

# MX-640V5

## 802.11ax 内嵌型无线网卡

### 产品概述



MX-640V5 是一款配有 PCI Express 3.0 界面及 M.2 E-key 的内嵌型无线网卡。该无线网卡采用 Qualcomm® 802.11ax Wi-Fi 6 技术，支持 5180-5850GHz 频段，可执行 AP 及 STA 功能，同时具备 4x4 MIMO 和 4 个空间流，适用于 5GHz IEEE802.11a/n/ac/ax 应用，相比上一代无线网卡的传输效率更高，并具备动态频率选择(DFS)功能。

### 产品规格

硬件规格	IEEE 标准	IEEE 802.11ax
	界面	PCI Express 3.0 , M.2 E-key
	工作电压	3.3V/5V
	工作频段	5G : 5.180GHz~5.850GHz
	调变技术	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 )
	输出功率	802.11ax : Max. 23dBm (每条链路)
	电源功耗	≤15W
	接收灵敏度	11ax : HE20 MCS0 <-82dBm / MCS11 <-52dBm HE40 MCS0 <-79dBm / MCS11 <-49dBm HE80 MCS0 <-76dBm / MCS11 <-46dBm
	天线接口	4x U. FL
	重量	20 克
	产品尺寸	60 (长) x 57 (宽) x 4.2 (高) mm (偏差±0.1mm)
	工作环境	温度 : -20°C to 70°C 湿度 : 95% (无冷凝)
	存储环境	温度 : -40°C to 90°C 湿度 : 90% (无冷凝)
软件规格	认证	RoHS/REACH

# 射频参数

	速率	发射功率 ( 单通道 )	公差	接收灵敏度	公差
802.11a	6Mbps	21dBm	±2dB	-91dBm	±2dB
	9Mbps	21dBm	±2dB	---	±2dB
	12Mbps	21dBm	±2dB	---	±2dB
	18Mbps	21dBm	±2dB	---	±2dB
	24Mbps	20dBm	±2dB	---	±2dB
	36Mbps	20dBm	±2dB	---	±2dB
	48Mbps	17dBm	±2dB	---	±2dB
	54Mbps	17dBm	±2dB	-74dBm	±2dB
802.11n/ac VHT20	MCS0	21dBm	±2dB	-91dBm	±2dB
	MCS1	21dBm	±2dB	---	±2dB
	MCS2	21dBm	±2dB	---	±2dB
	MCS3	21dBm	±2dB	---	±2dB
	MCS4	20dBm	±2dB	---	±2dB
	MCS5	20dBm	±2dB	---	±2dB
	MCS6	17dBm	±2dB	---	±2dB
	MCS7	17dBm	±2dB	-74dBm	±2dB
	MCS8	17dBm	±2dB	---	±2dB
	MCS9	17dBm	±2dB	-67dBm	±2dB
802.11n/ac VHT40	MCS0	21dBm	±2dB	-89dBm	±2dB
	MCS1	21dBm	±2dB	---	±2dB
	MCS2	21dBm	±2dB	---	±2dB
	MCS3	21dBm	±2dB	---	±2dB
	MCS4	20dBm	±2dB	---	±2dB
	MCS5	20dBm	±2dB	---	±2dB
	MCS6	17dBm	±2dB	---	±2dB
	MCS7	17dBm	±2dB	-71dBm	±2dB
	MCS8	17dBm	±2dB	---	±2dB
	MCS9	17dBm	±2dB	-65dBm	±2dB
802.11ac VHT80	MCS0	21dBm	±2dB	-86dBm	±2dB
	MCS1	21dBm	±2dB	---	±2dB
	MCS2	21dBm	±2dB	---	±2dB
	MCS3	21dBm	±2dB	---	±2dB
	MCS4	20dBm	±2dB	---	±2dB
	MCS5	20dBm	±2dB	---	±2dB
	MCS6	17dBm	±2dB	---	±2dB
	MCS7	17dBm	±2dB	---	±2dB
	MCS8	17dBm	±2dB	---	±2dB
	MCS9	17dBm	±2dB	-61dBm	±2dB
802.11ac VHT160	MCS0	19dBm	±2dB	---	±2dB
	MCS1	19dBm	±2dB	---	±2dB
	MCS2	19dBm	±2dB	---	±2dB
	MCS3	19dBm	±2dB	---	±2dB
	MCS4	18dBm	±2dB	---	±2dB
	MCS5	18dBm	±2dB	---	±2dB
	MCS6	15dBm	±2dB	---	±2dB
	MCS7	15dBm	±2dB	---	±2dB
	MCS8	15dBm	±2dB	---	±2dB
	MCS9	15dBm	±2dB	---	±2dB

