

LS RESEARCH Wireless Modules and Dev Kits



TIWI-BLE TRANSCIVER MODULES

Features:

- 2.4 GHz IEEE 802.11 b/g/n
- Bluetooth 2.1+EDR, Power Class 1.5
- Full support for BT4.0 BLE and ANT
- Miniature footprint: 18 mm x 13 mm
- Terminal for PCB/Chip antenna feeds
- Integrated band-pass filter
- Worldwide acceptance: FCC (USA), IC (Canada), and CE (Europe)
- Based on Texas Instruments WL1271L Transceiver
- Seamless integration with TI OMAP™ application processor
- SDIO host data path interfaces
- RoHS compliant



MOUSER STOCK NO.	LS Research Part No.	Description	Price Each			
			1	50	100	1000
741-450-0064	450-0064	TIWI-BLE Module with U.FL connector for external antenna	23.75	23.00	22.50	21.75
741-450-0097	450-0097	COM6L-BLE Adapter Card	42.64	-	-	-

PROFLEX ZIGBEE TRANSCIVER MODULES

Features:

- 2.4GHz Output Frequency
- 100mW output power
- Long range: 4000 feet
- Miniature footprint: 0.9" x 1.63"
- Integrated PCB F antenna or U.FL connector for external antenna
- Worldwide acceptance: FCC, IC and ETSI
- Powerful Texas Instruments 256k MSP430 with 802.15.4 MAC or ZigBee Stack
- LSR serial interface based on 802.15.4 MAC
- Low power operation
- RoHS compliant

MOUSER STOCK NO.	LS Research Part No.	Description	Price Each			
			1	50	100	1000
741-450-0075	450-0075	ProFLEX01-R2 Module with PCB F Antenna	29.61	29.00	28.43	26.65
741-450-0076	450-0076	ProFLEX01-R2 Module with U.FL connector for external antenna	31.24	30.60	29.99	28.11
741-450-0004	450-0004	ProFLEX01-R2 Development Kit with F antenna	345.83	-	-	-

SI-FLEX

The SiFLEX module is a high performance 900MHz IEEE 802.15.4 radio (AT86RF212 and RF amplifier circuit) and microcontroller (ATXMEGA256A3) in a cost effective, pre-certified footprint. Full debug and programming capabilities are included to develop custom applications. Easily load the ZigBee or MAC stack onto the module and create your own network.

Features:

- 900MHz DSSS 802.15.4/ZigBee/6LoWPAN Transceiver
- Very Versatile, Ultra Low Power Microcontroller Platform
- Serial Communications API (UART)
- Simple SiFLEX Network Protocol: Star Networks
- Simple Repeating
- AES Encryption
- Data Rate up to 1Mbps
- Open Hardware Platform to Enable User Developed Application Code
- 250mW RF Output Power
- RF Sensitivity up to -102dBm
- FCC/IC Approved (pending)
- 2.0V to 3.45V Operation
- 256K Flash/16K RAM/4K EEPROM
- Power Consumption: 300mA in Transmit
- 30mA in Receive
- <5uA in Sleep

MOUSER STOCK NO.	LS Research Part No.	Description	Price Each			
			1	50	100	1000
741-LS900-SI-02-A30	450-0017	Si-FLEX with Wire Antenna	39.90	38.86	37.88	37.42
741-LS900-SI-02-A20	450-0016	Si-FLEX with U.FL Connector	43.23	42.10	41.04	40.53
741-LSDEV-SI02-A30	450-0021	Si-FLEX Development Kit	299.00	-	-	-
Accessories						
741-001-0002	001-0002	900MHz Dipole Antenna for Si-Flex U.FL Module	15.00	14.85	14.50	14.00
741-080-0001	80-0001	U.FL to Reverse Polarity-SMA Bulkhead Cable for Si-Flex U.FL Module	4.40	4.10	4.07	4.00
741-450-0060	450-0060	SIFLEX02 Shield for Arduino W/Wire Antenna	47.50	45.00	42.50	40.65

SIFLEX ZIGBEE TRANSCIVER MODULES

Features:

- 900MHz Output Frequency
- 750mW output power
- Long range
- Up to 1Mbps RF data rate
- Miniature footprint: 0.9" x 1.63"
- Multiple antenna options
- Dual antennas
- Agency Approvals: FCC and IC
- Powerful Atmel 256k ATXMEGA256A3 with 802.15.4 MAC or ZigBee Stack
- LSR serial interface based on 802.15.4 MAC
- Low power operation
- RoHS compliant

