

2026 Wireless Connectivity Market Analysis Report Summary

July 2026

Takeshi Niwa 丹羽 健

TSR (Techno Systems Research Co., Ltd)

niwa@t-s-r.co.jp



About the report

Report Title: “2026 Wireless Connectivity Market Analysis”

Research Period: April to July 2026

Release Date: July 2026

Report Format: MS Word, A4 180 pages

Report Price: : USD4,000- (PDF report + Excel dataset, Department License)

Research Items

Wireless LAN

- WiFi Transceiver IC
- MCU WiFi
- WiFi AP/Router chipset

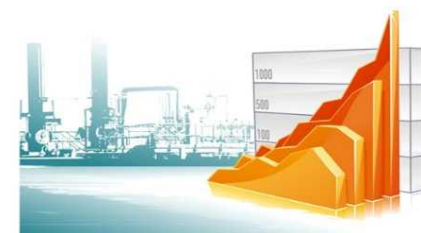
Bluetooth

- Data Bluetooth (Dual mode, Single mode, Multi-protocol)
- Audio Bluetooth/ Voice Wearable SoC

Bluetooth, Wi-Fi Modules

Sample report is available.

sample report inquiry to: Takeshi Niwa (niwa@t-s-r.co.jp)



1. Wireless Connectivity Market Summary: Short-Term Disruption, Long-Term Structural Growth

1. Memory disruption slows 2026–2027 wireless IC growth

- DRAM and NAND price hikes directly reducing shipments of memory-heavy host devices
- 2026–2027 wireless IC shipment growth is expected to slow
- Smart device OEMs try to control edge AI compute and memory resources, shift to cloud+edge Hybrid AI > Increase importance of reliable, high-capacity connectivity

2. Growth shift from smart devices to IoT, accessories, automotive, and industrial market

- Small memory applications, WiFi IoT, Bluetooth IoT device, IPC, Industrial...market will continue to grow

3. Wi-Fi standard fragments by application: Wi-Fi 6 mainstream, Wi-Fi 7/8 premium

- WiFi 7/8 will remain in premium/high end devices by around 2030
- Consumer, IoT eventually shift to WiFi 6 by 2028-2030. Low end IoT will shift to WiFi 6 around 2030

4. Bluetooth is growing beyond data & audio: positioning, broadcasting, asset tracking

- New Bluetooth features, PAWR, Channel Sounding, High Data Throughput, Energy Harvesting, creating new use cases

5. NearLink is emerging as a China-centered alternative ecosystem

- Fast growing during 2024-2026, expanding beyond Huawei ecosystem, but concentrated in China market

6. Chinese IC suppliers are reshaping market competition

- Gained meaningful share in mid/low end WiFi Transceiver IC, MCU-WiFi, Data Bluetooth and Audio Bluetooth market
- Advantages in low-cost and access to China domestic supply chain

7. AI integration is becoming a new value driver for wireless connectivity IC

- Edge AI processing, TinyML/ DSP/NPU are added to Wireless MCU, Bluetooth Audio SoC, and WiFi networking chipsets, adding value on SoC

