

Rockchip Wi-Fi/BT Situation ver1.9 2024.03.29													
Revision No.	History												Date
1.9	Update support list add vendor: synaptics\infineon\ITOM\AzureWave\CVTE\Quectel\Murata\Fore etc.												2024.03.29
1.8	新增BES2600IWA2/EA6621Q支持												2023.09.01
1.7	对支持模块的验证说明：列表中State DS有客户使用，但并未给RK做详细验证，稳定性需寻找模组厂或原厂确认。												2022.12.20
1.6	新增几款支持BT5.2/WiFi6/WiFi6E的模块： Infineon: CYW43012/CYW4373(BT5.2)/CYW54591(BT5.2/2T2R)/CYW55572(WiFi6/6E*) Realtek: RTL8852BS/BE(WiFi6) 新增ATBM6441 低功耗WiFi 新增Antenna Configuration/BT Standard列的说明，增加直观及可读性； <b>注：CYW55572 WiFi6 需找原厂更新专有驱动+WPA相关软件。</b> 新增ATBM6031、AIC8000-XX系列、BES2600支持												2022.08.15
1.5	新增SSV6155P，对AC/AX版本含义进行说明												2022.06.05
1.4	新增低功耗Hi3861L及kernel版本说明												2022.04.06
1.3	Add RTL8188FTV-VC and RTL8188FTV-VQ1（USB）												
1.2	Add WiFi6 AP6275S AP6275P												
1.0	initial release												
<b>Note：</b> 1、如果需要支持AP/Realtek的其它型号，可以参考Wi-Fi/BT开发文档里面的移植章节进行移植即可； 2、如果使用其它厂家的模组或芯片，则需要联系原厂协助你们移植驱动到我们平台，移植相关事项也可参考Wi-Fi/BT开发文档进行移植； 3、Wi-Fi/BT开发文档及本文档的最新版下载地址： <a href="https://redmine.rock-chips.com/documents/52">https://redmine.rock-chips.com/documents/52</a> 4、Hi3861/3881：已在我们平台验证可以使用，但驱动代码需要找模组厂要，在RK平台的移植补丁可以通过redmine提问获取补丁； 5、BT代表蓝牙（Bluetooth）ac:表示Wi-Fi5，ax:表示Wi-Fi6； 6、State代表芯片或模组在RK平台上的验证状态或模式， <b>SS SDK Support</b> ； <b>ST：Sample Tested样品测试</b> ； <b>DS：Datasheet Support规格可支持调试</b> 。 7、Antenna是指Wi-Fi天线，需要注意有些芯片模组支持BT单天线，即Wi-Fi天线是2T2R，BT是单链1T1R，设计选型时请注意。													
Vendor	WiFi Chip	Wi-Fi Interface	IEEE 802.11 Standard		Max Data rate	2.4GHz Band	5.0GHz Band	6.0GHz Band	Antenna	BT Standard	BT Interface	State	Remarks
Rockchip	RK960	SDIO	Wi-Fi 4	802.11b/g/n	72Mbps	√	×	×	1T1R	5.3	UART/PCM	SS	
	RK915	SDIO	Wi-Fi 4	802.11b/g/n	65Mbps	√	×	×	1T1R	×	×	SS	
Synaptics (IC)	SYN43756E	SDIO/PCle	Wi-Fi 6E	802.11a/b/g/n/ac/ax	1200Mbps	√	√	√	2T2R	5.4	UART/PCM	DS	
