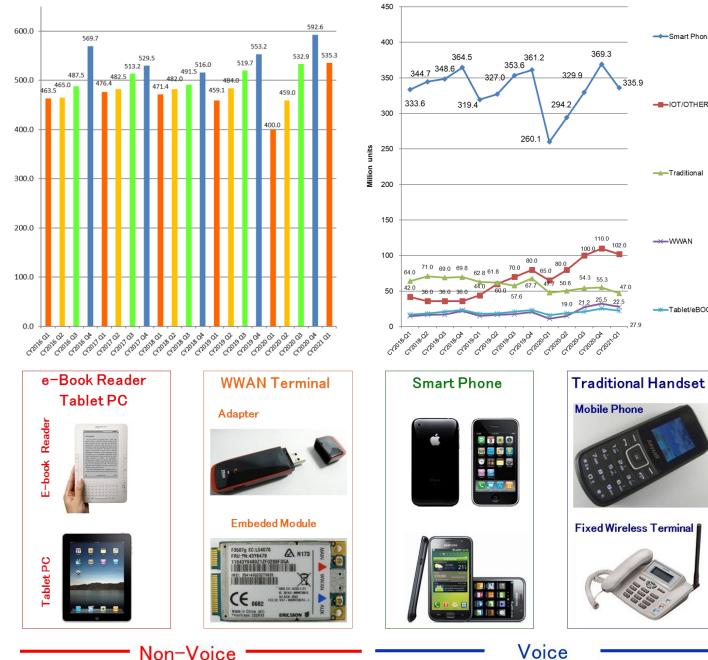
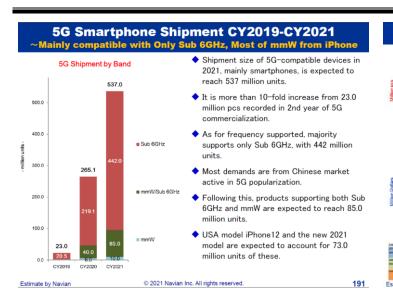
Navian Marketing Report

RF Devices/Modules For Cellular Terminal Quarterly Market Report Q1 2021





Report Sample



Teardown of 21 IOT Modules

◆ For this report, we did a teardown for 21 IOT modules

-Smart Phone

-----IOT/OTHERS

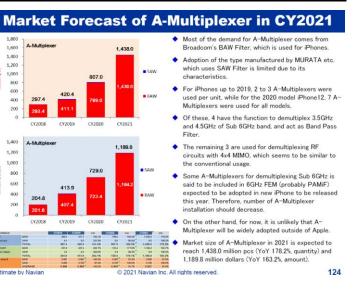
WWAI

335.9

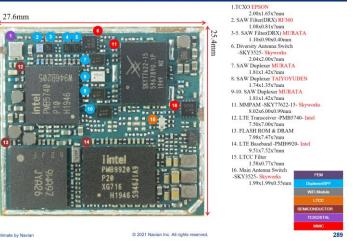
- Breakdown of the IOT Modules subject to teardown is: 5 NB-IOT, 7 CAT-M1/NB-IOT (Dual mode), 4 LTE CAT-1, and 5 CAT-4.
- Breakdown of IOT Module manufacturers is: 6 by Quectel, 2 by U-Blox, 5 by SIMCom, 1 by NimbeLink, 1 by Sequans Communications, 2 by Sierra Wireless, 2 by Telit, 1 by Thales DIS (formerly Gemalto), and 1 by Huawei.

IOT Modules	Quectel	U-Blox	SIMCom	SImbeLink 1 -	Sequans	Sierra	Telit	Thales	Huawei	TOTAL	Share
NB-IOT	3	2								5	23.89
CAT M1/NB-IoT			2	1	1	2	1			7	33.39
LTE CAT1			3					1		4	19.09
LTE CAT4	3						1		1	5	23.89
TOTAL	6	2	5	1	1	2	2	1	1	21	100.09
Share	28.6%	9.5%	23.8%	4.8%	4.8%	9.5%	9.5%	4.8%	4.8%	100.0%	