2. Wireless Connectivity Chip Market Overview

Wi-Fi	Wi-Fi Transceiver IC MediaTek, Qualcomm, Broadcom, Realtek, AIC, Altobeam, Intel, HiSilicon, NXP, Infineon, Synaptics, Seekwave...	+ Wi-Fi 6 > 7 > 8 > 9 + 5GHz, 6GHz RF, MIMO + BT features (CS, HDT...)	Smartphone, Tablet, PC, Smart TV, OTT Set Top Box, Smart Speaker, Game Console, Printer/MFP, High end Smart wearable, Automotive IVI, IP Camera, Mobile Router, Smart Display....	2025: 2.11 billion units 2032: 2.63 billion units
	MCU Wi-Fi SoC Espressif, Realtek, Beken, NXP, Infineon, Bouffalo Lab, SiLabs, TI, HiSilicon...	+ Wi-Fi 6 > 7 + 5GHz, 6GHz RF + Matter/Thread + BT features (CS, HDT...) + App MCU, DSP, NPU...	Home Appliance/ Small Appliance, Kitchen Appliance, Smart Home end node, IP Camera, Door Camera, Smart Lock, AI-Toy, Smart Wearable, Industrial Handheld terminal, Smart Meter, PV battery, EV Charger...	2025: 0.9 billion units 2032: 1.57 billion units
	Wi-Fi AP/Router Chipset MediaTek, Qualcomm, Broadcom, Realtek, HiSilicon, MaxLinear	+ Wi-Fi 7 > 8 > 9... + AI/NPU + iFEM, Wi-Fi+AP SoC	Wi-Fi Router/Repeater, Enterprise Wi-Fi AP, Wi-Fi Broadband Gateway	2025: 0.54 billion units 2032: 0.54 billion units ASP increase
Data Bluetooth	Dual Mode Data IC YiChip, Realtek, MediaTek, Qualcomm, Infineon, FreqChip...	+ App MCU, DSP, NPU... + BT Features (CS, HDT, ULL HID...) + Thread/Matter, Proprietary 2.4GHz	Remote Controller, HID, Gaming Controller, Commercial Tag, Consumer Tag, Healthcare Device, Smart Wearable, mobile accessories, Smart Lighting, Smart Home end-nodes (sensor, switch), Door Lock, ESL, Automotive ESL, Automotive TPMS, ETC Box, Toy, POS terminal, Industrial Handheld Terminal, Label Printer, SPI Data Module...	2025: 3.25 billion units 2032: 5.24 billion units
	BLE Single mode IC Nordic, Telink, SiLabs, Realtek, PHYPLus, EMMicro, OnMicro, NXP, YiChip, Renesas, TI, ST...			
Audio Bluetooth	Bluetooth Audio/ Wearable SoC Mid/High: Bestechnic, Apple, Airoha, Actions, WuQi, Qualcomm... Low end: Bluetrum, Jieli, YiChip	+ HDT, 5GHz, HD codec + AI DSP, NC + App MCU, Display, camera, NPU (wearable)	Bluetooth Headset (TWS, Non-TWS), Bluetooth speaker (portable, home...), Voice Smart watch, Smart Glass, Wireless MIC, Conference System...	2025: 5.04 billion units 2032: 5.11 billion units
Wireless Connectivity integrated SoC	WiFi/Bluetooth integrated Mobile SoC		Smartphone, Tablet, Smart Wearable (watch, XR), Automotive IVI, Industrial Smart Device	2025: 0.89Bu > 2032: 0.6Bu
	Bluetooth integrated Feature phone SoC		Feature Phone, Smart Watch	2025: 0.14Bu > 2032: 0.09Bu

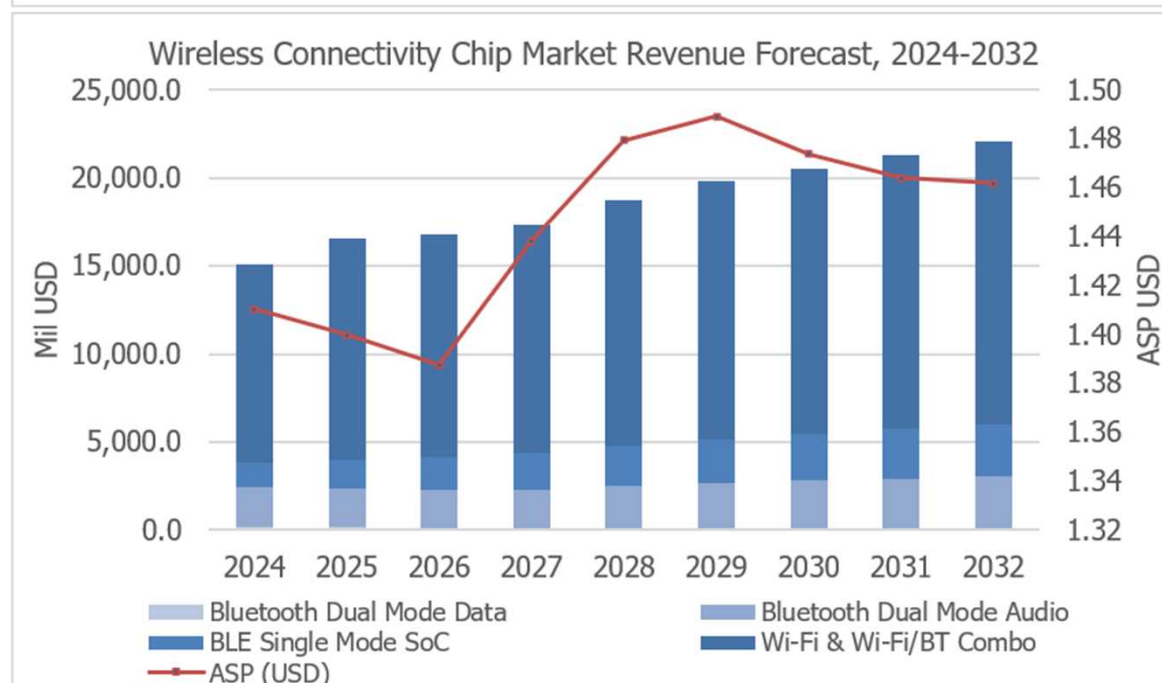
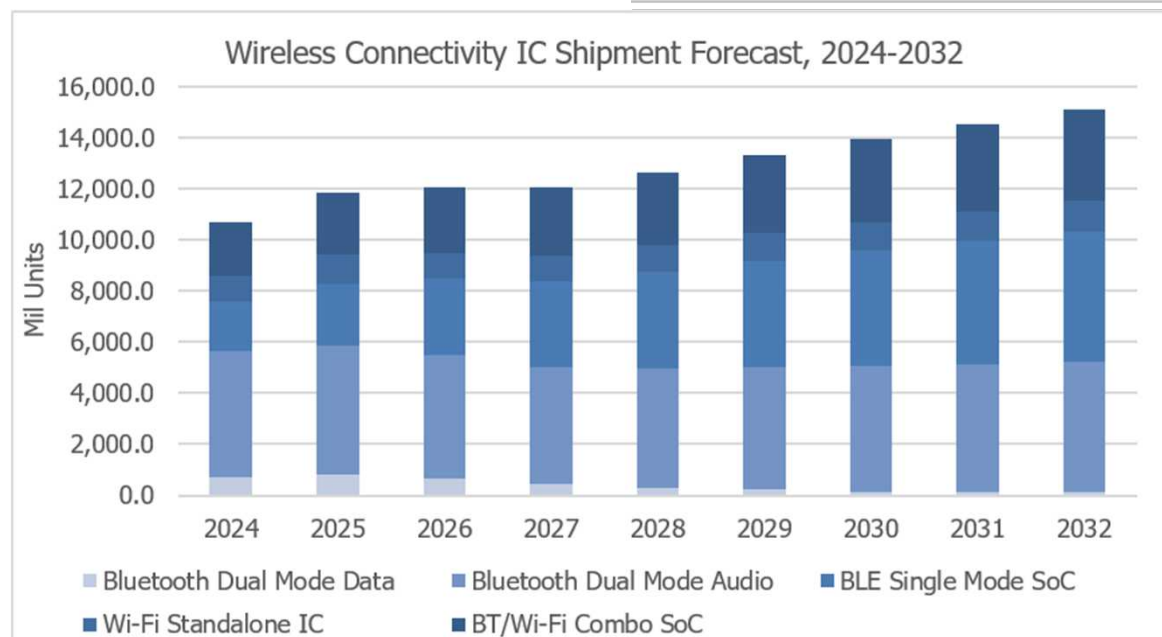
3. Wireless Connectivity Chip Market Forecast

