

Navian Marketing Report

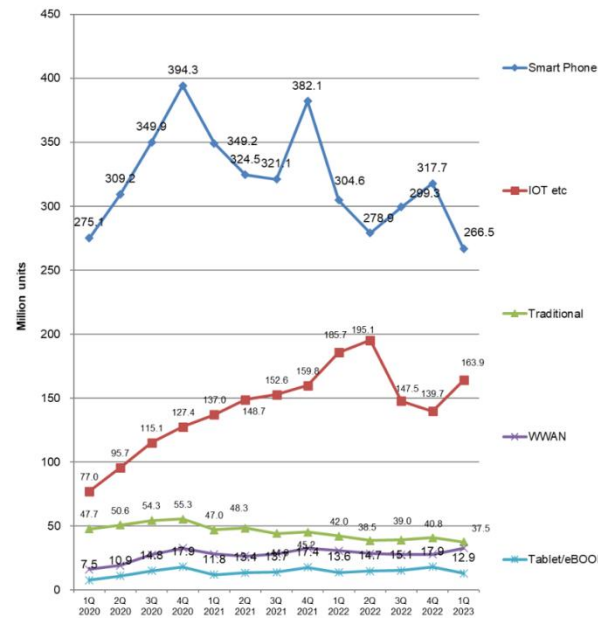
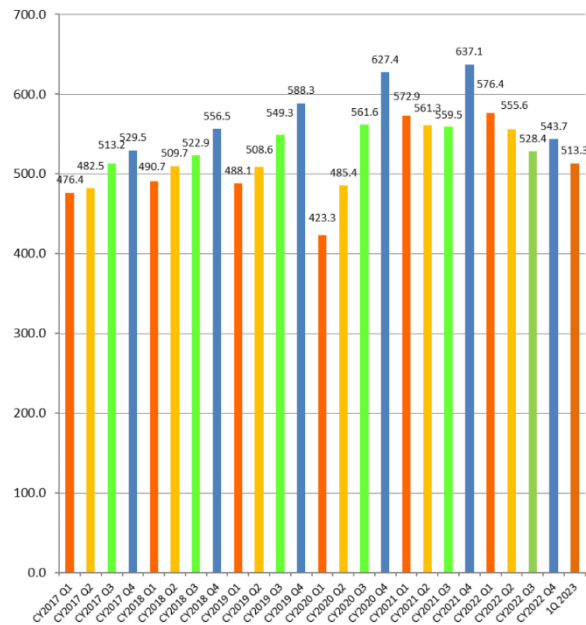
RF Devices/Modules For Cellular Terminal Quarterly Market Report Q1 2023

