



# | About Us



EmWicon Corporation specialized in Wi-Fi communication for industrial, enterprise, medical, automation, and defense applications to have user experience with easy design in and we offered worldwide leading Wi-Fi technology.

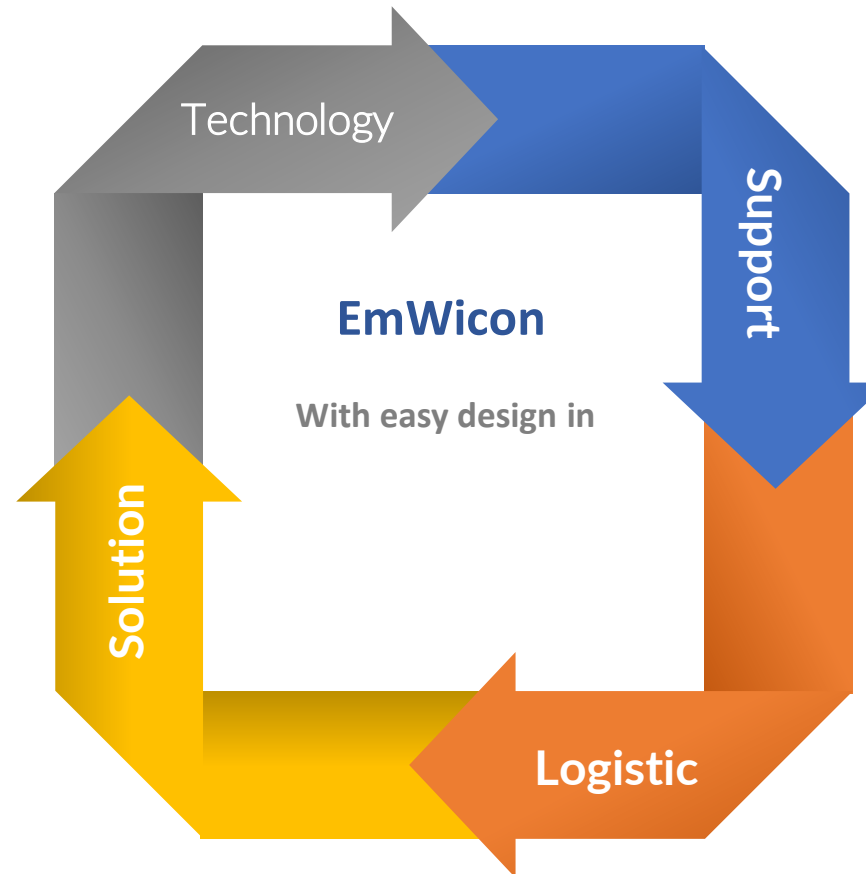
# Why EmWicon?

