

Navian Marketing Report

～市場のけん引役は Smartphone から IOT 等の非音声機器に～

Front End Module と高周波部品市場の中期展望

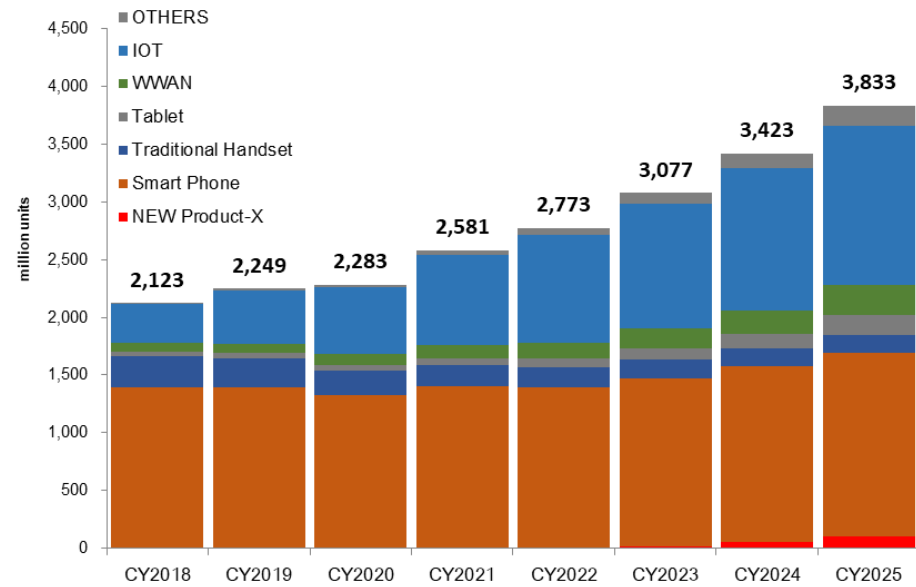
RF Devices/Modules for Cellular 2021-2022

2021年12月31日発行

本レポートで対象とする RF Devices / Modules

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

Cellular Terminal Shipment Forecast by Standard



New Product X

表示や入出力がSmart phone等の既存のMobile機器とは一線を画す5G時代を牽引する新型機器の登場を予想。



Cellular LPWA IOT

5Gの目玉の一つだが、5G規格のNR-IOTはしばらく時間がかかりそう。当面は4GベースのNB-IOTを中心にIOTの市場が拡大する。



Cellular V2X

Cellular V2Xは、LTEの採用がこれからといった段階。WiFiベースの802.11pとの競合もあり、需要規模は限定的。



Cellular PC/Tablet

5Gの実用化に伴って、Tablet・Notebook PCのCellular搭載が本格化。Notebook PC・Tablet市場を刺激するカンフル剤としても期待。