	速率	发射功率 ( 单通道 )	公差	接收灵敏度	公差
802.11ax HE20	MCS0	21dBm	±2dB	-89dBm	±2dB
	MCS1	21dBm	±2dB	---	±2dB
	MCS2	21dBm	±2dB	---	±2dB
	MCS3	21dBm	±2dB	---	±2dB
	MCS4	20dBm	±2dB	---	±2dB
	MCS5	20dBm	±2dB	---	±2dB
	MCS6	17dBm	±2dB	---	±2dB
	MCS7	17dBm	±2dB	---	±2dB
	MCS8	17dBm	±2dB	---	±2dB
	MCS9	17dBm	±2dB	---	±2dB
	MCS10	16dBm	±2dB	---	±2dB
	MCS11	16dBm	±2dB	-64dBm	±2dB
	MCS12	10dBm	±2dB	---	±2dB
	MCS13	10dBm	±2dB	---	±2dB
802.11ax HE40	MCS0	21dBm	±2dB	-89dBm	±2dB
	MCS1	21dBm	±2dB	---	±2dB
	MCS2	21dBm	±2dB	---	±2dB
	MCS3	21dBm	±2dB	---	±2dB
	MCS4	20dBm	±2dB	---	±2dB
	MCS5	20dBm	±2dB	---	±2dB
	MCS6	17dBm	±2dB	---	±2dB
	MCS7	17dBm	±2dB	---	±2dB
	MCS8	17dBm	±2dB	---	±2dB
	MCS9	17dBm	±2dB	---	±2dB
	MCS10	16dBm	±2dB	---	±2dB
	MCS11	16dBm	±2dB	-60dBm	±2dB
	MCS12	10dBm	±2dB	---	±2dB
	MCS13	10dBm	±2dB	---	±2dB
802.11ax HE80	MCS0	21dBm	±2dB	-86dBm	±2dB
	MCS1	21dBm	±2dB	---	±2dB
	MCS2	21dBm	±2dB	---	±2dB
	MCS3	21dBm	±2dB	---	±2dB
	MCS4	20dBm	±2dB	---	±2dB
	MCS5	20dBm	±2dB	---	±2dB
	MCS6	17dBm	±2dB	---	±2dB
	MCS7	17dBm	±2dB	---	±2dB
	MCS8	17dBm	±2dB	---	±2dB
	MCS9	17dBm	±2dB	---	±2dB
	MCS10	16dBm	±2dB	---	±2dB
	MCS11	16dBm	±2dB	-58dBm	±2dB
	MCS12	10dBm	±2dB	---	±2dB
	MCS13	10dBm	±2dB	---	±2dB
802.11ax HE160	MCS0	19dBm	±2dB	---	±2dB
	MCS1	19dBm	±2dB	---	±2dB
	MCS2	19dBm	±2dB	---	±2dB
	MCS3	19dBm	±2dB	---	±2dB
	MCS4	18dBm	±2dB	---	±2dB
	MCS5	18dBm	±2dB	---	±2dB
	MCS6	15dBm	±2dB	---	±2dB
	MCS7	15dBm	±2dB	---	±2dB
	MCS8	15dBm	±2dB	---	±2dB
	MCS9	15dBm	±2dB	---	±2dB
	MCS10	14dBm	±2dB	---	±2dB
	MCS11	14dBm	±2dB	---	±2dB
	MCS12	7dBm	±2dB	---	±2dB
	MCS13	7dBm	±2dB	---	±2dB

## 模组尺寸和推荐 PCB 方式