## Design for market trend

Wi-Fi 6E  
Wi-Fi 6  
Wi-Fi 5  
Wi-Fi 4

## Variety of Form Factor

Industrial / Commercial Grade  
Mini PCIe  
M.2  
USB



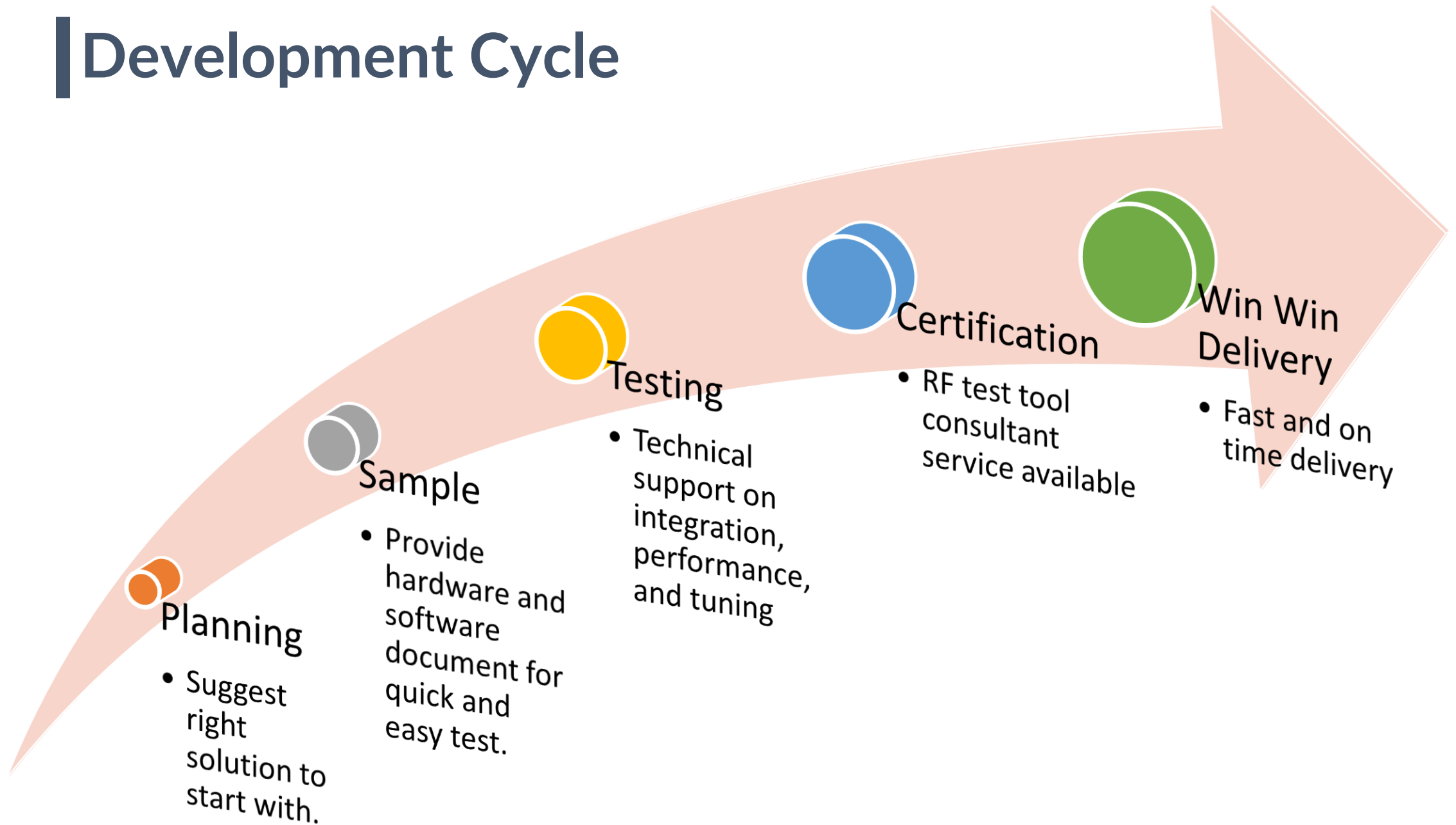
## Support

Hardware  
Software Porting  
Certification consulting

## Logistic

Forecast planning  
Stock available  
Fast delivery

# Development Cycle



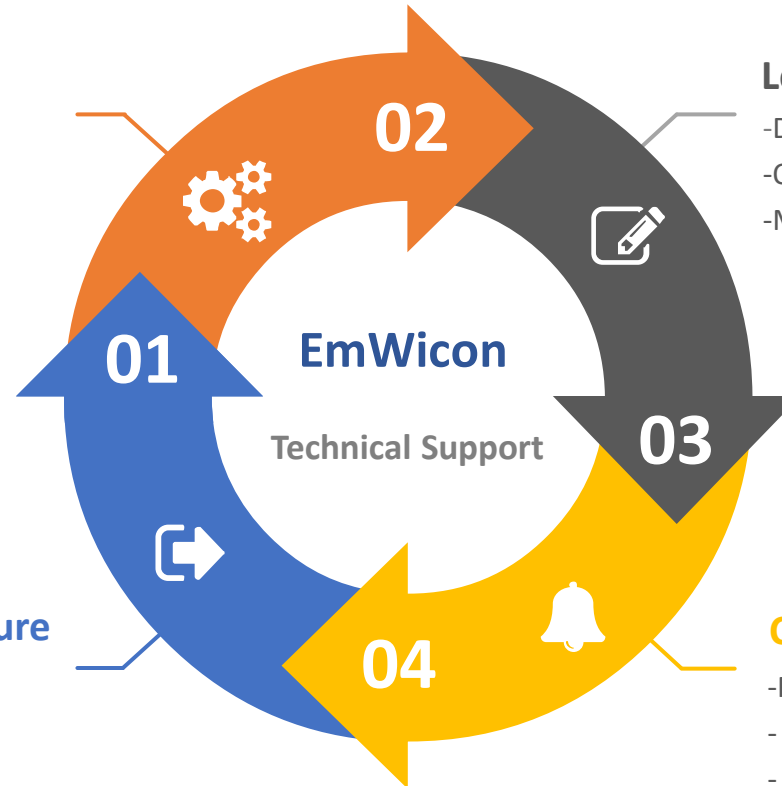
# Technical Support

## Strong Technical Service

- Full Scale Firmware Porting
- Certification Test Supports
- Special Feature Function Test
- RF test tool consultant service available

## Robust Design Manufacture

- In house RF Design Expertise
- Strong RF and Firmware Eng.
- Quality Focus Manufacturing



## Longevity in Supply

- Designed for longevity
- Offer longest product life
- Minimize End of Life impact

## Complete Certification

- Factory offered FCC/CE/IC
- Custom Specified Certification
- Support SAR/UL needs



# Our Manufacturing



# Our Manufacturing

Automated shop floor management System  
Advanced manufacturing equipment  
Thorough quality assurances testing



