

# Navian Marketing Report

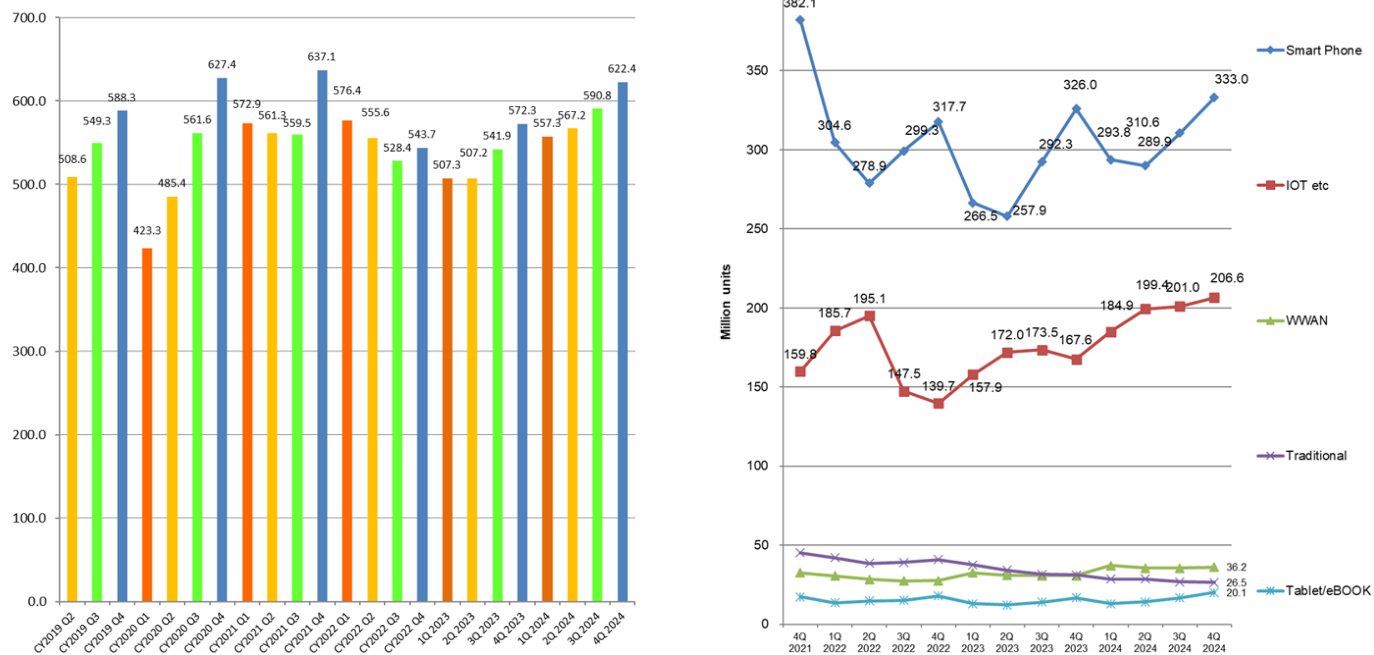
## RF Devices/Modules For Cellular Terminal Quarterly Market Report Q4 2024

Released on May 5<sup>th</sup> 2025

### RF Components & Modules in this report

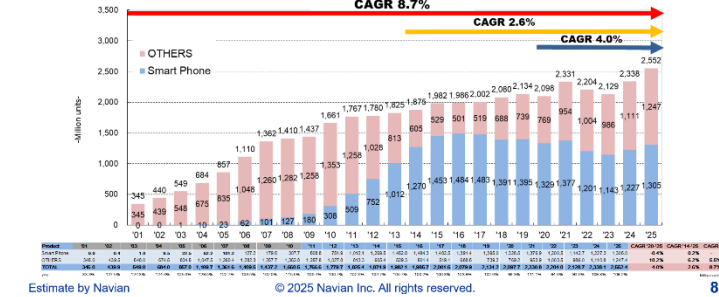
- ① Front end Module (ASM・TX Module・PAiD・FEMiD・All-in-One FEM・PAMiD・**5G TX Module/PAMiF-NEW**・ Multiplexer・A-Multiplexer・**5G RX Module-NEW**)
- ② Antenna Switch (Main RF/Diversity) Power Amplifier Module
- ④ Duplexer
- ⑤ Band Pass Filter
- ⑥ TCXO