<Shipments>

- **11.8 billion units** of total shipments in **2025**, **10.7% of strong growth** YoY. **15.1 billion units** of total shipments in **2032**, **3.7% of CAGR** in **2024-2032**.
- Memory shock, **slow growth in 2026-2027**.
- BLE SoC, BT/Wi-Fi combo SoC continue to grow during 2026-2027.
- Return to stable expansion from 2028, led by **MCU Wi-Fi, Data Bluetooth for IoT applications**, and **Wi-Fi/BT combo SoC migration**.

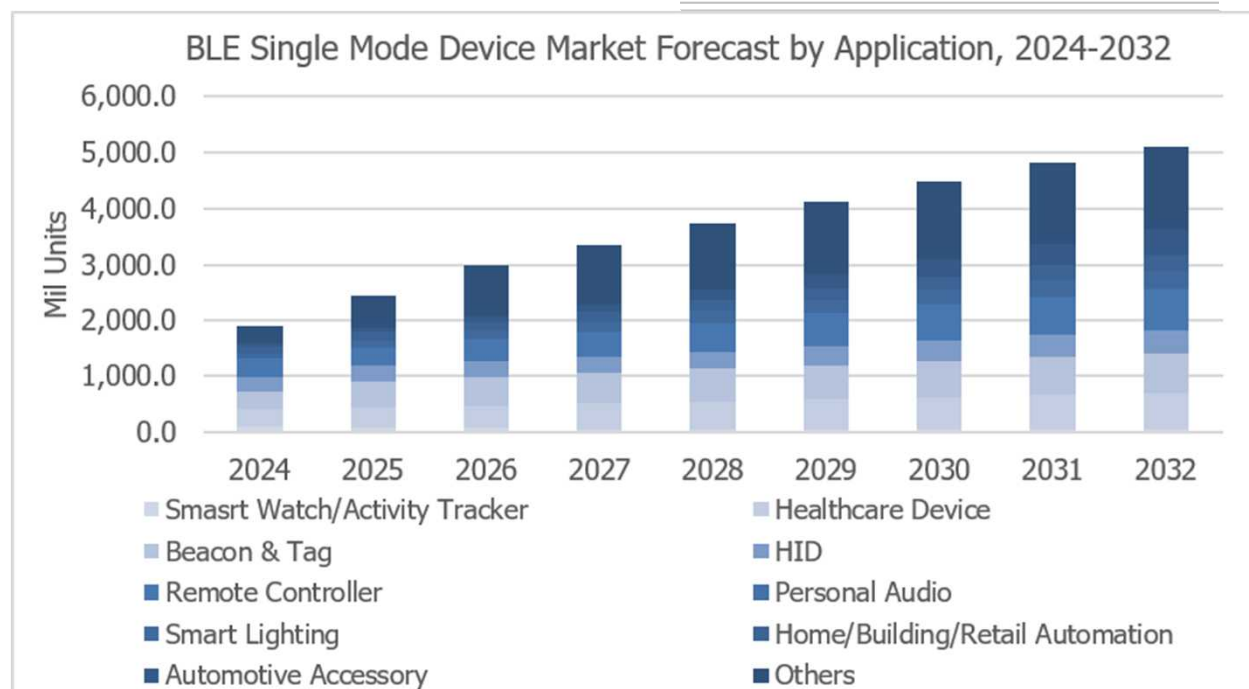
<Revenue>

- **16.6 billion USD** of total revenue in **2025**, to **22.1 billion USD** in **2032**. **4.9% of CAGR**, outpacing shipment growth.
- **ASP rise** driven by Wi-Fi technology migration, AI integration in wireless IoT SoCs, product mix change in Bluetooth audio, IC cost increase.
- Wi-Fi accounts 76% market share in revenue, while 30% in shipments base in 2025.



4. BLE Single Mode Chip Market Forecast

- **2.45 billion units** of total shipments, **27.8% of strong YoY growth in 2025**.
- **Strong momentum** to continue in **2026**, nearly **3 billion units**, **21.7% of YoY growth**.
- Strong, double-digit growth continue by 2029. total shipments reach **5.12 billion units** by **2032**, with **13.1% of CAGR** in 2024-2032.
- Main growth driver: migration from **dual mode Bluetooth and proprietary 2.4GHz to BLE**, and **high growth applications**.
- **Emerging applications**: Healthcare device, remote controller, commercial tag (including smart label), consumer FindMy tag, automotive digital keys, Smart Home & smart lighting, toys...
- **China low-cost supplier**: strong presence in **HID, remote controller, commercial tag** in China domestic market, **China smart home**, mobile accessories... Limited exposure in automotive, healthcare, industrial...