PCB Router



N2 ReFlow



X-Ray inspection equipment



High Speed Mounter



100% SPI  
Inspection



# Chipset Partner



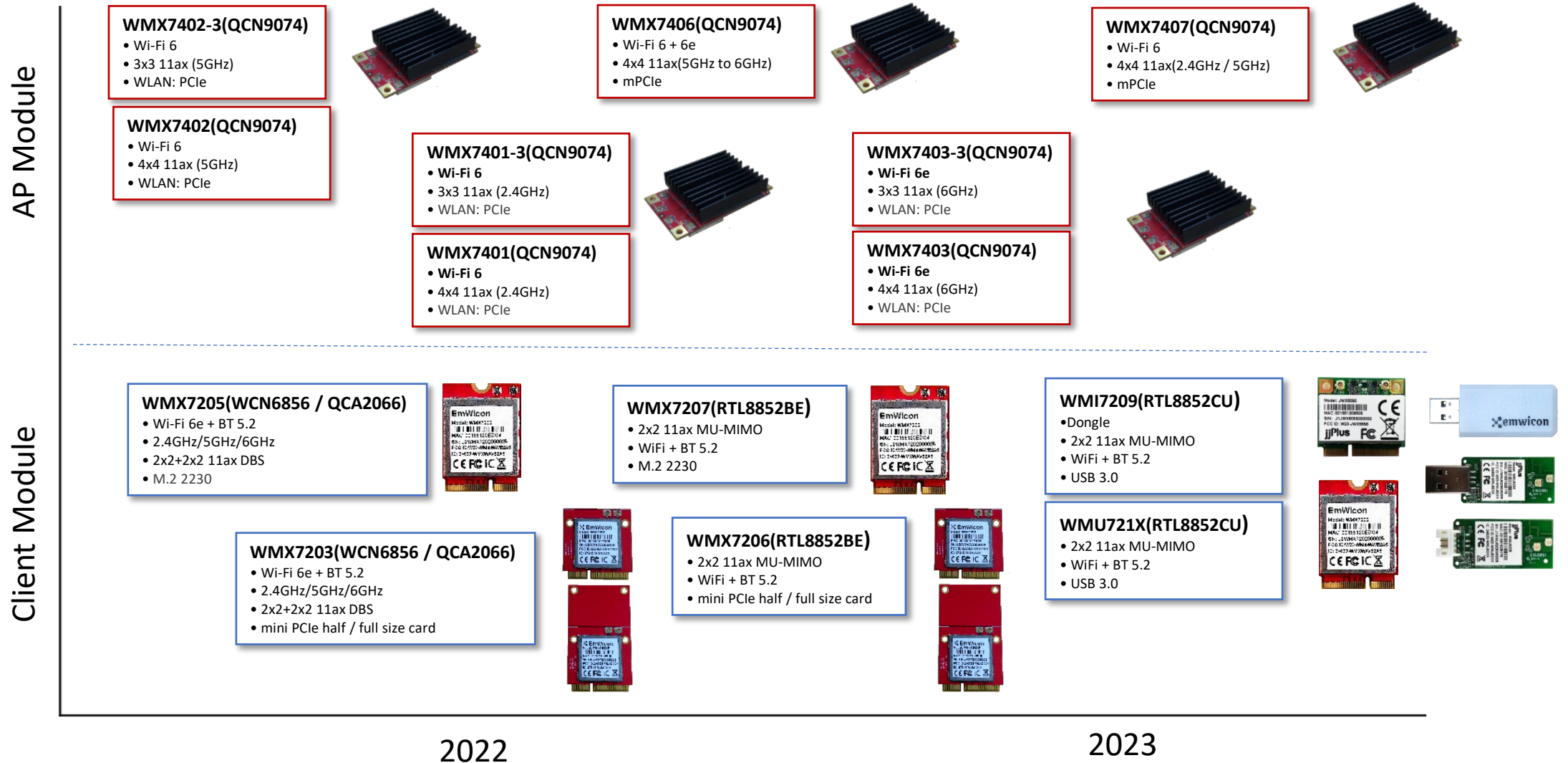
Qualcomm





REALTEK





# Wi-Fi Product Roadmap









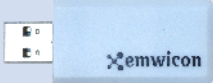
# Wi-Fi 6 / 6e Client Module (2022)

	WMX7203	WMX7205
Photo		
Chip	WCN6856 / QCA2066	WCN6856 / QCA2066
Wi-Fi	Wi-Fi 6e	Wi-Fi 6e
Bluetooth	BT5.2	BT5.2
Interface	Mini PCIe (Half / Full)	M.2 2230
MIMO	2T2R	2T2R
Frequency	2400~2496 MHz 4900~5850 MHz 5925~7125 MHz	2400~2496 MHz 4900~5850 MHz 5925~7125 MHz
Band-Width	20/40/80/160	20/40/80/160
Certification	CE/FCC/IC	CE/FCC/IC

# Wi-Fi 6 Client Module (2022)

	WMX7206	WMX7207
Photo		
Chip	RTL8852BE	RTL8852BE
Wi-Fi	Wi-Fi 6	Wi-Fi 6
Bluetooth	BT5.2	BT5.2
Interface	Mini PCIe (Half / Full)	M.2 2230
MIMO	2T2R	2T2R
Frequency	2400~2496 MHz 4900~5850 MHz	2400~2496 MHz 4900~5850 MHz
Band-Width	20/40/80	20/40/80
Certification	TBD	TBD