### Cellular Terminal Shipment History

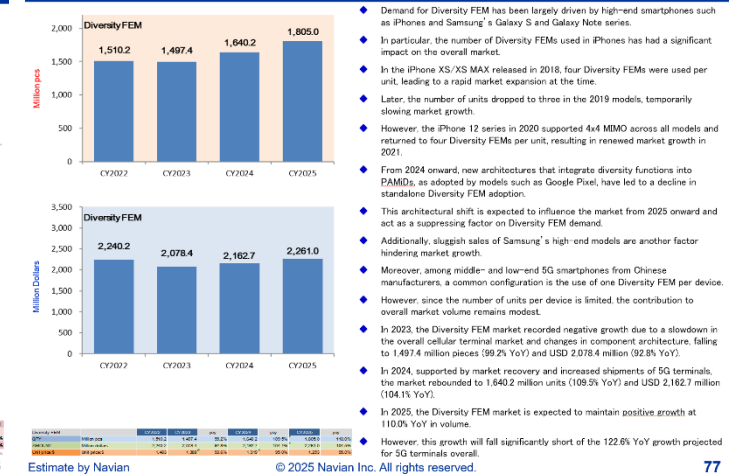


### Cellular Terminal Annual Shipment History CY2001-CY2025

- Cellular terminal shipments in 2023 totaled 2,128.7 million units, representing a YoY decline to 96.6%, and recording negative growth for the second consecutive year.
- However, signs of recovery appeared from the second half of 2023, and in 2024, cellular terminal shipments reached 2,330.1 million units, representing 109.0% YoY.
- The main drivers of demand recovery were smartphones and IoT terminals in the Chinese market, supported by the reintroduction of HUAWEI's 5G models and continued infrastructure investment.
- In 2025, further acceleration is expected, with shipments projected to reach 2,552.4 million units, representing 109.2% YoY.
- This growth is believed to be partially driven by smartphones being officially included in China's trade-in subsidy program ("以旧换新") starting in 2025.
- The subsidy is limited to models priced at 6,000 yuan or less, with domestic brands being the primary beneficiaries.
- Cellular IoT terminals are also maintaining steady growth, particularly in the Chinese market, with increasing deployment in urban infrastructure and industrial fields.
- In addition, partial commercialization of 5G RedCap, which offers low power consumption and low cost, is progressing and drawing attention as a driver to accelerate 5G adoption in the IoT sector.



### Market Forecast of Diversity FEM



### iPhone16e -A3409- RF Section-1

- Low-band PAMiD SKY5 58440-11 Skyworks  
7.15x4.68x7mm
- WiFi(2.4GHz) FEM 241 MURATA  
3.30x3.30x7mm

Component count  
RF1-32pcs-



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### WiFi 7 Modules



### Outline of the report

### RF Devices/Modules For Cellular Terminal Quarterly Market Report Q4 2024 -CD-ROM (PDF file)-

- The date of issue May 5th 2025
- The Documents of the report The PDF file of 218 SLIDES : MS PowerPoint based/Excel data/JPEG files of Teardown photos
- Report price JP¥195,000
- Annual subscription for four quarterly issues JP¥510,000(report&data x3/data x1)

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### e-Book Reader Tablet PC



### WWAN Terminal Adapter



### Embedded Module



### Smart Phone



### Traditional Handset



### Fixed Wireless Terminal



Non-Voice

Voice

PHASE 1. CELLULAR TERMINAL SHIPMENT  
AND UPDATE

- Cellular Terminal Quarterly Shipment History ~ Q4 2024
- Cellular Terminal Quarterly Shipment by Product Type ~ Q4 2024
- Cellular Terminal Quarterly Shipment by Standard ~ Q4 2024
- Annual Shipment History CY2001-CY2025
  - Cellular Terminal Shipment History by Smartphone/Others
  - Annual Cellular Terminal Shipment Trend by Product Type
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PHASE 2. SHIPMENT AND STATUS OF  
CELLULAR TERMINAL KEY MANUFACTURER

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Q1 2021-Q4 2024
- Cellular Terminal Shipment by Maker & Cellular Standard  
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CY2020-CY2025
  - Cellular Terminal Shipment by Manufacturer & Cellular Standard  
CY2020-CY2025
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  - LTE RF Platform Market Share by Cellular Terminal Manufacturer  
Quarterly data: Q1 CY2021-Q4 2022  
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  - 5G RF Platform Market Share by Cellular Terminal Manufacturer  
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Annual data: CY2020-CY2025