	SYN43711	SDIO/PCle	Wi-Fi 6E	802.11a/b/g/n/ac/ax	600Mbps	√	√	√	1T1R	5.4	UART/PCM	DS	
	SYN43752	SDIO/PCle	Wi-Fi 6	802.11a/b/g/n/ac/ax	1200Mbps	√	√	×	2T2R	5.4	UART/PCM	DS	
	SYN43598	SDIO/PCle	Wi-Fi 5	802.11 a/b/g/n/ac	866Mbps	√	√	×	2T2R	5.2	UART/PCM	DS	
	SYN43456	SDIO	Wi-Fi 5	802.11 a/b/g/n/ac	433Mbps	√	√	×	1T1R	5.2	UART/PCM	DS	
	SYN43436	SDIO	Wi-Fi 4	802.11b/g/n	72Mbps	√	×	×	1T1R	5.4	UART/PCM	DS	
	BCM430132	SDIO	Wi-Fi 4	802.11a/b/g/n	72Mbps	√	√	×	1T1R	5.4	UART/PCM	DS	
Realtek (IC)	RTL8852C	PCle/USB	Wi-Fi 6E	802.11 a/b/g/n/ac/ax	1200Mbps	√	√	√	2T2R	5.3	UART/USB/PCM	DS	
	RTL8852B	SDIO/PCle/USB	Wi-Fi 6	802.11 a/b/g/n/ac/ax	1200Mbps	√	√	×	2T2R	5.2	UART/USB/PCM	DS	
	RTL8832BU	USB	Wi-Fi 6	802.11 a/b/g/n/ac/ax	1200Mbps	√	√	×	2T2R	×	×	DS	
	RTL8851B	SDIO/PCle/USB	Wi-Fi 6	802.11 a/b/g/n/ac/ax	600Mbps	√	√	×	1T1R	5.3	UART/USB/PCM	DS	
	RTL8822C	SDIO/PCle/USB	Wi-Fi 5	802.11 a/b/g/n/ac	866Mbps	√	√	×	2T2R	5	UART/USB/PCM	SS	
	RTL8822E	SDIO/USB	Wi-Fi 5	802.11 a/b/g/n/ac	866Mbps	√	√	×	2T2R	5.3	UART/PCM	SS	
	RTL8821C	SDIO/PCle/USB	Wi-Fi 5	802.11 a/b/g/n/ac	433Mbps	√	√	×	1T1R	4.2	UART/USB/PCM	DS	
	RTL8812CU	USB	Wi-Fi 5	802.11 a/b/g/n/ac	866Mbps	√	√	×	2T2R	×	×	DS	EFEM
	RTL8812EU	USB	Wi-Fi 5	802.11 a/b/g/n/ac	866Mbps	√	√	×	2T2R	×	×	DS	
	RTL8811CU	USB	Wi-Fi 5	802.11 a/b/g/n/ac	433Mbps	√	√	×	1T1R	×	×	DS	
	RTL8192E	SDIO/USB	Wi-Fi 4	802.11 b/g/n	300Mbps	√	×	×	2T2R	×	×	DS	EFEM
	RTL8192F	SDIO/USB	Wi-Fi 4	802.11 b/g/n	300Mbps	√	×	×	2T2R	×	×	DS	
	RTL8733B	SDIO/USB	Wi-Fi 4	802.11 a/b/g/n	150Mbps	√	√	×	1T1R	5.2	UART/PCM	DS	
	RTL8723D	SDIO/USB	Wi-Fi 4	802.11 b/g/n	150Mbps	√	×	×	1T1R	4.2	UART/USB/PCM	SS	
	RTL8731B	SDIO/USB	Wi-Fi 4	802.11 a/b/g/n	150Mbps	√	√	×	1T1R	×	×	DS	
	RTL8189FTV	SDIO	Wi-Fi 4	802.11 b/g/n	150Mbps	√	×	×	1T1R	×	×	SS	
	RTL8189ES/EM	SDIO	Wi-Fi 4	802.11 b/g/n	150Mbps	√	×	×	1T1R	×	×	DS	
	RTL8188FTV	USB	Wi-Fi 4	802.11 b/g/n	150Mbps	√	×	×	1T1R	×	×	SS	
