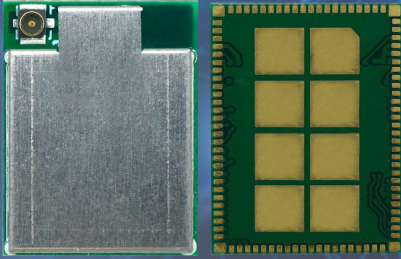


# PIXI-9377



- PIXI-9377 delivers all your IoT multi-mode wireless communication needs in one ultra-compact and secure System-in-Package module.
- Based on Qualcomm Atheros QCA9377 System-in-Package (SiP) supporting 802.11 a/b/g/n/ac Dual-Band 1x1 and Bluetooth 4.1 (BR+EDR+BLE).
- The module offers the latest and most stringent security and robust radio performance for noisy industrial environments.
- Pre-certified PIXI-9377 with approval from regulatory agencies, including European Union (CE/ETSI/RED), United States (FCC), Canada (IC), Australia/New Zealand (RCM) and Japan (TELEC).

## Specifications

### System-in-Package

Chipset Qualcomm QCA9377

### Connectivity

Wi-Fi Standards 802.11 a/b/g/n/ac  
 Wi-Fi Generation Wi-Fi 5  
 Wi-Fi Operating Frequency 2412MHz ~ 2462MHz  
 5180MHz ~ 5825MHz  
 BT Operating Frequency 2402MHz ~ 2480MHz  
 TX/RX Streams Dual-Band 1x1  
 Bluetooth BT (BR+EDR+BLE)

### Antenna

Antenna Connector 1x MHF4

### Signaling

Wi-Fi SDIO or PCIe  
 Bluetooth UART + I<sup>2</sup>S or USB

### Power Specifications

Operating Voltage 3.3V DC +/-10%  
 Power Consumption TX Mode: max. 510mA  
 RX Mode: max. 160mA

### Driver Support

Standard Support Linux  
 Yocto  
 Ubuntu  
 Android  
 Windows 10

### Radio

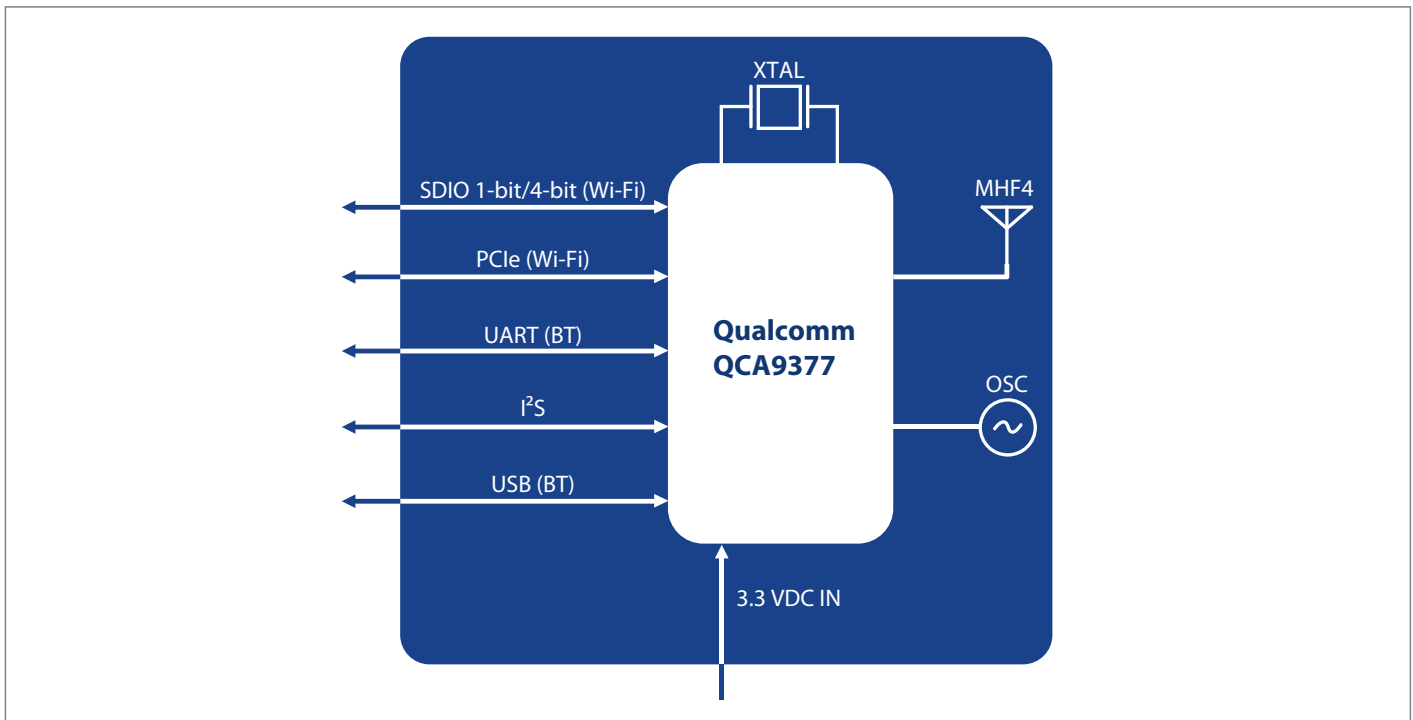
Transmitted Power 802.11b: 19dBm +/- 2dB @11M  
 802.11g: 17dBm +/- 2dB @54M  
 802.11gn: 16dBm +/- 2dB @HT20 MCS7  
 802.11gn: 16dBm +/- 2dB @HT40 MCS7  
 802.11a: 12dBm +/- 2dB @54M  
 802.11an: 11dBm +/- 2dB @HT20 MCS7  
 802.11an: 11dBm +/- 2dB @HT40 MCS7  
 802.11ac: 9dBm +/- 2dB @VHT20 MCS8  
 802.11ac: 9dBm +/- 2dB @VHT40 MCS9  
 802.11ac: 9dBm +/- 2dB @VHT80 MCS9  
 BT\*: 0 ≤ Output Power ≤ 10 dBm  
 \*BT(Class 1 Device)