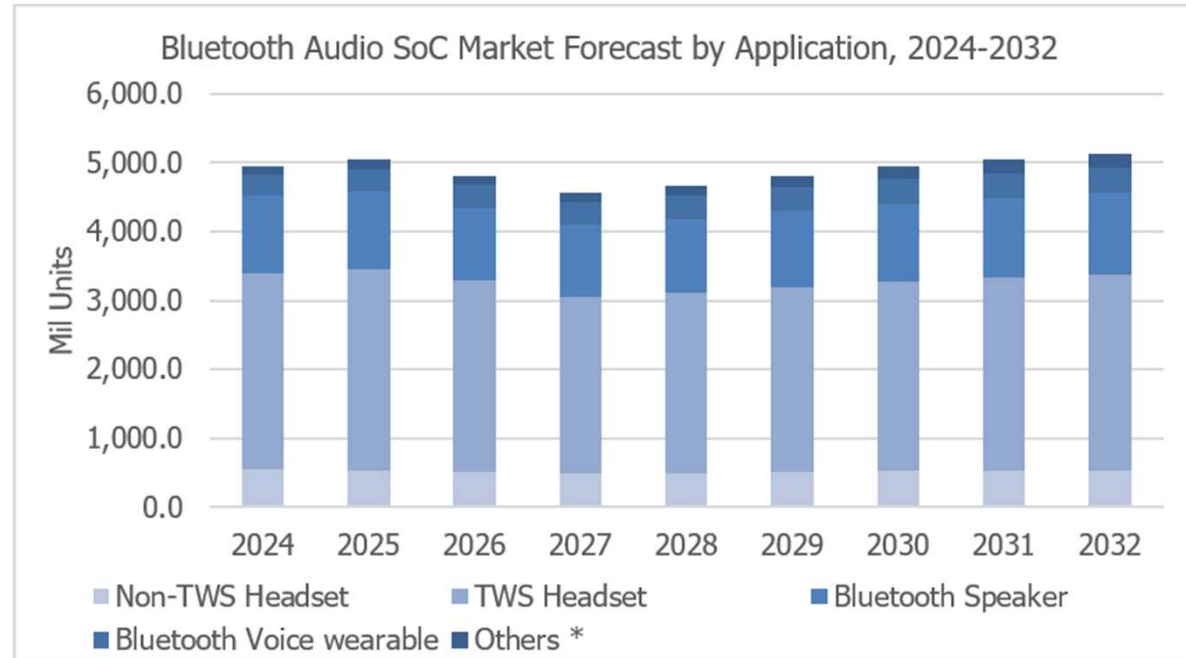


Main IC supplier by application

Remote Controller	Realtek, Telink, YiChip, OnMicro, Atmosic, Nordic...
HID	Nordic, OnMicro, Telink, YiChip...
Consumer Tag	Nordic, SiLabs, Atmosic, Renesas, PhyPlus, OnMicro, YiChip...
Commercial Tag	PhyPlus, OnMicro, WillIoT, InPlay, Nordic, TI...
Smart Home/ Lighting	Nordic, SiLabs, Telink, NXP, OnMicro, YiChip...
Healthcare	Nordic, EMMicro, SiLabs, NXP, TI, OnSemi
Automotive	NXP, TI

5. Bluetooth Audio SoC Market Forecast

- **Around 5 billion** units of total shipments, **2% of YoY growth in 2025**.
- Market growth moderating in 2025, **slow growth expected in 2026-2028**. Inflation, smartphone market shrink.