	RTL87618TV	×	×	×	×	×	×	×	×	5.0	UART/PCM	ST	
	RTL8188EUS-VH	USB	Wi-Fi 4	802.11 b/g/n	150Mbps	√	×	×	1T1R	×	×	DS	EFEM
Infineon (IC)	CYW55572	SDIO/PCle	Wi-Fi 6	802.11 a/b/g/n/ac/ax	1200Mbps	√	√	√	2T2R	5.4	UART/PCM	DS	
	CYW55513	SDIO/SPI	Wi-Fi 6E	802.11 a/b/g/n/ac/ax	600Mbps	√	√	√	1T1R	5.4	UART/PCM	DS	
	CYW54591	SDIO/PCle	Wi-Fi 5	802.11 a/b/g/n/ac	866Mbps	√	√	×	2T2R	5.4	UART/PCM	DS	
	CYW43455	SDIO	Wi-Fi 5	802.11 a/b/g/n/ac	433Mbps	√	√	×	1T1R	5.3	UART/PCM	ST	
	CYW4373	SDIO/PCle/USB	Wi-Fi 5	802.11 a/b/g/n/ac	433Mbps	√	√	×	1T1R	5.4	UART/PCM	DS	
	CYW43438	SDIO	Wi-Fi 4	802.11 b/g/n	72Mbps	√	×	×	1T1R	5.2	UART/PCM	ST	
	CYW43012	SDIO/SPI	Wi-Fi 4	802.11a/b/g/n	72Mbps	√	√	×	1T1R	5.2	UART/PCM	DS	
	CYW43439	SDIO	Wi-Fi 4	802.11 b/g/n	65Mbps	√	×	×	1T1R	5.2	UART/PCM	DS	
	AIC8000D80	SDIO/PCle/USB	Wi-Fi 6	802.11a/b/g/n/ac/ax	600Mbps	√	√	×	1T1R	5.4	UART/PCM	DS	
AIC (IC)	AIC8000D	SDIO/USB	Wi-Fi 6	802.11b/g/n/ax	286.80Mbps	√	×	×	1T1R	5.2	UART/PCM	ST	
SeekWave (IC)	EA6621Q	SDIO	Wi-Fi 6	802.11a/b/g/n/ac/ax	600Mbps	√	√	×	1T1R	5.0	UART/PCM	DS	
Unisoc (IC)	UWES621DS	SDIO	Wi-Fi 5	802.11a/b/g/n/ac	866Mbps	√	√	×	2T2R	5.0	UART/PCM	DS	
iComm (IC)	SSV6155P	USB	Wi-Fi 4	802.11b/g/n	150Mbps	√	×	×	1T1R	×	×	ST	
	SV6158	SDIO	Wi-Fi 4	802.11b/g/n	150Mbps	√	×	×	1T1R	×	×	DS	
	SV6256	SDIO	Wi-Fi 4	802.11a/b/g/n	150Mbps	√	√	×	1T1R	×	×	DS	
AltoBeam (IC)	ATBM603x	SDIO/USB	Wi-Fi 4	802.11b/g/n	150Mbps	√	×	×	1T1R	×	×	ST	
	ATBM6441	SDIO	Wi-Fi 4	802.11b/g/n	72Mbps	√	×	×	1T1R	×	×	ST	
Hisilicon (IC)	Hi3861L/3881	SDIO	Wi-Fi 4	802.11b/g/n	72Mbps	√	×	×	1T1R	×	×	SS	
BES (IC)	BES2600IWA2	SDIO	Wi-Fi 4	802.11a/b/g/n	150Mbps	√	√	×	1T1R	5.0	UART/PCM	DS	

Ampak (Module)	AP6275 (SYN43752)	SDIO/PCIe	Wi-Fi 6	802.11a/b/g/n/ac/ax	1200Mbps	✓	✓	×	2T2R	5.3	UART/PCM	SS		
	AP6611 (SYN43711)	SDIO/PCIe	Wi-Fi 6E	802.11a/b/g/n/ac/ax	600Mbps	✓	✓	✓	1T1R	5.3	UART/PCM	ST		
	AP6281 (SYN4381)	SDIO/PCIe	Wi-Fi 6E	802.11a/b/g/n/ac/ax	600Mbps	✓	✓	✓	1T1R	5.3	UART/PCM	DS		
