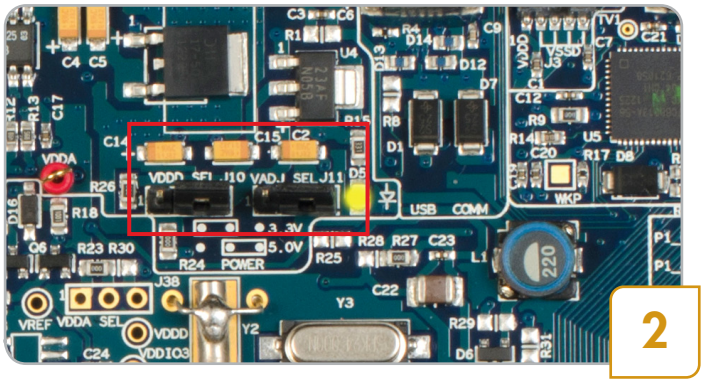
- After programming, disconnect the Miniprog3
- Disconnect power from CY8CKIT-001
- Connect the CY8CKIT-035 into Port A of CY8CKIT-001
- Connect power to CY8CKIT-001
- The LCD displays four rail voltages in mV. Pressing SW1 displays four rail currents in 0.1mA
- For more details, see Example Project section in the PSoC 1 Power Supervision Kit Guide

PSOC 3 POWER SUPERVISION USING POWER SUPERVISION KIT (CY8CKIT-035) AND PSOC 3 KIT (CY8CKIT-030)



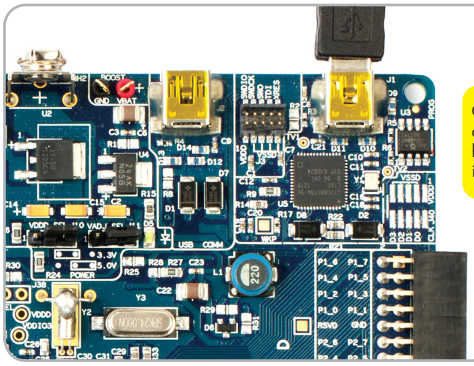
1

- Download and install the PSoC Power Supervision Kit software from www.cypress.com/go/CY8CKIT-035



2

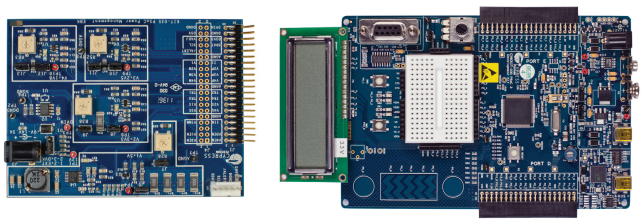
- On the PSoC 3 Kit (CY8CKIT-030) set VDDD and VADJ to 5V using J10 and J11 jumpers
- All other jumpers should be in specified default settings



CAUTION: DO NOT connect the CY8CKIT-035 board at this step. Follow instruction in Step 4

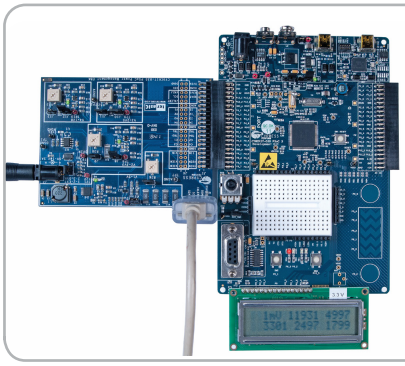
3

- Connect the USB cable to J1 of CY8CKIT-030
- Launch PSoC Programmer, set Programming Mode: Reset; Auto Detection: ON
- Load and program file Power_Demo-030_rev3.hex, located at <Install_Directory>\CY8CKIT-035 EBK\ <version>\Firmware\Hex_Files



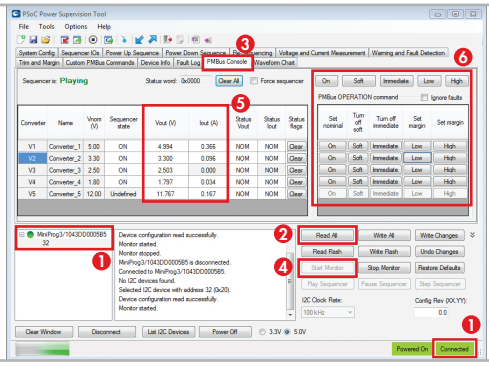
4

- Disconnect the USB cable from CY8CKIT-030
- Ensure the LCD module included with CY8CKIT-030 is mounted
- Connect the Power Supervision Kit (CY8CKIT-035) Expansion Board to Port E of CY8CKIT-030



5

- On the CY8CKIT-035, insert jumper J5 in position 1-2 and populate J6, J7, J8, J9, J10, J11, J12 and J13
- Connect the 12V/2A power supply to J3 of CY8CKIT-035
- Connect the MiniProg3 to the white connector (J2) of CY8CKIT-035



6

- Close PSoC Programmer; launch PSoC Power Supervision Tool. It will automatically connect to the MiniProg3 ❶
- Click Read All to load configuration ❷
- Click PMBus Console tab ❸; Click Start Monitor ❹
- The tool shows voltage and current of the rails ❺
- Click command buttons to control them ❻

