



# AX-931

4X4 MU-MIMO 6GHz Wi-Fi 6E WIRELESS MODULE MODEL



AX931 is an 802.11ax Wi-Fi 6E PCIe for Enterprise Access Points and Campus deployments.

Based on Qualcomm® 802.11ax technology, a highly integrated wireless local area network (WLAN) system-on-chip (SoC), AX931 supports 6 GHz for IEEE802.11ax/ac/ax applications. AX931 supports spatial streams (4x4) in MU-MIMO mode.

AX931 accesses the Wi-Fi 6E channels, including 160MHz that speeds up the transmission performance and efficiency, and is ideal for PTP (Point-to-Point), AR & VR applications.

The driver is available now. It runs only on Qualcomm's Wi-Fi6 platform, in particular, IP807x and IPQ60xx CPU.

Hardware	Standards	IEEE 802.11ax
	Host Interface	PCI Express 3.0 interface, M.2 E-key
	Operating Voltage	3.3V/5V
	Operating Frequency	6.105GHz~7.125GHz
	Modulation	802.11n: OFDM (BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM) 802.11ac: OFDM (BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM) 802.11ax: OFDMA (BPSK, QPSK, DBPSK, DQPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM, 4096-QAM)
	Output Power	802.11ax: Max. 21dBm (per chain)
	Power Consumption	≤ 15W
	Receive Sensitivity	802.11ax HE20 MCS0 <-89dBm / MCS11 <-64dBm HE40 MCS0 <-89dBm / MCS11 <-60dBm HE80 MCS0 <-86dBm / MCS11 <-58dBm
	Antenna Connector	4x U.FL Connectors
Physical Characteristics	<b>Weight</b>	<b>Dimensions</b>
	20g	60 (L) x 57 (W) x 4.1 (H) mm (Tolerance±0.15mm)
Environmental	<b>Operating</b>	<b>Storage</b>
	Temperature: -20°C to 70°C Humidity: 95% (non-condensing)	Temperature: -40°C to 90°C Humidity: 90% (non-condensing)
Safety Approval	RoHS/REACH Compliance	

PIN Definition									
No.	Description	No.	Description	No.	Description	No.	Description	No.	Description
1	GND	2	3V3	3	NC	4	3V3	5	NC
6	PCIE_LED0	7	GND	8	UART_TXD	9	NC	10	UART_RXD
11	NC	12	NC	13	NC	14	NC	15	5V
16	PCIE_LED1	17	5V	18	GND	19	5V	20	NC
21	5V	22	NC	23	5V	24	Key	25	Key
26	Key	27	Key	28	Key	29	Key	30	Key
31	Key	32	NC	33	GND	34	NC	35	PCIE_RX0+
36	NC	37	PCIE_RX0-	38	PTA2_BT_PRIO	39	GND	40	PTA2_WL_ACT
41	PCIE_TX0+	42	PTA2_BT_ACT	43	PCIE_TX0-	44	PTA1_BT_PRIO	45	GND
46	PTA1_WL_ACT	47	PCIE_REFCLK+	48	PTA1_BT_ACT	49	PCIE_REFCLK-	50	NC
51	GND	52	PCIE_RST	53	PCIE_CLKREQ_N	54	NC	55	PCIE_WAKE_N
56	PCIE_WDIS_N	57	GND	58	NC	59	PCIE_RX1+	60	NC
61	PCIE_RX1-	62	NC	63	GND	64	NC	65	PCIE_TX1+
66	NC	67	PCIE_TX1-	68	NC	69	GND	70	NC
71	NC	72	3V3	73	NC	74	3V3	75	GND