# Wi-Fi 6 / 6e Client Module (USB) (2022 - 2023)

	WMU721x	WMU721x	WMU721x	WMU721x	WMU721x	WMU721x	WMI7209
Photo							
Chip	RTL8852CU	RTL8852CU	RTL8852CU	RTL8852CU	RTL8852CU	RTL8852CU	RTL8852CU
Wi-Fi	Wi-Fi 6	Wi-Fi 6	Wi-Fi 6	Wi-Fi 6	Wi-Fi 6	Wi-Fi 6	Wi-Fi 6
Bluetooth	BT 5.2	BT 5.2	BT 5.2	BT 5.2	BT 5.2	BT 5.2	BT 5.2
Interface	Mini PCIe	M.2 2230	USB Type-A	Pin Wafer	Pin Header	Solder Down	USB Dongle
MIMO	2T2R	2T2R	2T2R	2T2R	2T2R	2T2R	2T2R
Antenna	U.FL	MHF4	U.FL/PCB ANT	U.FL/PCB ANT	U.FL/PCB ANT	U.FL/PCB ANT	PCB ANTENNA
Frequency	2400~2496 MHz 4900~5850 MHz 5925~7125 MHz	2400~2496 MHz 4900~5850 MHz 5925~7125 MHz	2400~2496 MHz 4900~5850 MHz 5925~7125 MHz	2400~2496 MHz 4900~5850 MHz 5925~7125 MHz	2400~2496 MHz 4900~5850 MHz 5925~7125 MHz	2400~2496 MHz 4900~5850 MHz 5925~7125 MHz	2400~2496 MHz 4900~5850 MHz 5925~7125 MHz
Band-Width	20/40/80/160	20/40/80/160	20/40/80/160	20/40/80/160	20/40/80/160	20/40/80/160	20/40/80/160
Certification	TBD	TBD	TBD	TBD	TBD	TBD	TBD



# Wi-Fi 6 Enterprise Module (2022 – 2023)

	WMX7401	WMX7401-3	WMX7402	WMX7402-3	WMX7403	WMX7403-3	WMX7406	WMX7407
Photo								
Chip	QCN9074	QCN9074	QCN9074	QCN9074	QCN9074	QCN9074	QCN9074	QCN9074
Wi-Fi	Wi-Fi 6	Wi-Fi 6	Wi-Fi 6	Wi-Fi 6	Wi-Fi 6e	Wi-Fi 6e	Wi-Fi 6 + 6e	Wi-Fi 6
Interface	mPCIe	mPCIe	mPCIe	mPCIe	mPCIe	mPCIe	mPCIe	mPCIe
MIMO	4T4R	3T3R	4T4R	3T3R	4T4R	3T3R	4T4R	4T4R
Frequency	2400~2496 MHz	2400~2496 MHz	4900~5925 MHz	4900~5925 MHz	5925~7150 MHz	5925~7150 MHz	4900~7150 MHz	2400~2496 MHz 4900~5925 MHz
Band-Width	20/40/80/160	20/40/80/160	20/40/80/160	20/40/80/160	20/40/80/160	20/40/80/160	20/40/80/160	20/40/80/160
Certification	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD