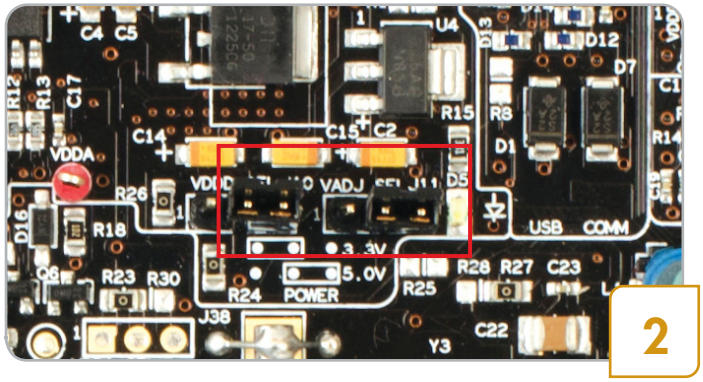
EXPANSION BOARD KIT QUICK START GUIDE

PSoC 5LP POWER SUPERVISION USING POWER SUPERVISION KIT (CY8CKIT-035) AND PSoC 5LP KIT (CY8CKIT-050)



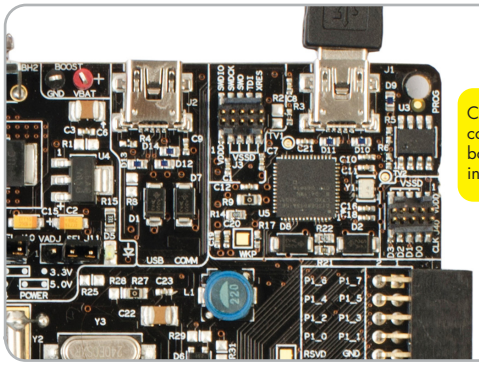
1

- Download and install the PSoC Power Supervision Kit software from www.cypress.com/go/CY8CKIT-035



2

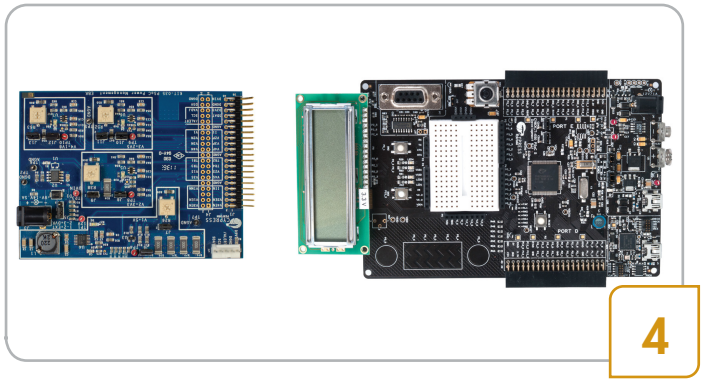
- On the PSoC 5LP Kit (CY8CKIT-050) set jumpers J10, J11 in position 2-3. Disconnect J43, J44. All other jumpers should be in kit default settings



CAUTION: DO NOT connect the CY8CKIT-035 board at this step. Follow instruction in Step 4

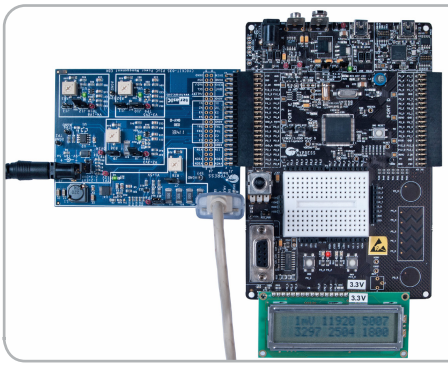
3

- Connect the USB cable to J1 of CY8CKIT-050
- Launch PSoC Programmer, set Programming Mode: Reset; Auto Detection: ON
- Load and program file Power_Demo-050_rev3.hex, located at <Install_Directory>\CY8CKIT-035 EBK\ <version>\Firmware\Hex_Files



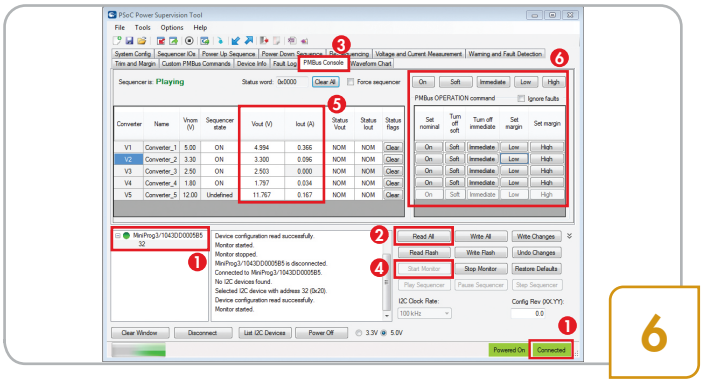
4

- Disconnect the USB cable from CY8CKIT-050
- Ensure the LCD module included with CY8CKIT-050 is mounted
- Connect the Power Supervision Kit (CY8CKIT-035) Expansion Board to Port E of CY8CKIT-050



5

- On the CY8CKIT-035, insert jumper J5 in position 1-2 and populate J6, J7, J8, J9, J10, J11, J12 and J13.
- Connect the 12V/2A power supply to J3 of CY8CKIT-035
- Connect the MiniProg3 to the white connector (J2) of CY8CKIT-035



6

- Close PSoC Programmer; launch PSoC Power Supervision Tool. It will automatically connect to the MiniProg3 ❶
- Click Read All to load configuration ❷
- Click PMBus Console tab ❸; Click Start Monitor ❹
- The tool shows voltage and current of the rails ❺
- Click command buttons to control them ❻

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