	AP6276 (SYN43756)	SDIO/PCIe	Wi-Fi 6E	802.11a/b/g/n/ac/ax	1200Mbps	✓	✓	✓	2T2R	5.3	UART/PCM	ST		
	AP6398S (SYN43598)	SDIO	Wi-Fi 5	802.11a/b/g/n/ac	866Mbps	✓	✓	×	2T2R	5.2	UART/PCM	SS		
	AP6256 (SYN43456)	SDIO	Wi-Fi 5	802.11a/b/g/n/ac	433Mbps	✓	✓	×	1T1R	5.2	UART/PCM	SS		
	AP6203BM (BCM43012)	SDIO	Wi-Fi 4	802.11b/g/n	72Mbps	✓	✓	×	1T1R	5.4	UART/PCM	ST		
	AP6212 (BCM43438)	SDIO	Wi-Fi 4	802.11b/g/n	72Mbps	✓	×	×	1T1R	5.4	UART/PCM	SS		
	ITON (Module)	BW3752-50BX (SYN43752)	SDIO/PCIe	Wi-Fi 6	802.11a/b/g/n/ac/ax	1200Mbps	✓	✓	×	2T2R	5.2	UART/PCM	DS	
BW756E-50B2 (SYN43756E)		SDIO/PCIe	Wi-Fi 6E	802.11a/b/g/n/ac/ax	1200Mbps	✓	✓	✓	2T2R	5.3	UART/PCM	DS		
BW3598-50BX (SYN43598)		SDIO/PCIe	Wi-Fi 5	802.11 a/b/g/n/ac	867Mbps	✓	✓	×	2T2R	5.2	UART/PCM	DS		
BW3456-44B1 (SYN43456)		SDIO	Wi-Fi 5	802.11 a/b/g/n/ac	433Mbps	✓	✓	×	1T1R	5.2	UART/PCM	DS		
BW0132-44B1 (BCM430132)		SDIO	Wi-Fi 4	802.11a/b/g/n	72Mbps	✓	✓	×	1T1R	5.2	UART/PCM	DS		
BW4365-44B1 (SYN43436)		SDIO	Wi-Fi 4	802.11b/g/n	72Mbps	✓	×	×	1T1R	5.2	UART/PCM	DS		
AW-XM606 (CYW5511)		SDIO/SPI	Wi-Fi 6E	802.11 a/b/g/n/ac/ax	600Mbps	✓	✓	✓	1T1R	5.3	UART/PCM	DS		
AW-XM650 (CYW5512)		SDIO/SPI	Wi-Fi 6	802.11 a/b/g/n/ac/ax	600Mbps	✓	✓	×	1T1R	5.3	UART/PCM	DS		
AW-XM643 (CYW5573)		SDIO/PCIE	Wi-Fi 6E	802.11 a/b/g/n/ac/ax	1200Mbps	✓	✓	✓	2T2R	5.3	UART/PCM	DS		
AzureWave (Module)	AW-XM612 (CYW5572)	SDIO/PCIE	Wi-Fi 6	802.11 a/b/g/n/ac/ax	1200Mbps	✓	✓	×	2T2R	5.3	UART/PCM	ST		
	AW-XM632 (SYN43571)	SDIO/PCIE	Wi-Fi 6	802.11 a/b/g/n/ac/ax	600Mbps	✓	✓	✓	1T1R	5.3	UART/PCM	DS		
	AW-CM467 (CYW4373)	SDIO/USB	Wi-Fi 5	802.11 a/b/g/n/ac	433Mbps	✓	✓	×	1T1R	5.2	UART/PCM/USB	DS		
	AW-CM572 (CYW4591)	SDIO	Wi-Fi 5	802.11 a/b/g/n/ac	866Mbps	✓	×	×	2T2R	5.1	UART/PCM	DS		
	AW-CM2565M (CYW43455)	SDIO	Wi-Fi 5	802.11 a/b/g/n/ac	433Mbps	✓	✓	×	1T1R	5.3	UART/PCM	ST		
	AW-AM497 (CYW43012)	SDIO	Wi-Fi 4	802.11 b/g/n/ac friendly	78Mbps	✓	✓	×	1T1R	5.2	UART/PCM	DS		