- Inflation hit low end segment, **negative growth** expected in **low end** Bluetooth audio SoC market. **Low end** share will decrease from **84% (2024) to 75% (2032)**.
- Total shipments rebound gradually from 2028. Only **0.4% of CAGR** in 2024-2032. While **ASP rise** thanks to **mid/high-end shift**.
- **TWS headset** remains largest share, **55-60%**, followed by **Bluetooth speaker (22-23%)**, **non-TWS headset (10-11%)**, and **voice/audio wearable (6-8%)**.
- Voice smart watch market grew past years, but growth moderating in 2025-2026.
- Audio, camera smart glass market gains attraction since 2024.

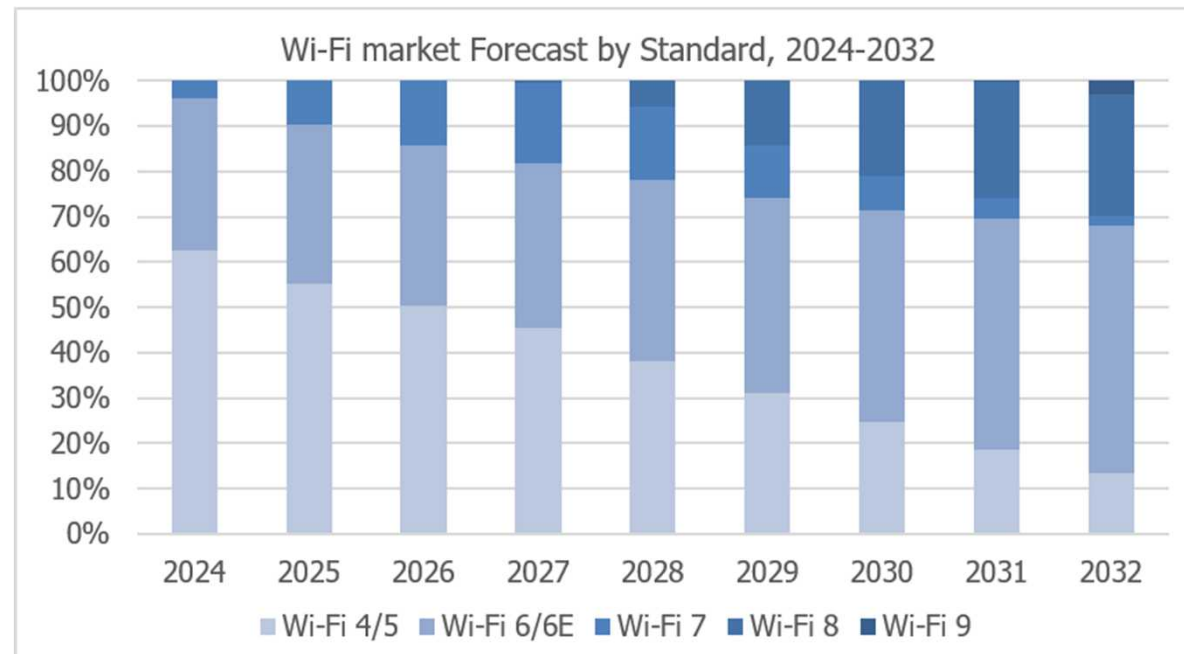
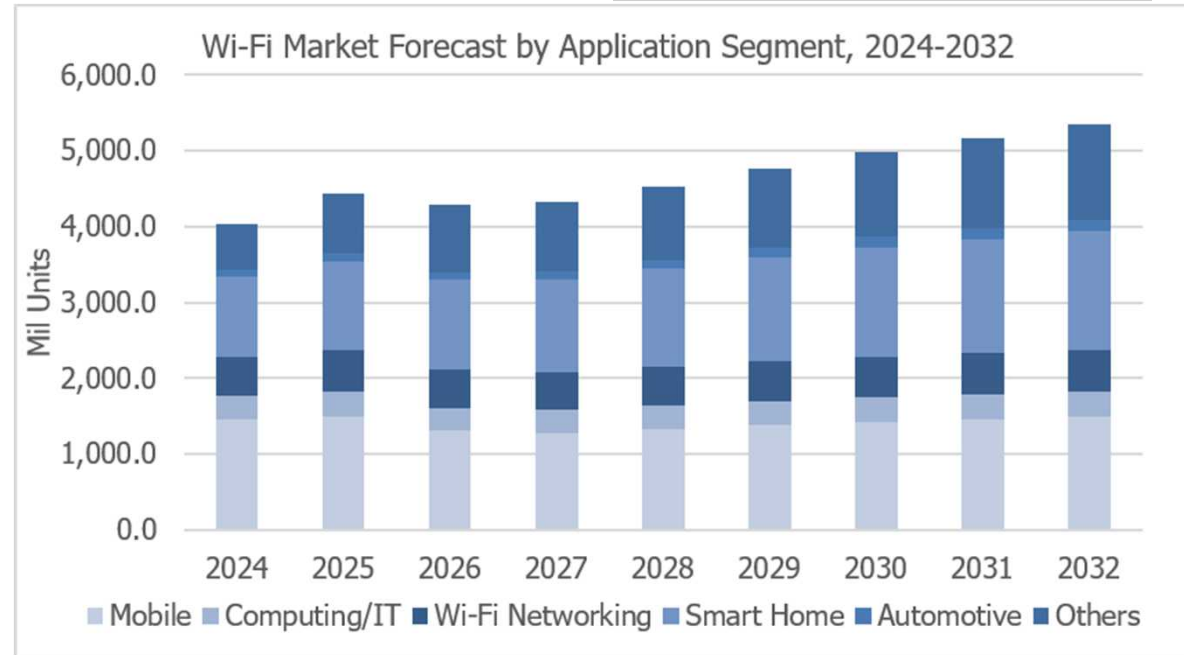


