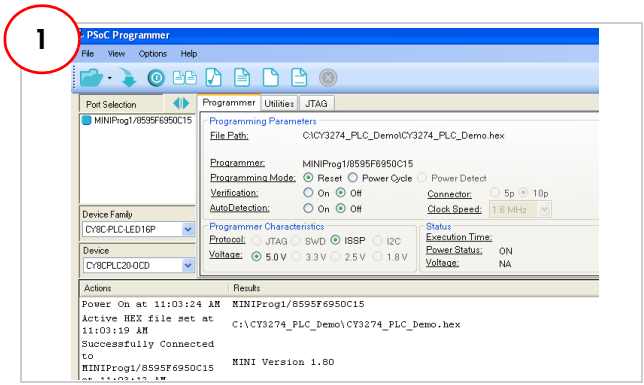
CY3274-HV PLC DEVELOPMENT KIT
QUICK START GUIDE

Using the CY3274-HV High Voltage 110-240 V AC PLC Development Kit

CAUTION: High Voltage (Risk of Electric Shock)
All work in powerline communications must be done with extreme care.
Caution must be exercised when using power supplies or power related equipment.

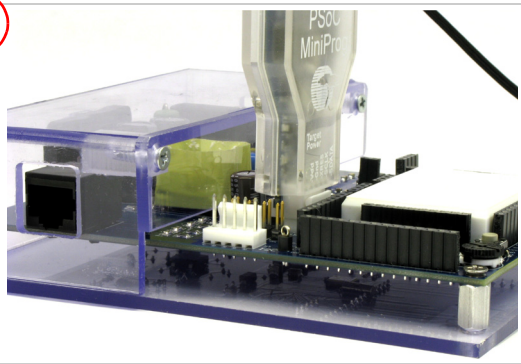
To evaluate this kit, a second CY3274 kit is needed. This guide assumes that two CY3274 kits are available.

1



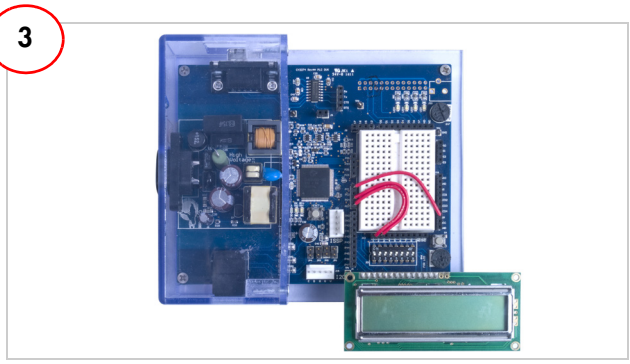
1. Install CY3274 Kit installer from the kit website. Open PSoC Programmer from Start menu.
2. Set AutoDetection to Off, set the 'Device Family' to CY8C-PLC-LED16P, 'Device' to CY8CPLC20-OCD, programming mode to Reset and Verification to either option.
3. Open the *CY3274_PLC_Demo.hex* file from the firmware -> CY3274_PLC_Demo inside CY3274 kit installation folder.

2



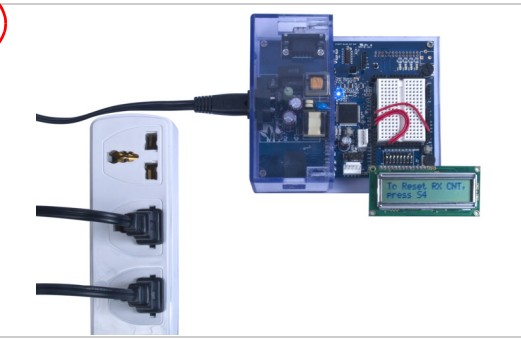
1. Connect the USB cable from the PC to the MiniProg programmer. Connect the MiniProg to the ISSP header J21 on kit 1.
2. In PSoC Programmer, power the device by clicking 'Toggle Power' button. Click the Program button (downward arrow). When the status says 'Programming Successful', remove the MiniProg from the ISSP header.
3. Repeat the above programming operation on kit 2.

3



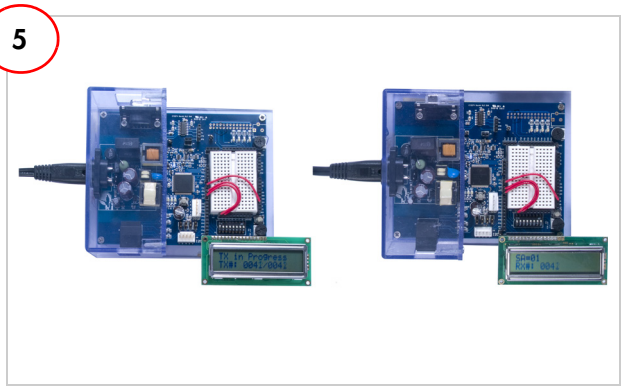
1. Connect the LCD Module to LCD1 header.
2. On kit 1, connect a jumper wire from SW (on J18) to P0[1] (on J13), from P0[4] to one of the 8 DIP switches on J12 (the 8 DIP switch array on S3 is connected to J12) and from P0[7] to another DIP switch.
3. Repeat steps 1 and 2 on kit 2 as well.
4. Put the 2 DIP switches (S3) on kit 1 to ON position to set it as Tx and the 2 DIP switches on kit 2 to OFF position to set it as Rx.