	AW-NM3725M (CYW43438)	SDIO	Wi-Fi 4	802.11 b/g/n	72Mbps	✓	×	×	1T1R	5.1	UART/PCM	ST		
	AW-NM512 (CYW43439)	SDIO	Wi-Fi 4	802.11 b/g/n	72Mbps	✓	×	×	1T1R	5.2	UART/PCM	DS		
	Quectel (Module)	FC5866R	SDIO	Wi-Fi 6	802.11a/b/g/n/ac/ax	1200Mbps	✓	✓	×	2T2R	5.2	UART/PCM	DS	
(RTL8852B5-CG) FCE863R		PCIe	Wi-Fi 6	802.11a/b/g/n/ac/ax	1200Mbps	✓	✓	×	2T2R	5.2	UART/PCM	DS		
FCU760K/FC5960K (AIC8800D80)		USB/SDIO	Wi-Fi 6	802.11a/b/g/n/ac/ax	600Mbps	✓	✓	×	1T1R	5.4	UART/PCM	DS		
FC5961K (AIC8800DC)		SDIO	Wi-Fi 6	802.11 b/ g/ n/ ax	286Mbps	✓	×	×	1T1R	5.2	UART/PCM	DS		
FC80A (CYW54591)		SDIO	Wi-Fi 5	802.11 a/b/g/n/ac	866Mbps	✓	✓	×	2T2R	5.1	UART/PCM	DS		
FC5850R (RTL8822CS-V5-CG)		SDIO	Wi-Fi 5	802.11 a/b/g/n/ac	866Mbps	✓	✓	×	2T2R	5.0	UART/PCM	DS		
FC5851U (UWE5621)		SDIO	Wi-Fi 5	802.11a/b/g/n/ac	866Mbps	✓	✓	×	2T2R	5.0	UART/PCM	DS		
FC5950R (RTL8821CS-CG)		SDIO	Wi-Fi 5	802.11 a/b/g/n/ac	433Mbps	✓	✓	×	1T1R	4.2	UART/PCM	DS		
FC905A (CYW43455)		SDIO	Wi-Fi 5	802.11 a/b/g/n/ac	433Mbps	✓	✓	×	1T1R	5.0	UART/PCM	DS		
FC5940R (RTL8723DS-CG)		SDIO	Wi-Fi 4	802.11 b/g/n	150Mbps	✓	×	×	1T1R	5.0	UART/PCM	DS		
FC908A (CYW43438)		SDIO	Wi-Fi 4	802.11 b/g/n	72Mbps	✓	×	×	1T1R	5.1	UART/PCM	DS		
FC5945R (RTL8733B5-CG)		SDIO	Wi-Fi 4	802.11a/b/g/n	150Mbps	✓	✓	×	1T1R	5.2	UART/PCM	DS		
FCU741R (RTL8731BU-CG)		USB	Wi-Fi 4	802.11a/b/g/n	150Mbps	✓	✓	×	1T1R	×	×	DS		
FC30R (RTL8189EM-VI-CG)		SDIO	Wi-Fi 4	802.11 b/g/n	150Mbps	✓	×	×	1T1R	×	×	DS		
CVTE (Module)		SKI-WB800DS2.1 (AIC8800D)	SDIO/USB	Wi-Fi 6	802.11 a/b/g/n/ac/ax	286Mbps	✓	✓	×	1T1R	5.2	UART/PCM	ST	
		SKI-WB800D80S.1 (AIC8800D80)	SDIO/USB	Wi-Fi 6	802.11 a/b/g/n/ac/ax	600Mbps	✓	✓	×	1T1R	5.3	UART/PCM	ST	
		Murata (Module)	PCIE	Wi-Fi 5	802.11 a/b/g/n/ac	433Mbps	✓	✓	×	1T1R	5.1	UART/PCM	DS	AutoMotive
nFore (Module)			PCIE	Wi-Fi 5	802.11 a/b/g/n/ac	433Mbps	✓	✓	×	1T1R	5.0	UART/PCM	DS	AutoMotive