### Receive Sensitivity

802.11a: ≤ -70dBm@54Mbps  
 802.11b: ≤ -88dBm@11Mbps  
 802.11g: ≤ -72dBm@54Mbps  
 802.11gn HT20: ≤ -65dBm@MCS7  
 802.11gn HT40: ≤ -65dBm@MCS7  
 802.11an HT20: ≤ -65dBm@MCS7  
 802.11an HT40: ≤ -65dBm@MCS7  
 802.11ac VHT80: ≤ -51Bm@MCS9  
 BT: < 0.1% BER at -70dBm



**Block Diagram**



**Environmental and Mechanical**

Dimensions	12 x 16 mm
Form Factor	M.2 LGA Type 1216
Weight	≤ 2 grams
Temperature	Commercial: 0° to +60° C Industrial: -40° to +85° C
Relative Humidity	10 to 90 %
MTBF	50000 Hours
Shock	50G/25ms
Vibration	20G/0-600Hz

**Certification and Compliance**

USA	FCC ID: 2AKZA-QCA9377
Canada	IC: 22364-QCA9377
Japan	TELEC: 201-180629
European Union	EN 55032 / EN 55024 EN 300 328 v2.2.2 EN 301 893 v2.1.1
Australia/New Zealand	RCM
Bluetooth Logo Certification	QDID150839 (Bluetooth 4.2) Compliant with RoHS / REACH directives

**Order Information :**

Code	Module	Signaling
PIXI-9377-S	Qualcomm QCA9377 System-in-Package (SiP) IoT module.	SDIO (Wi-Fi) / UART (BT) / I²S
PIXI-9377-P	Qualcomm QCA9377 System-in-Package (SiP) IoT module.	PCIe (Wi-Fi) / USB (BT)
STIX-9377-M2-AE	Qualcomm QCA9377 SiP M.2 KEY-A+E Type 2230 IoT module.	PCIe (Wi-Fi) / USB (BT)
STIX-9377-M2-B	Qualcomm QCA9377 SiP M.2 KEY-B Type 2242 IoT module.	PCIe (Wi-Fi) / USB (BT)
STIX-9377-MPCIE	Qualcomm QCA9377 SiP mini-PCIe half size IoT module.	PCIe (Wi-Fi) / USB (BT)
Code	Module	Wireless SiP module
PIXI-9377-EVK	Development Kit for Qualcomm QCA9377 based on PIXI-9377-S	Antenna and cable set.

**Mechanical Dimension**

(units in mm)