4



1. Connect the power cable from the AC mains to the AC power connector on the first CY3274 kit. The blue LED (DS1) turns on. Repeat the same for kit 2.

5



1. Push the reset button S2 on both nodes. A message "PLC Demo" initially appears on the LCD. The kit will be a transmitter if the DIP switch connected to P0[7] is pulled high, else the kit will act as a receiver.
2. Press the push button (S4) on transmitter to start transmission of packets upto a packet count of 1000. The LCD shows transmission statistics.
3. Transmission can be started or halted (if transmission is in progress) or resumed (if transmission is halted) or restarted (when the packet count of 1000 is completed) by pressing the push button (S4) on the transmitter kit.
4. Received packet count can be reset by pressing the push button (S4) on the receiver kit.

CY3274-HV Top View

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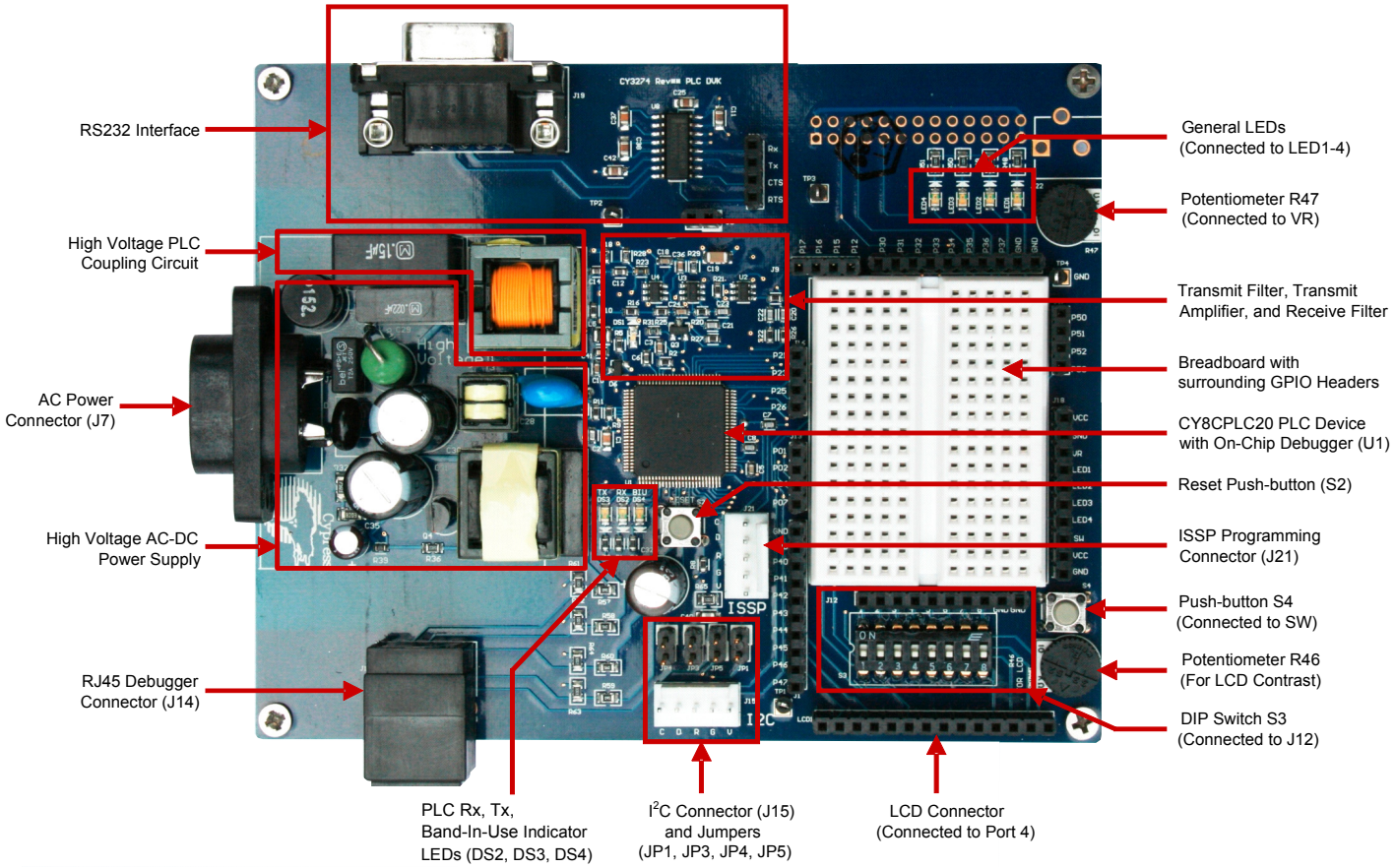
The protective plastic encasing must always be fixed to the board when the kit is in operation.



For the latest information about this kit visit
www.cypress.com/go/plc

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