# Wi-Fi Product List

## WMU62xx(RTL8822BU)

- 2x2 11ac/abgn MU-MIMO
- WiFi + BT 4.2
- USB

### USB

## WMI6201(RTL8822BU)

- 2x2 11ac/abgn MU-MIMO
- WiFi + BT 4.2
- USB Dongle

### USB Dongle

## JWX6058(QCA6174A)

- 2x2 11ac/abgn MU-MIMO
- WiFi + BT 4.2
- mPCIe

### Half Mini PCIe Card

## WMX6218(RTL8822CE)

- 2x2 11ac/abgn MU-MIMO
- WiFi + BT 5.0
- mPCIe

## JWW6051(QCA6174A)

- 2x2 11ac/abgn MU-MIMO
- WiFi + BT 4.2
- M.2

## WMX6219(RTL8822CE)

- 2x2 11ac/abgn MU-MIMO
- WiFi + BT 5.0
- M.2

### M.2 2230

## JWX6053(QCA9890)

- 3x3 11ac/abgn MU-MIMO
- **Industrial grade**
- mPCIe Full Size

## JWX6056(QCA9892)

- **Industrial grade**
- 2x2 11ac/abgn MU-MIMO
- mPCIe Half Size

### Industrial Grade Full PCIe Card

## JWX6052(QCA9880)

- 3x3 11ac/abgn MU-MIMO
- mPCIe Full Size

## JWX6055(QCA9882)

- 2x2 11ac/abgn MU-MIMO
- mPCIe Half Size

### Enterprise Module Full PCIe Card

## WMX6301(QCA9984)

- 3x3 **DualBand** 11ac Wave 2

## WMX6401(QCA9984)

- 4x4 **DualBand** 11ac Wave 2
- 2x2-160/80+80 11ac Wave 2
- PCIe

### Dual Band Full PCIe Card

## WMX5301(QCA9984)

- 3x3 11ac Wave 2

## WMX5401(QCA9984)

- 4x4 11ac Wave 2
- 2x2-160/80+80 11ac Wave 2
- PCIe

### 5GHz Full PCIe Card

## WMX2301(QCA9984)

- 3x3 11bgn

## WMX2401(QCA9984)

- 4x4 11bgn
- 2x2-160/80+80 11ac Wave 2
- PCIe

### 2.4GHz Full PCIe Card

### Wi-Fi 5 Client Module

### Wi-Fi 5 Enterprise Module

### Wi-Fi 5 Wave II Module

# Wi-Fi Product List

## WMX7205 (WCN6856 / QCA2066)

- Wi-Fi 6e + BT 5.2
- 2.4GHz/5GHz/6GHz
- 2x2+2x2 11ax DBS
- M.2 2230

## WMX7207(RTL8852BE)

- 2x2 11ax MU-MIMO
- WiFi + BT 5.2
- M.2 2230

M.2 2230

## WMX7203 (WCN6856 / QCA2066)

- Wi-Fi 6e + BT 5.2
- 2.4GHz/5GHz/6GHz
- 2x2+2x2 11ax DBS
- mini PCIe half / full size card

## WMX7206(RTL8852BE)

- 2x2 11ax MU-MIMO
- WiFi + BT 5.2
- mini PCIe half / full size card

Half / Full PCIe Card

## WMI7209(RTL8852CU)

- Dongle

## WMU721X(RTL8852CU)

- 2x2 11ax MU-MIMO
- WiFi + BT 5.2
- USB 3.0

USB

## WMX7401-3(QCN9074)

- 3x3 11ax(2.4GHz)

## WMX7401(QCN9074)

- Wi-Fi 6
- 4x4 11ax(2.4GHz)
- mPCIe/M.2

2.4GHz

## WMX7407(QCN9074)

- Wi-Fi 6
- 4x4 11ax(2.4GHz / 5GHz)
- mPCIe/M.2

2.4GHz or 5GHz

## WMX7402-3(QCN9074)

- 3x3 11ax(5GHz)

## WMX7402(QCN9074)

- Wi-Fi 6
- 4x4 11ax(5GHz)
- mPCIe/M.2

5GHz

## WMX7406(QCN9074)

- Wi-Fi 6 + 6e
- 4x4 11ax(5GHz to 6GHz)
- mPCIe/M.2

5GHz to 6GHz

## WMX7403-3(QCN9074)

- 3x3 11ax(6GHz)

## WMX7403(QCN9074)

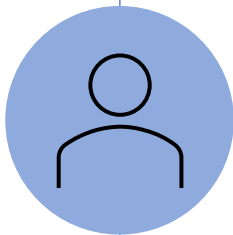
- Wi-Fi 6e
- 4x4 11ax(6GHz)
- mPCIe/M.2

6GHz

Wi-Fi 6 / 6e  
Client Module

Wi-Fi 6 / 6e  
Enterprise Module  
Full PCIe Card

# WiFi Analyzer Device



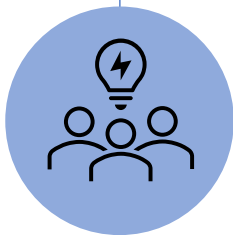
## About Client:

Worlds top leading WiFi Analyzer company, helps businesses build and maintain high-performing Wi-Fi networks.



