

# Navian Marketing Report

~Will 5G be able to become a driving force of the market?~

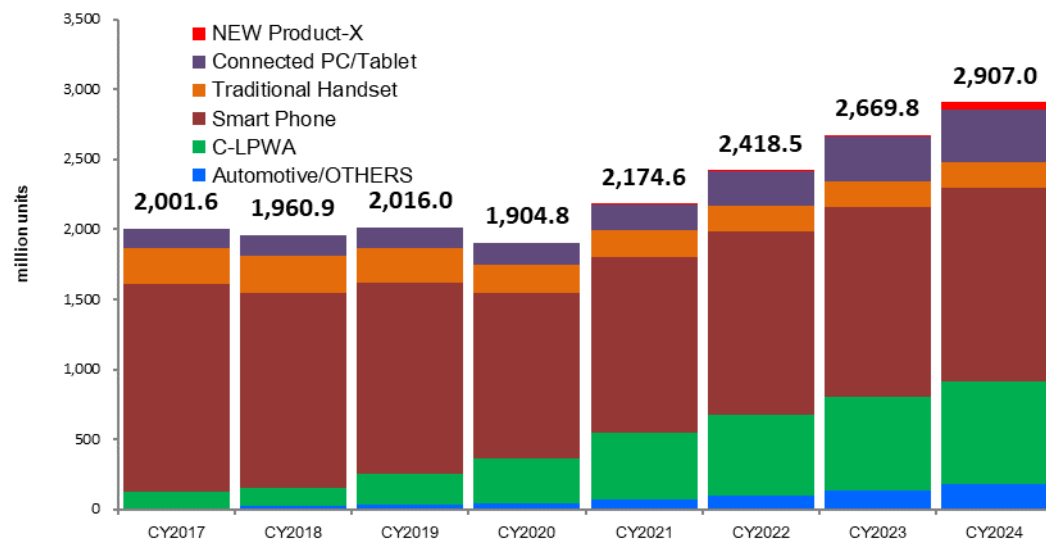
## RF Devices/Modules for Cellular 2019-2020

Released on December 15 2020

Front End Modules & RF Components in this report

- ① Front end Module (ASM·RX Module·TX Module·PAiD·PAMiD·FEMiD·Multiplexer·Antenna Multiplexer·5G TX Module/PAMiF·AIP·mmW Module)
- ② Antenna Switch (For Main RF·For RX Diversity)
- ③ Power Amplifier Module
- ④ Duplexer(SAW/BAW/IHP)
- ⑤ Band Pass Filter(SAW/BAW/IHP/LTCC for Sub 6GHz/IPD for Sub 6GHz)
- ⑥ TCXO

### Cellular Terminal Shipment Forecast by Standard



**New Product X**  
Expecting a completely new kind of gadget with completely groundbreaking display and input-output style different from existing mobile gadgets, and it will be the engine of 5G era.



**Cellular LPWA IOT**  
It is one of the highlights of 5G, but NR-IOT of 5G standard is likely to take a while. IOT market will expand mainly in 4G-based NB-IOT for now.



**Cellular V2X**  
LTE adoption would be the next step for Cellular V2X. Because of competition with WiFi-based 802.11p, demand size would be limited.



**Cellular PC/Tablet**  
Cellular adoption in Tablet and Notebook PC will become full scale as 5G becomes widely used. It should become the adrenaline shot which will stimulate the Tablet and Notebook PC market.



**Smart phone**  
Product which would most likely adopt 5G. However, as for milli-waves, it is strongly thought that adoption would be limited due to issues with space, cost, and power consumption.



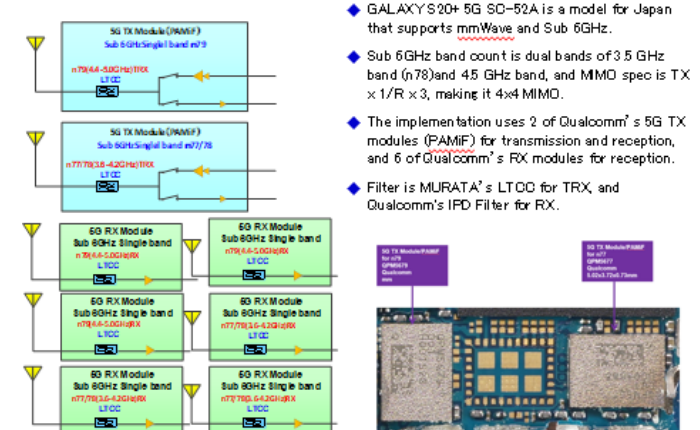
**Traditional Handset**  
Would be the last to adopt 5G. Also, it will only adopt either Sub 3GHz or Sub 6GHz, and not milli-waves.

# Report Sample

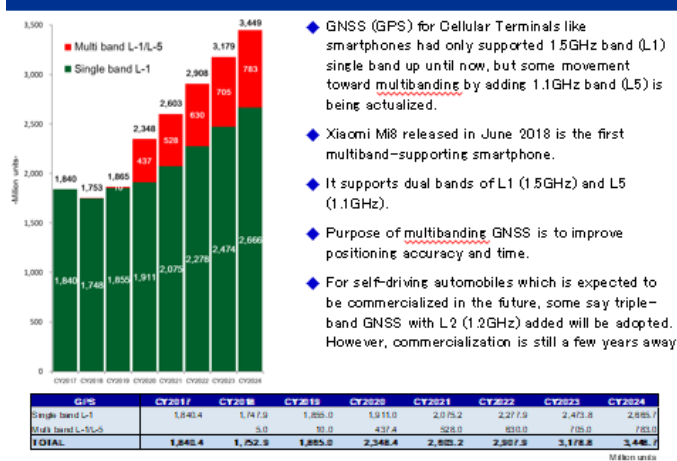
### Consideration of Antennas & Filters for Sub 7GHz



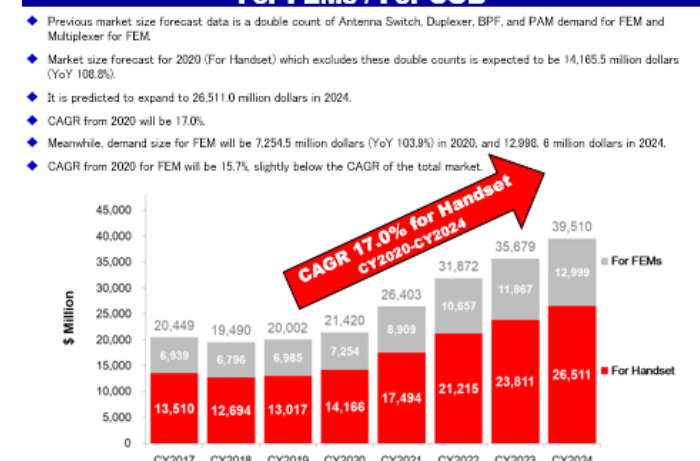
### Sub 6GHz RFFE of SAMSUNG GALAXY S20+ 5G SC-52A



### Multi-band GNSS Forecast



### RF Devices / Modules Total Market Forecast - For FEMs / For COB -



### RF Devices/Modules For Cellular 2019 2020 English version -CD-ROM (PDF file & Excel file)-

- Release Schedule December 15 2020
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② 270,000JPN Customers who have purchased Navian quarterly report within 1year  
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**Phase1. Cellular Terminal Shipment Forecast****I. Cellular Terminal Shipment AND Update**

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