Main IC supplier by application

Mid/High end Headset	Apple, Bestechnic, Airoha, Qualcomm, WuQi, HiSilicon
Low end Headset	Jieli, Bluetrum, YiChip
Speaker	Actions, Qualcomm, Airoha, ViMicro, Jieli, Bluetrum
Voice Wearable	Bestechnic, Actions, Realtek, Jieli, Bluetrum

6. Wi-Fi Market Forecast

- Forecast 4.43 billion units in 2025, 9.8% of strong growth supported by a rebound in smart devices and continued IoT demand.
- Growth to stagnate in 2026–2027 due to memory inflation, smart device market shrink. IoT will continue growing.
- Log-term growth driven by smart home, automotive, industrial and broad-market IoT, with mid-high single-digit CAGR. Mature segment, mobile, computing/IT, and networking will remain nearly flat below 1% of CAGR.
- Wi-Fi standard migration is moving from Wi-Fi 4/5 to Wi-Fi 6, and from Wi-Fi 6 to Wi-Fi 7/8 in premium/high end devices.
- Wi-Fi 6/6E is expected to surpass Wi-Fi 4/5 in 2028, become largest category.
- Wi-Fi 7/8 adoption will be concentrated in premium and high-end devices, with rapid migration from Wi-Fi 7 to Wi-Fi 8 expected during 2028–2030.
- Wi-Fi 9 will emerge in 2031-2032 for premium devices.
- Wi-Fi 4/5 remain in IoT, automotive, consumer electronics, low-end mobile, and wearables, but its share will decline steadily through 2032.