MOUSER STOCK NO.	LS Research Part No.	Description	Price Each			
			1	50	100	1000
741-450-0047	450-0047	SIFLEX02-HP Module with U.FL connectors for dual external antennas	69.85	68.42	67.05	62.86
741-450-0084	450-0084	SIFLEX02-HP U.FL Development Kit	415.00	-	-	-

TIWI

TIWI5 Transceiver Module

Features:

- 802.11 a/b/g/n and Bluetooth® 2.1+EDR, 3.0, 4.0 (BLE), and ANT compliant
- 2.4 and 5.8GHz operation
- Supports requirements for WiFi Protected Access (WPA and WPA2.0) and IEEE 802.11i
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- Integrated band-pass filters
- Supports requirements for WiFi Protected Access (WPA and WPA2.0) and IEEE 802.11i
- Cost saving module level certification accepted worldwide: FCC (USA), IC (Canada), and ETSI (Europe)
- Compact design based on Texas Instruments WiLink™ 6.0 WL1273L transceiver
- Seamless integration with TI OMAP™ application processors
- SDIO host data path interfaces
- Bluetooth advanced audio interfaces
- Low power operation modes
- RoHS compliant

Specifications:

- Vcc min: 3.0V
- Vcc max: 4.8V
- Temp range: -40 to +85°C
- Miniature footprint: 18mm x 13mm
- Low height profile: 1.9mm

MOUSER STOCK NO.	LS Research Part No.	Description	Price Each			
			1	50	100	1000
741-450-0053	450-0053	TIWI5-R2 Module with Terminal for PCB/Chip Antenna Feeds	45.19	43.10	41.20	38.90
741-450-0085	450-0085	COM6L-T5 TIWI5 Adapter Card with U.FL	61.23	-	-	-

TIWI-R2 Transceiver Module

The TIWI-R2 module is a high performance 2.4GHz IEEE 802.11 b/g/n Bluetooth 2.1+EDR radio in a cost effective, pre-certified footprint. The module realizes the necessary PHY/MAC layers to support WLAN applications in conjunction with a host processor over a SDIO interface. The module also provides a Bluetooth platform through the HCI transport layer. Both WLAN and Bluetooth share the same antenna port.

Features:

- IEEE 802.11 b,g,n,d,e,i compliant
- Typical WLAN Transmit Power: 20.0dBm, 11Mbps, CCK (b) 14.5dBm, 54Mbps, OFDM (g) 12.5dBm, 65Mbps, OFDM (n)
- Output Power: 9.5dBm, Class 1.5
- Bluetooth 2.1+EDR, Power Class 1.5
- Typical WLAN Transmit Power: -89dBm, 8% PER, 11Mbps
- -76dBm, 10% PER, 54Mbps
- -73dBm, 10% PER, 65Mbps
- Miniature footprint: 18mm x 13mm
- Low height profile: 1.9mm
- U.FL connector for external antenna
- Terminal for PCB/Chip antenna feeds
- Integrated band-pass filter
- Worldwide acceptance: FCC (USA), IC (Canada), and ETSI (Europe)
- Compact design based on Texas Instruments WL1271WSP Transceiver
- Seamless integration with TI OMAP™ application processor
- SDIO Host data path interfaces
- Bluetooth Advanced Audio Interfaces
- Low power operation mode
- Streamlined development with LSR design services
- RoHS compliant

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	LS Research Part No.	Description	Price Each			
			1	50	100	1000
741-450-0037	450-0037	TIWI01-R2 Module U.FL Connector, WiFi/802.11	23.00	22.50	22.50	22.20

TIWI-SL Transceiver Module

Features:

- IEEE 802.11 b/g compliant
- Typical WLAN Transmit Power: +19.0dBm, 11Mbps, CCK (b) +15dBm, 54Mbps, OFDM (g)
- Typical WLAN Sensitivity: -85dBm, 8% PER, 11Mbps
- -70dBm, 10% PER, 54Mbps
- Miniature footprint: 14mm x 21mm
- Low height profile: 2.3mm
- Operating Voltage: 2.9V to 3.6V
- Operating temperature: -40 to +85
- Embedded network stack
- Wireless Security WEP, WPA Personal, WPA2 Personal
- Terminal for PCB/Chip antenna feeds
- Compact design based on Texas Instruments CC3000 transceiver
- SPI host interface
- Simple integration with microcontrollers and microprocessors
- Worldwide acceptance: FCC (USA), IC (Canada), and ETSI (Europe)
- Streamlined development with LSR design services
- RoHS compliant

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	LS Research Part No.	Description	Price Each			
			1	50	100	1000
741-450-0067	450-0067	TIWI-SL Module	27.86	27.13	26.45	26.11
741-450-0089	450-0089	TIWI-SL Eval Module Board-Chip Antenna	53.46	-	-	-