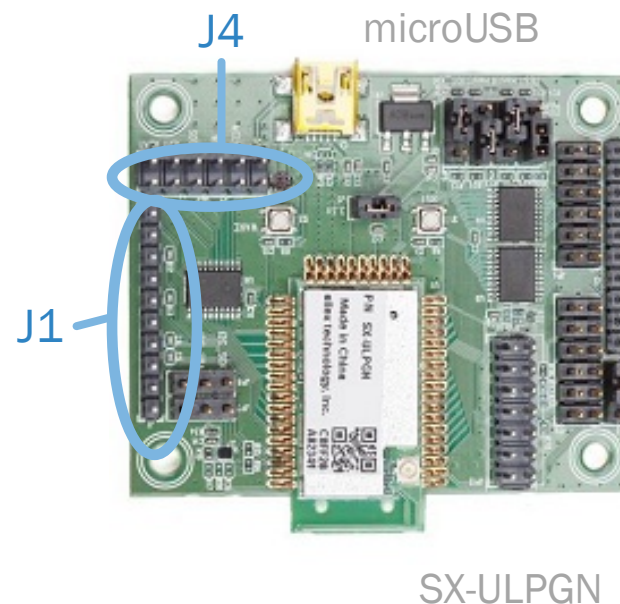


The following items should be present in the Evaluation Kit Box:

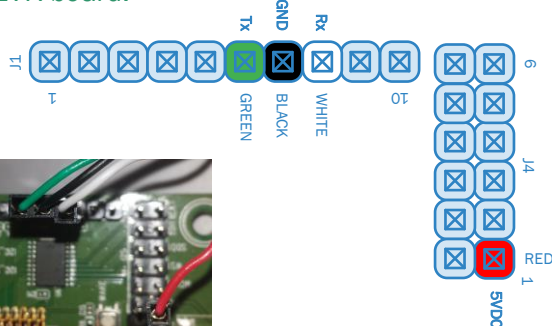
- SX-ULPGN-EVK radio card.
- USB-A to UART adapter cable (Communications & Power)
- This Quick Start Guide

If any of the above items are missing please contact Silex Technology America technical support immediately:

Tel (US): 866.765.8761
 Tel (International): +1.801.748.1199
 e.mail: support@silexamerica.com



1 Connect USB-A to UART adapter cable to headers (J1 and J4) on the EVK board:



2 Connect the USB to UART cable to your computer. This will power up the EVK board.

- 3** Open a terminal emulation application e.g. teraterm, PuTTY, etc. (Serial settings: 115200N81)
- 4** Open a session associated with the COM port assigned to the EVK.
- 5** The terminal session will display a **shell>** prompt. You now have access to the demo platform console, configuration and evaluation of the system is covered in the next section.

Full documentation on the SX-ULPGN can be found on the Silex and Arrow Websites.

The SX-ULPGN is based upon the Qualcomm QCA4010 chipset. Hardware and software SDK's can be found on the Qualcomm Developer Network (QDN.com)

Configure WPA2-PSK USING CONSOLE

..... SX-ULPGN-EVK

Prior to configuring the interface you will need to either set-up a test wireless network or know which available wireless network you want to connect the EVK to. In either case you will need to know the following information prior to attempting to connect:

- Network SSID.
- Security configuration and appropriate credentials. The following uses WPA2-PSK, you will need to know the PSK.

1

Set the passphrase of the Wireless network (using WPA2 PSK) you wish to connect to. Use the following command to set the passphrase:
`wmiconfig --p <passphrase>`

2

Set the encryption protocol to CCMP using:
`wmiconfig --wpa 2 CCMP CCMP`

3

Set the SSID of the wireless network you wish to connect to, using:
`wmiconfig --connect <ssid>`

4

After the SSID is set and step #3 is completed the following prompt is displayed:

Setting SSID to <ssid>
Connected to <ssid>. bssid = <bssid>. Channel = <#>
Connected to <ssid>. Auth completed

5

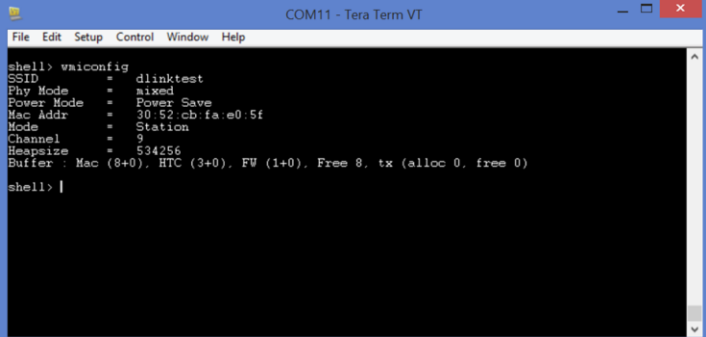
To get an IP address, make sure DHCP is enabled on the AP. Use the command:
`wmiconfig --ipdhcp`

6

When the DHCP process is completed the EVK will display the following:
`_dhc_setip Got IP address <IP Address>`

7

Check the connection status using the command `wmiconfig`.



```
COM11 - Tera Term VT
File Edit Setup Control Window Help
shell> waiconfig
SSID = dlinktest
Phy Mode = mixed
Power Mode = Power Save
Mac Addr = 30:52:cb:fa:e0:5f
Mode = Station
Channel = 9
Heapsize = 534256
Buffer = Mac (0+0), HTC (3+0), FW (1+0), Free 8, tx (alloc 0, free 0)
shell> |
```

The SX-ULPGN-EVK supports the use of a JTAG interface for programming of device firmware. A compatible JTAG adapter is available directly from Arrow Electronics.

The compatible JTAG devices part number is **FTDI C232HM-DDHSL-0**.



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Links:

Qualcomm QDN:
SX-ULPGN-EVK:

<https://developer.qualcomm.com/hardware/qca4010>
<http://silexamerica.com/products/connectivity-solutions/embedded-wireless/loT-Modules/sx-ulpgn-evk>

Arrow Purchase Link: <https://www.arrow.com/en/products/sx-ulpgn-evk/silex-technology-america>