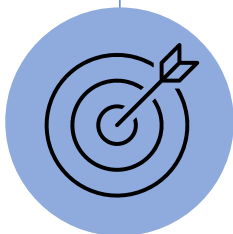
## Challenges:

Searching latest WiFi 6/6e technology and work with chipset vendor to customized the driver feature to fulfill their need.



## Approach Solution:

WMX7205: High performance 2x2 Tri-Band WiFi 6/6e M.2 2230 Wi-Fi solution support MU - MIMO and Bluetooth 5.2, WCN6856 / QCA2066.

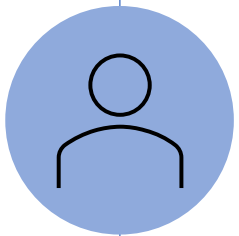


## Winning point:

- Solution WMX7205 support WiFi 6/6e.
- Special co-work with chipset vendor to support on the customized driver.



# 3D Printer



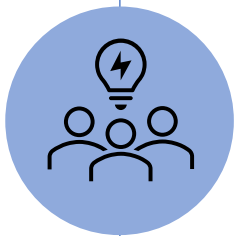
## About Client:

World's top leading 3D printer company, helps businesses and schools to do 3D printing.



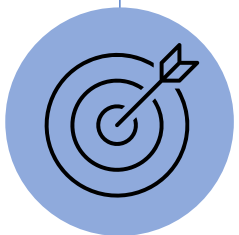
## Challenges:

Customer facing WiFi shortage and need to complete the replacement sample testing and certification process within a very short period of time.



## Approach Solution:

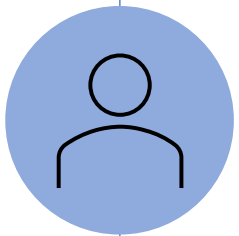
WMX6218: High performance 2x2 Dual-Band WiFi 5 half size card Wi-Fi solution support MU-MIMO and Bluetooth 5.0, RTL8822CE



## Winning point:

- Quick product delivery with our support to maintain their production line ongoing.
- Completed the worldwide module level Cert and sample testing within three months.
- Support RF test tool to help customer finish their system level certification.

# Parcel Station



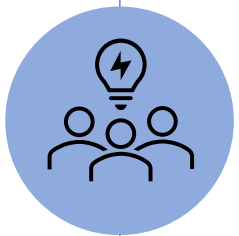
## About Client:

Parcel station provider for global sightseeing spots.



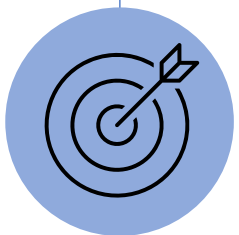
## Challenges:

Worldwide location, with high cost of certification.



## Approach Solution:

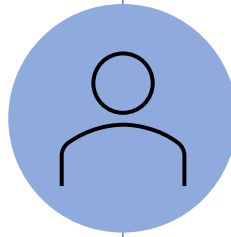
WMX6219: High performance 2x2 Dual-Band WiFi 5 M.2 2230 Wi-Fi solution support MU - MIMO and Bluetooth 5.0, RTL8822CE



## Winning point:

- Ready to go 100+ module level worldwide Cert.
- Quick product delivery for their urgent demand.
- Easy integration with ready software document.

# X'Ray Scanner



## About Client:

Top leading X'Ray scanner provider for worldwide hospital.



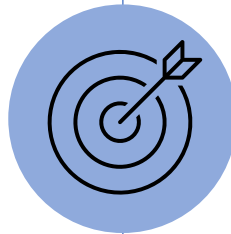
## Challenges:

Medical required long-term product life cycle together with after EOL replacement plan, and this customer has been with us for generations because we are able to meet their product life cycle need.



## Approach Solution:

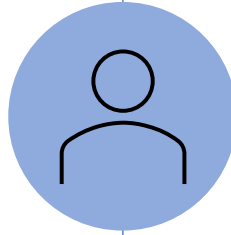
WMU6206: High performance 2x2 Dual-Band WiFi 5 USB Type A Wi-Fi solution support MU – MIMO and Bluetooth 4.2, RTL8822BU.