Released on August 28th ,2023

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 ⑥TCXO

Cellular Terminal Shipment History



e-Book Reader
Tablet PC

E-book Reader

Tablet PC

WWAN Terminal Adapter

Embedded Module

Smart Phone

Traditional Handset
Mobile Phone

Fixed Wireless Terminal

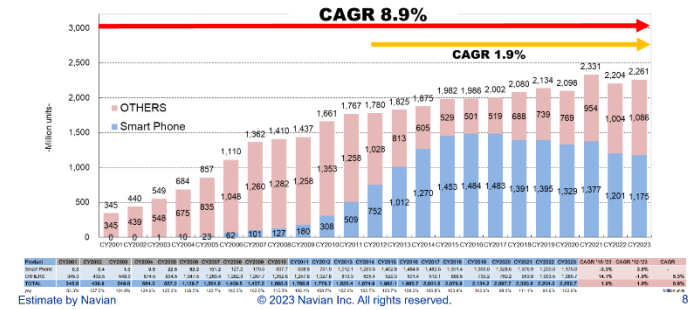
Non-Voice

Voice

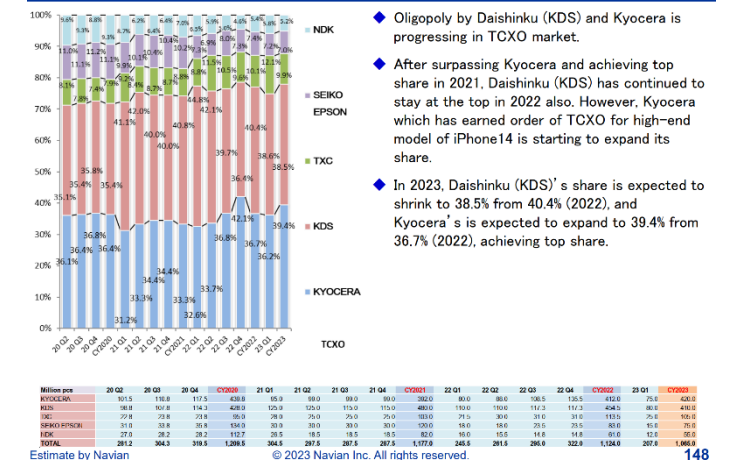
Report Sample

Cellular Terminal Annual Shipment History CY2001-CY2023

- Shipment volume of Cellular Terminal in 2022 was 2,204.0 million units (YoY 94.8%).
- From our previous report forecasting YoY 95.8%, the negative range increased by 1.2%.
- Drop in smartphone demand has become serious mainly in China, and in addition, Cellular IOT which used to see healthy growth has significantly lost momentum in late 2022.
- Economic recovery of China expected with the lift of Zero-Covid policy is still not evident in 2023, and concerns for slowdown of economy due to progressing global inflation are stronger. Demand recovery of Cellular Terminal should not happen until late 2023 at the earliest.
- Shipment volume of Cellular Terminal in 2023 is expected to increase slightly to 2,260.7 million units (YoY 102.6%).

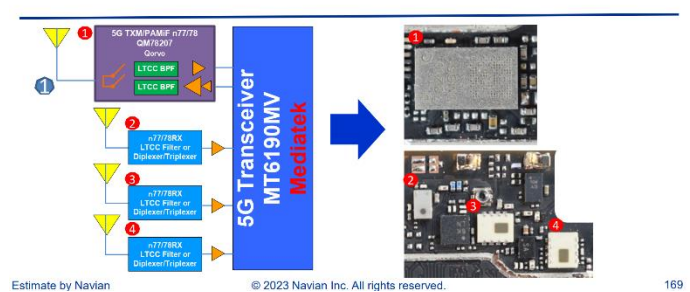


TCXO Market Share for CY2022 & CY2023 forecast

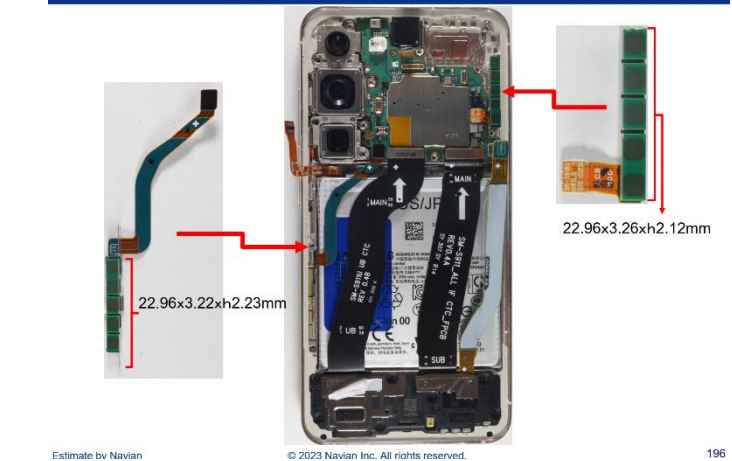


Sub 6GHz RFFE of Xiaomi Redmi Note 12 Pro 5G

- Xiaomi Redmi Note 12 Pro 5G is a 5G smartphone for China which supports Sub 6GHz. It supports single band of 3.5GHz (n77/n78), and configured with Single TX/Triple RX.
- It only uses PAMiF which supports n77/78 TRX, and has COB configuration using LTCC filter on RX side.
- Its PAMiF is Qorvo's QM78207, and has 2 LTCC filters as internal filter.
- EN-DC supports 3 bands of n41/n1/n3, and uses a combination of COB Duplexer, Filter, and ALL-band PAM.
- Smartphone market is drastically stagnant in China, and although Sub 6GHz's RF generally was dual band/Dual TX when 5G implementation had started, nowadays, this kind of single band/Single TX in on an increase.



SAMSUNG Galaxy S23 SC-51D mmW AIP Location



Outline of the report

RF Devices/Modules For Cellular Terminal Quarterly Market Report Q1 2023 -CD-ROM (PDF file)-

- The date of issue August 28th ,2023
- The Documents of the report The PDF file of 224 SLIDES : MS PowerPoint based/Excel data/JPEG files of Teardown photos
- Report price JPY195,000
- Annual subscription for four quarterly issues JPY510,000(report&data x3/data x1)

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