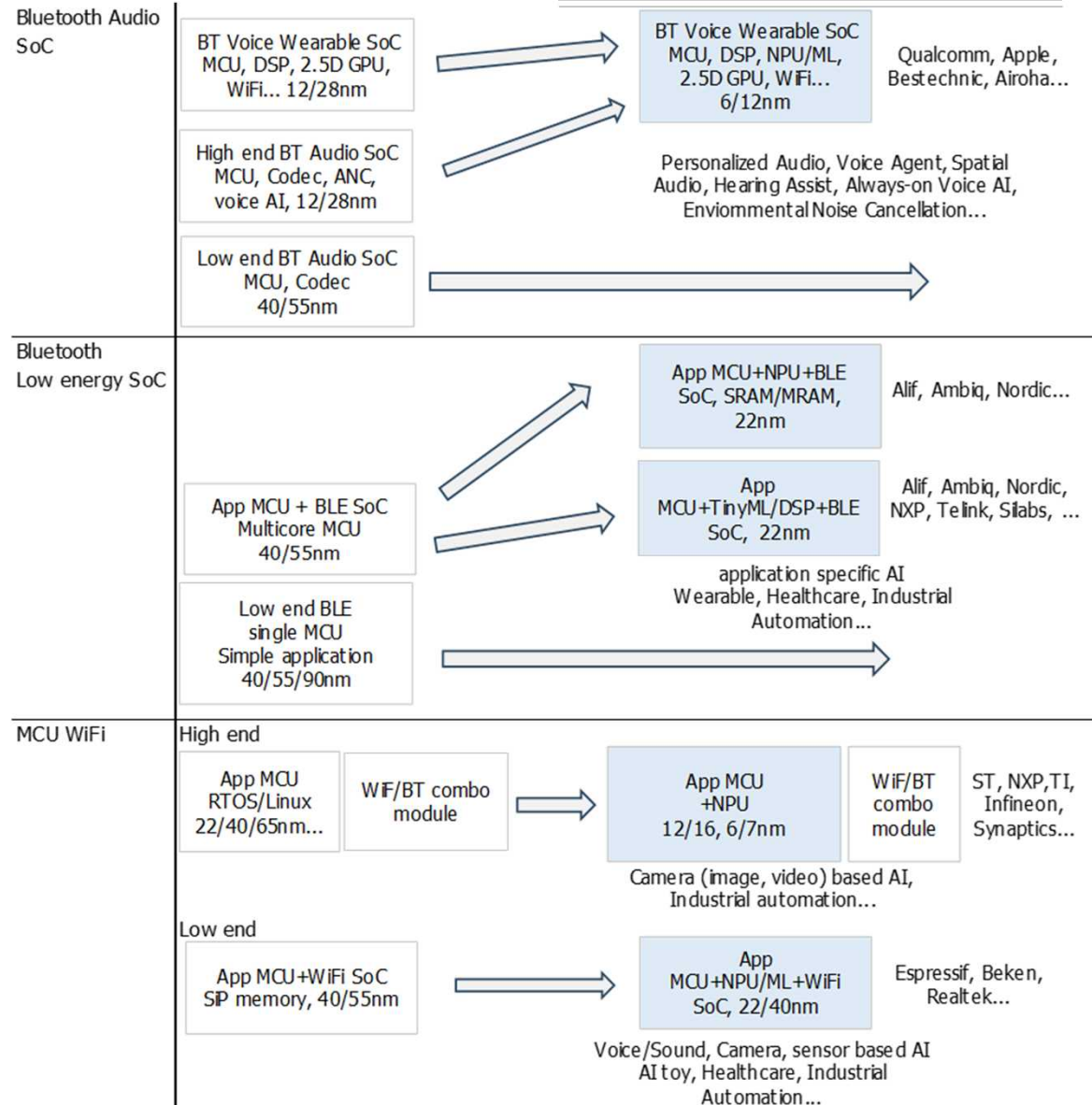


7. Edge AI Integration into Wireless IoT chipset

Edge AI Category by application/Processor Type

Data source↕	Use case↕	Processor↕	Model size↕	Wireless Connectivity IC↕
Sensor↕	Anomaly Detection↕ Predictive Maintenance↕ Activity Recognition↕	MCU/Tiny ML↕	KB class↕	Nordic, SiLabs, Telink↕
Sensor+ Voice/Sound, Sensor fusion↕	Voice Identification↕ Voice Agent↕ ANC/ENC↕ Hearing Enhancement↕	DSP, NPU↕	MB class↕	Bluetooth, Wi-Fi, BLE↕
Sensor+ Data/Sound+ Image/Video↕	Object Detection↕ Facial Recognition↕ Gesture Recognition↕ Visual AI Agent↕	NPU↕	GB class↕	Wi-Fi↕ (standalone AI MCU+ Wi-Fi module, or Wi-Fi SoC)↕

- **Edge AI adds value** on Wireless MCU, Bluetooth audio/ wearable SoC. Driving **process migration, memory requirements**.
- Edge AI processing evolving from TinyML to NPU, SLM to Multimodal models.
- Qualcomm, Bestechnic, Airoha , Actions (Bluetooth Audio), Nordic, Alif, AmbiqMicro, Telink, SiLabs (Data Bluetooth), Beken, Synaptics (MCU Wi-Fi) introduced Wireless SoC with integrated NPU or AI-DSP.
- ST, NXP, Renesas, Infineon, Synaptics... introduced AI-MCU with integrated NPU.