## Winning point:

- Long product life cycle 5 to 7 years
- Always prepare the successor for customer, so their product life can continue.
- With our Cert paid service to help customer completed the worldwide Cert 23+ countries already and continue more in upcoming soon.

# EV Charger



## About Client:

Top leading EV Charger provider for personal and public electric car construction.



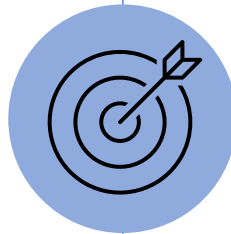
## Challenges:

Customer is searching a long product life cycle USB dongle for plug in and pay, together with their customization on the dongle logo.



## Approach Solution:

WMI6201: High performance 2x2 Dual-Band WiFi 5 USB Dongle Wi-Fi solution support MU – MIMO and Bluetooth 4.2, RTL8822BU

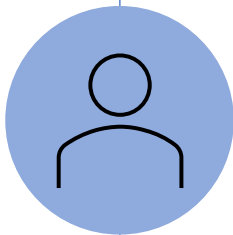


## Winning point:

- Plug in and play with ready to go certification.
- Wide temperature range -20 ~ +70c.
- Customization on dongle logo with their brand.



# Enterprise Router



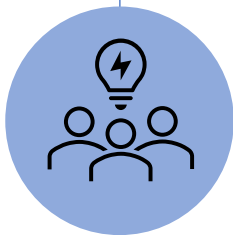
## About Client:

Enterprise router provider for public transportation use.



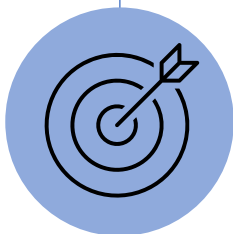
## Challenges:

Required high level WiFi performance and our support on certification.



## Approach Solution:

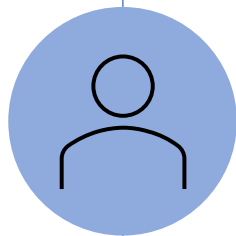
- JWX6055: High performance 2x2 Dual-Band WiFi 5 Full size card Wi-Fi solution support MU – MIMO, QCA9882
- WMX2401-2: High performance 2x2 Single-Band WiFi 5 Full size card Wi-Fi solution support MU – MIMO, QCA9984
- WMX5401: High performance 4x4 Single-Band WiFi 5 Full size card Wi-Fi solution support MU – MIMO, QCA9984
- In discussion for WMX74xx WiFi 6/6e series for next generation



## Winning point:

- Driver integration with their NXP platform.
- Support RF test tool operation during their Cert. process
- Support master certification report.
- EU local test fail test, we support it locally in Taiwan (same lab) and pass for customer.

# Enterprise Router



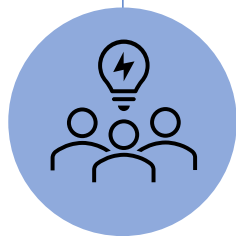
## About Client:

Enterprise router provider for public transportation use.



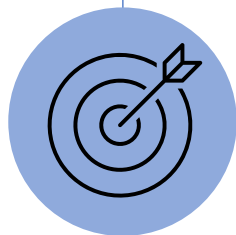
## Challenges:

Customer was searching the wave II dual band solution, and we are the first one developed it.



## Approach Solution:

- WMX6301: High performance 3x3 Dual-Band WiFi 5 Full size card Wi-Fi solution support MU – MIMO and wave II, QCA9984
- In discussion for WMX74xx WiFi 6/6e series for next generation



## Winning point:

- Dual band switchable with 3T3R solution is a key for customer product line.
- Certification support to help complete it.

A person is holding a smartphone in their right hand. The screen of the phone displays a dial pad with numbers 1 through 9, 0, and a call button. The background is a blurred office setting with a desk and a laptop.

# | TALK TO US

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