

# WiLink™ 8 Wi-Fi and BT/BLE Pmod Adaptor

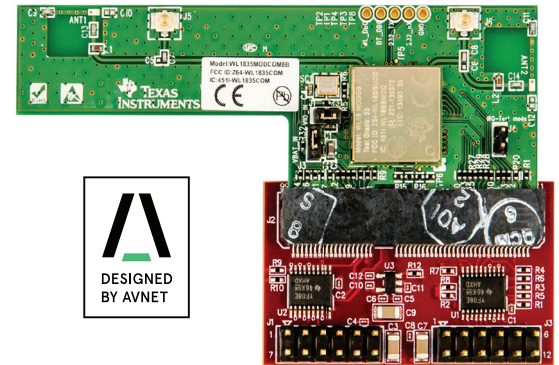
The WiLink™ 8 Wi-Fi®, Bluetooth® and Bluetooth Low Energy (BLE) Pmod™ Adaptor is a small adaptor card that enables the connection of the Texas Instrument WL1835MODCOM8 (2.4 GHz) and WL1837MODCOM8I (5.0 GHz) wireless evaluation boards to several of Avnet's "Zed-series" development boards. When combined with one of the Texas Instruments WiLink 8 eval boards (not included), the adaptor adds wireless connectivity to the Xilinx Zynq®-7000 All Programmable SoC solutions. The WiLink 8 adaptor uses two Digilent compatible Pmod connectors to facilitate the connection of the WiLink 8 board to either ZedBoard, MicroZed, PicoZed, or the Mini Module Plus. Sustained high throughput WLAN connectivity is ensured by implementing the host interface between the Zynq processor and the wireless module with a 4-bit wide SDIO interface clocked at 50MHz. A UART-based Bluetooth/BLE interface is supported via a separate Pmod-compatible connector.

The included documentation and example designs demonstrate the software build process using Yocto and Xilinx's Open Source Linux Distribution. Details on how to add Wi-Fi, Bluetooth and BLE are covered in detail, helping developers quickly add wireless capabilities for Internet of Things, multimedia, industrial and home automation, security, and M@M industrial applications.

## FEATURES

- Dual Pmod-compatible adaptor for pre-certified WiLink™ 8 wireless module boards from Texas Instruments (WiLink™ 8 boards must be purchased separately)
- 1.8V level-shifters for COM8 connector I/O (allows connection to any Xilinx VCCIO voltage)
- WL1835MODCOM8 (2.4 GHz) and WL1837MODCOM8I (5.0 GHz WiLink™ 8 wireless modules are both supported.
- WLAN interface uses SDIO (4bit) routed via PS MIO pins, clocked at 50MHz
- WLAN interface includes an "Out of Band", dedicated hardware interrupt pin
- Separate WLAN\_EN and BT\_EN enable pins are provided
- Bluetooth/BLE interface uses UART (HCI transport) routed via FPGA's PL EMIO pins
- Level-shifted BT\_WAKE\_HOST and WLAN RS232 diagnostic signals are provided on the PL Pmod connector.

To purchase this kit, visit <http://microzed.org/product/wilink-8-adaptor>



## COMPATIBLE WITH

**/ZEDBOARD™**  
**/MICROZED™**  
**/PICOZED™**

## KIT INCLUDES

### Hardware

- Avnet WiLink™ 8 Wi-Fi and BT/ BLE Pmod Adaptor board

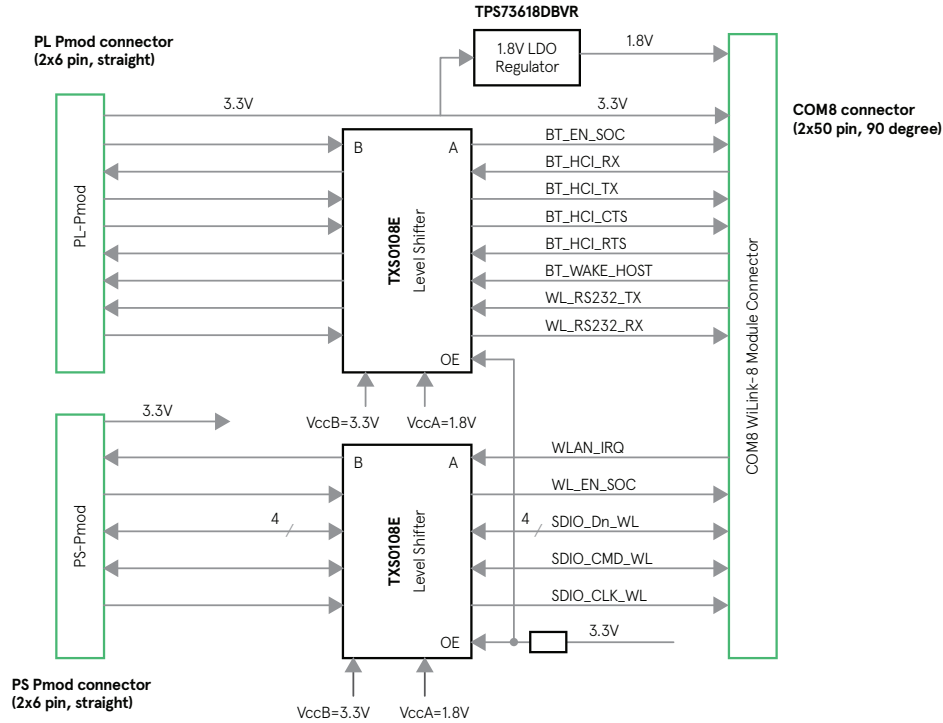
### Software

- Downloadable Wi-Fi Webserver Reference Design for MicroZed SOMs based on Xilinx Open Source Linux distribution
- Downloadable ArchiTech Yocto SDK plus applicable scripts for efficient Linux builds

## TARGET APPLICATIONS

- High throughput Wi-Fi connected Zynq-based Embedded applications
- Bluetooth connected Zynq-based Embedded applications
- Bluetooth Low Energy connected Zynq-based Embedded applications

## BLOCK DIAGRAM



## FEATURED MANUFACTURERS



## PARTS

Part Number	Description	Resale
AES-PMOD-WILINK8-G	WiLink™ 8 Wi-Fi and BT/BLE Pmod Adaptor	\$34 USD

## RELATED PARTS

Part Number	Description	Resale
WL1835MODCOM8B	WiLink™ 8 Module 2.4 GHz WiFi® + Bluetooth® COM8 Evaluation Module	\$39.79 USD
WL1837MODCOM8I	WiLink™ 8 Dual Band 2.4 and 5 GHz Wi-Fi® + Bluetooth® COM8 Evaluation Module	Call for Quote
AES-Z7MB-7Z010-G	MicroZed Evaluation Kit	\$199 USD
AES-MBCC-IO-G	MicroZed /O Carrier Card	\$149 USD
AES-Z7PZ-7Z010-SOM-G	PicoZed 7010	\$249 USD
AES-PZCC-FMC-G	PicoZed FMC Carrier Card	\$425 USD
AES-Z7EV-7Z020-G	ZedBoard	\$395 USD

Countries Available for Purchase: Americas, EMEA, Asia, Japan

## CONTACT INFORMATION

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