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For Cellular Market Trend

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  - Quarterly Front End Module Market Trend Q1 2022-Q4 2022
  - Annual Front End Module Market Trend by Product CY2020-CY2024
  - Detailed Data of Front End Module Marke
  - Front End Module Market Size & Trend by Product  
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    - TX Module
    - FEMiD
    - All-in-One FEM
    - PAMiD
    - PAiD
    - Multiplexer (Quadplexer/Hexaplexer)

- Antenna Switches
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Antenna Switch TOTAL Market Size  
Antenna Switch for Main RF Market Size by Throw Count  
Antenna Switch for Main RF Market Size by Substrate  
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  - Annual Detailed Data of Duplexer Market
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ASM Market Share Breakdown per Product Type
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RX Module Market Share for CY2025 Forecast  
RX Module Market Share Breakdown per Product Type
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TX Module Market Share for CY2025 Forecast  
TX Module Market Share Breakdown per Product Type
- FEMiD  
FEMiD Market Share for CY2025 Forecast

- FEMiD Market Share Breakdown per Product Type
  - PAiD  
PAiD Market Share for CY2024 Forecast  
PAiD Market Share Breakdown per Product Type
  - Duplexer Bank  
Duplexer Bank Market Share for CY2025 Forecast  
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Multiplexer Market Share for CY2025 Forecast  
Multiplexer Market Share Breakdown per Product Type
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  - TCXO Market Share Breakdown per Product Type
  - TCXO Supply chain

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- 5G Shipment CY2020-CY2025 by Brand
- ANTENNA FEM for Millimeter Wave

- 5G RFFE Case Studies -Sub 6GHz-
  - Sub 6GHz RFFE of SAMSUNG GALAXY S10 5G SM-G977N
  - Sub 6GHz RFFE of Huawei MATE20X5 EVR-AN00
  - Sub 6GHz RFFE of Xiaomi Mi Mix 3 5G M1810E5GG
  - Sub 6GHz RFFE of OPPO Reno3 5G
  - Sub 6GHz RFFE of SAMSUNG GALAXY S20+ 5G SC-52A
  - Sub 6GHz RFFE of Apple iPhone12Pro A2406
  - Sub 6GHz RFFE of Apple iPhone14 Pro MAX USA
  - Sub 6GHz RFFE of SAMSUNG GALAXY S21 Ultra SC-52B docomo
  - Sub 6GHz RFFE of Fibocom FM650-CN (5G IOT Module)
  - Sub 6GHz RFFE of Xiaomi Redmi Note 12 Pro 5G
  - Sub 6GHz RFFE of Huawei Mate 60 Pro
  - Sub 6GHz RFFE of Google Pixel9
- 5G RFFE Market Forecast in CY2025
- Market Forecast of 5G TX Module/PAMiF in CY2025
- 5G TX Module/PAMiF Market Share for CY2025 Forecast
- Market Forecast of AiP (Antenna in Package) CY2024
- AiP (Antenna in Package) in CY2025 Forecast
- Market Forecast of 5G RX Module in 2022
- 5G RX Module in CY2025 Forecast
- Market Forecast of 5G Band Pass Filter(BPF) in CY2025
- 5G Band Pass Filter(BPF) for CY2025 Forecast
- 5G RFFE Market Forecast in CY2025
- 5G RFFE Vendor Trend in CY2025

PHASE 6. Hot Products Teardown

- iPhone16e -A3409- JAPAN Model
  - The first iPhone to adopt Apple's 5G modem Released 2025, February 28 -
    - RF Circuit Block Diagram
    - Main RF Parts list & Duplexer/BPF Count
    - Teardown pictures & RF Modules/Components
- QUECTEL RG255C-GL
  - The first IoT module to support 5G RedCap Released 2024, April -
    - RF Circuit Block Diagram
    - Main RF Parts list & Duplexer/BPF Count
    - Teardown pictures & RF Modules/Components
- WiFi 7 Modules
  - FENVI MT7925 WiFi 7
  - FENVI BE200
  - FENVI QCNCM865
    - RF Circuit Block Diagram
    - Main RF Parts list & Duplexer/BPF Count
    - Teardown pictures & RF Modules/Components

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