8. Wireless Chip Supplier Market Share Position

Segment	Mobile (Smartphone/ Tablet)	Networking (AP/Router/Gateway)	CE (TV, OTT, Smart Speaker, Game Console)	IoT (MCU+WiFi)	Automotive BeforeMarket WiFi	Bluetooth Audio/ Voice Wearable	Bluetooth Data (BLE + Dual Mode)
2025 TAM	1,401Mil units	543Mil units	457Mil units	778Mil units	78Mil units	5,049Mil units	3,273Mil units
IC solution	AP SoC+RF, WiFi/BT Combo Chip	WiFi Networking chipset	WiFi/BT Combo Chip	MCU WiFi	Bluetooth/WiFi Combo Chip	Bluetooth Audio/ Voice Wearable SoC	Bluetooth Data SoC
Market Share							
30+ %	MediaTek	MediaTek	MediaTek	Espressif	Qualcomm	Bluetrum Jieli	
20-30%	Qualcomm	Qualcomm	Realtek	Realtek	Infineon NXP		YiChip Nordic
10-20%	Broadcom	Broadcom Realtek		Beken			Realtek
5-10%	UNISOC Apple	HiSilicon	NXP		MediaTek		Telink SiLabs
	Samsung HiSilicon						PHYPlus EMMicro
~5%			AMLogic AIC	NXP Infineon		Bestechnic Apple	OnMicro NXP
			Seekwave Altobeam	Bouffalo ASR		Airoha Actions	Infineon Renesas
			Apple Broadcom	Eswin SiLabs		YiChip WuQi	TI WiIoT
			UNISOC Bestechnic	TI HiSilicon		Qualcomm Realtek	MediaTek ST
			Infineon iComm	iComm Renesas		ViMicro HiSilicon	Qorvo FreqChip
		MaxLinear		MediaTek Qualcomm	UNISOC TI	Beken	Qualcomm Beken
		SiFlower		Synaptics Nordic	HiSilicon	SiFli Telink	Goodix Ambiq
Small New Entry	Realtek AIC	WuQi Senscomm		Altobeam AIC			Atmosic WCH
	Altobeam	Espressif AIC					Bouffalo OnSemi
		Seekwave					InPlay Actions
							SenaSIC LinkedSe
							and more...

- MediaTek, Qualcomm, Broadcom leads in mid-high end Wi-Fi market. Apple, HiSilicon emerges.
- Realtek lose share by Chinese competitors in Smart Device (AIC, Altobeam), Wi-Fi IoT (Beken), Bluetooth (Bestechnic, Telink) market.
- IoT (MCU-WiFi, Data Bluetooth) market share fragmented. Middle/Small-size companies dominant.
- Limited number of suppliers in Wi-Fi networking, Automotive Wi-Fi.

9. Growing Chinese Suppliers Presence in Wireless Connectivity IC Market

<Chinese IC Supplier Share>

	Major Chinese IC Supplier	2024	2025	2026 trend
Wi-Fi Transceiver	AIC, <u>Altobeam</u> , <u>HiSilicon</u> , <u>Seekwave</u> , <u>AMLogic</u> , <u>iComm</u> , <u>Taixin</u>	14-15%	20-22%	- → Low end smart device market decrease - → Chinese suppliers gain share
MCU Wi-Fi	<u>Espressif</u> , <u>Beken</u> , <u>Bouffalo Lab</u> , <u>Eswin</u> ...	59-60%	61-63%	- → Continuing to gain market share
Wi-Fi Networking	<u>HiSilicon</u>	4-5%	6-7%	- → small
Data Bluetooth	<u>YiChip</u> , <u>Telink</u> , <u>PhyPlus</u> , <u>OnMicro</u> , <u>Beken</u> , <u>FreqChip</u> , <u>Goodix</u> , <u>BouffaloLab</u> ...	42-43%	41-42%	- → market share stable
Bluetooth Audio (Mid/High end)	<u>Bestechnic</u> , <u>Actions</u> , <u>WuQi</u> , <u>HiSilicon</u>	45-46%	51-52%	- → Market share stable ~ slight increase?
Bluetooth Audio (Low end)	<u>Jieli</u> , <u>Bluetrum</u> , <u>YiChip</u>	100%	100%	- → 100% Chinese IC suppliers

- Chinese low-cost IC suppliers traditionally taking advantages in
 - Simple Wireless Transceiver (Application software on host side)
 - Simple Applications (HID, remote control, remote button, wireless sensor node, simple tag...)
 - Turnkey solution (low end consumer application from IDH, ODM, simple IoT devices)
 - Access to local supply chain, support of domestic customer
- Chinese Wireless IC vendors remain weak position in
 - Wi-Fi networking (several WiFi IC suppliers investing)
 - High end WiFi Transceiver (MIMO, Wi-Fi 7, 6GHz)
 - Wireless MCU business, hardware + SDK, Developer Community
- **HiSilicon** (High end Wi-Fi Transceiver), **Espressif** (successful in growing developer community and software ecosystem), **Bestechnic** (from Bluetooth audio to high end wearable SoC) are in **unique position**.