Smart phone

5Gの採用が最も期待される製品。ただ、ミリ波についてはスペース・コスト・消費電力の面から限定的との見方が強い。

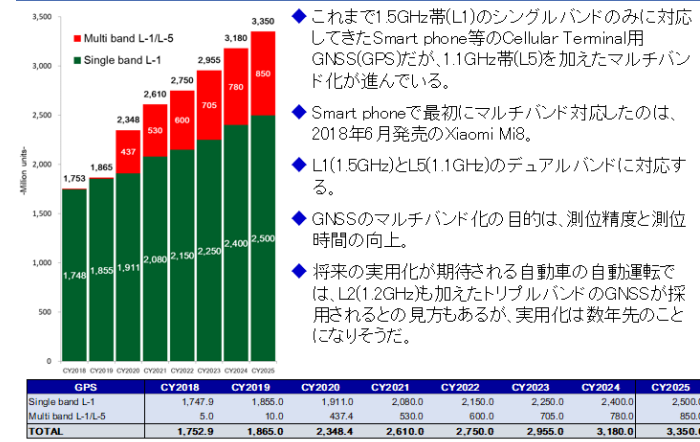


Traditional Handset

5Gの採用は最後発となる。またミリ波の採用もなく、Sub 3GHz又はSub 6GHzの採用に止まる。

Report Sample

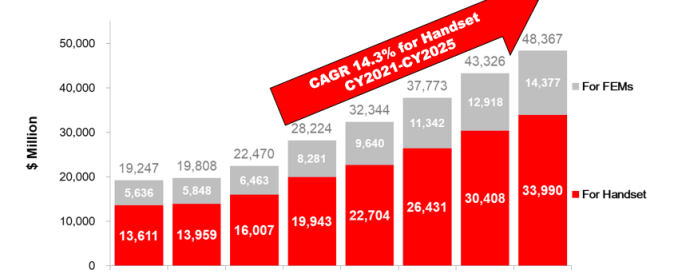
Multi-band GNSS Forecast



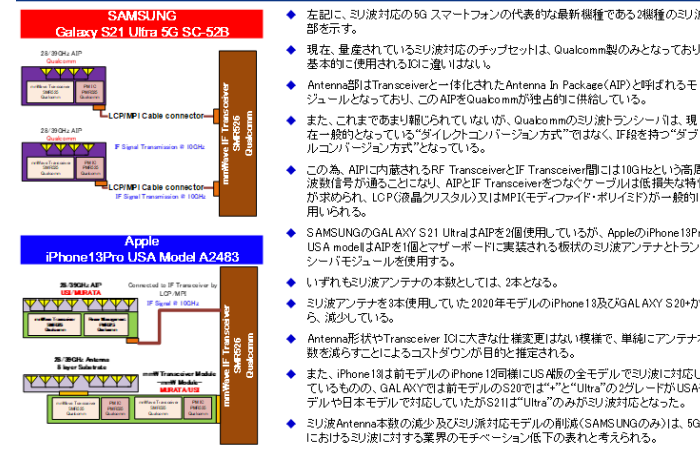
- ◆これまで1.5GHz帯(L1)のシングルバンドのみに対応してきたSmart phone等のCellular Terminal用GNSS(GPS)だが、1.1GHz帯(L5)を加えたマルチバンド化が進んでいる。
- ◆Smart phoneで最初にマルチバンド対応したのは、2018年6月発売のXiaomi Mi8。
- ◆L1(1.5GHz)とL5(1.1GHz)のデュアルバンドに対応する。
- ◆GNSSのマルチバンド化の目的は、測位精度と測位時間の向上。
- ◆将来の実用化が期待される自動車の自動運転では、L2(1.2GHz)も加えたトリプルバンドのGNSSが採用されるとの見方もあるが、実用化は数年先のことになりそうだ。

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

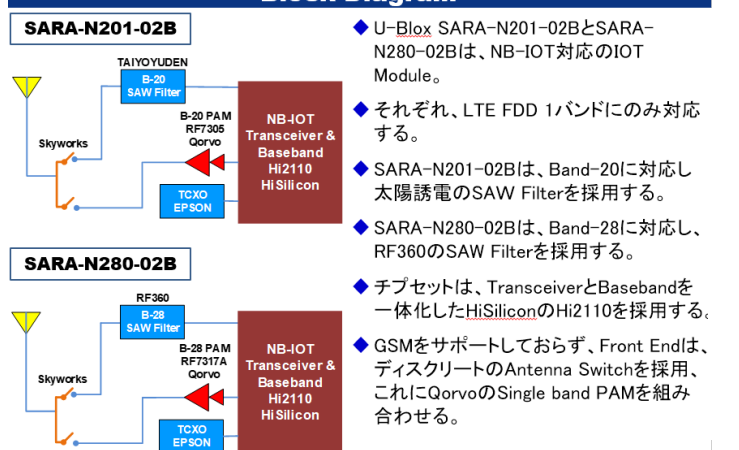
- ◆先の市場規模予測のデータは、Antenna Switch・Duplexer・BPF・PAMのFEM向け需要分、及びFEM向けMultiplexerをダブルカウントしたものである。
- ◆これらダブルカウントを除いた2020年における市場規模予測(For Handset)は、前年比124.6%の19,942.8million dollarsの見込み。
- ◆2025年には33,989.6million dollarsに拡大すると予測した。
- ◆2021年からの年平均成長率は14.3%となる。
- ◆一方、FEM向けの需要規模は、2021年で前年比128.1%の8,281.0million dollarsで、2025年には14,377.3million dollarsとなる。
- ◆FEM向けの2021年からの年平均成長率は14.8%と、総市場の年平均成長率14.4%を若干上回ることになる。



iPhone13 Pro A2483 vs. GALAXY S21 Ultra 5G SC-52B in mmW Part



U-Blox SARA-N201-02B/SARA-N280-02B Block Diagram



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 ■資料発刊要領

RF Devices/Modules For Cellular 2021-2022 日本語版

-CD-ROM (PDF file & Excel file)-

○発行予定日 2021年12月31日
 ○資料体裁 A4版 フルカラー 321スライド(予定) CD-ROM(PDF file) ※印刷物は付属いたしません
 PDF file of report/Excel data
 ○価格 ① 190,000円(税別) 四半期レポート年間購読のお客様
 ② 240,000円(税別) 過去1年以内に四半期レポート購入履歴のあるお客様
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Report Title	価格	数量
RF Devices/Modules For Cellular 2021-2022 ※四半期レポートを年間購読のお客様	190,000 円 (税別)	
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