RF Devices/	Modules For Cellular Termin
	-CD-ROM (PI
OThe date of issue	July 20th ,2021
OThe Documents of the report	The PDF file of 316 SLIDES : MS PowerPoint
OReport price	JP¥168,000
OAnnual subscription for four quar	rterly issues JP¥560,000(JP¥140,000/report)
* Additional notes for compa	panies with more than 10,000 employees on a consolidat
If you will share our report	ts between different departments or subsidiaries and aff
Method of order	
OBY Attached FAX ORDER FORM	И Fax.+81-3-5303-1304
OBY Email order@navian.co.jp	p with your information as same as FAX ORDER
PAYMENT	
Please Bank Transfer in Japanese	Yen to the bank account of the Navian, Inc.
The report's bill will be sent with the	he report.
Payment term is within 1 month aft	ter you receive the report.
PUBLISHER	



Thales ELS61-US/USA Motherboard



nalQuarterly Market Report Q1 2021 DF file)-

nt based/Excel data/JPEG files of Teardown photos

225

ated basis

ffiliated companies, you need to purchase the corporate license. Please confer with us.

FORM

-CONTENTS -

PHASE 1. CELLULAR TERMINAL SHIPMENT

AND UPDATE

- 1. Cellular Terminal Quarterly Shipment History
- 2. Cellular Terminal Quarterly Shipment by Product Type
- 3. Cellular Terminal Quarterly Shipment by Standard
- 4. Cellular Terminal Annual Shipment
- 5.Annual Shipment History CY2001-CY2021
- 6. Annual Cellular Terminal Shipment Trend by Product Type
- 7. Annual Cellular Terminal Shipment Trend by Cellular Standard

PHASE 2. SHIPMENT AND STATUS OF

CELLULAR TERMINAL KEY MANUFACTURER

- 1. Cellular Terminal Shipment by Maker & Product Type Q1 CY2016-Q4 CY2021
- 2. Cellular Terminal Shipment by Maker & & Cellular Standard Q1 CY2016-Q4 CY2020
- 3. Annual Cellular Terminal Market Share Trend
- (1) Cellular Terminal Shipment by Manufacturer & Product Type CY2016-CY2021
- (2) Cellular Terminal Shipment by Manufacturer & Cellular Standard CY2016-CY2021
- 4. RF Platform Market Share by Cellular Terminal Manufacturer
- (1) UMTS RF Platform Market Share by Cellular Terminal Manufacturer Quarterly data: Q1 CY2018-Q4 CY2020 Annual data: CY2018-CY2021
- (2) UMTS RF Platform Market Share by Cellular Terminal Manufacturer Quarterly data: Q1 CY2018-Q1 CY2021 Annual data: CY2018-CY2021

PHASE 3. RF Devices / Modules

For Cellular Market Trend

1. Front End Modules (1) Quarterly Front End Module Market Trend (2) Annual Front End Module Market Trend by Product (3) Detailed Data of Front End Module Marke (4) Q4 CY2020 : Front End Module Market Size & Trend by Product ①Antenna Switch Module 2 TX Module ③FEMiD ④All-in-One FEM (5)PAMiD (7)PAiD (8)Multiplexer(Quadplexer/Hexaplexer) 9 Antenna – Multiplexer 2. Antenna Switches (1) Antenna Switch Market Size in Q1 CY2021 Antenna Switch TOTAL Market Size

- Antenna Switch for Main RF Market Size by Throw Count Antenna Switch for Main RF Market Size by Substrate
- Antenna Switch for Diversity Market Size by Substrate
- (2) Quarterly Detailed Data of Antenna Switches
- (3) Annual Market Size of Antenna Switch in CY2021 Market Size of Antenna Switch Market Size of Antenna Switch for Main RF by Throw Count
- Market Size of Antenna Switch for Main RF by Substrate Market Size of Antenna Switch for Diversity by Substrate (4) Annual Detailed Data of Antenna Switch Market
- 3. Power Amplifier Module
- (1) Power Amplifier Module Market Size in Q1 CY2021
- (2) Annual Market Size of Power Amplifier Module by Product Type in CY2021 (3) Annual Detailed Data of Power Amplifier Module Market
- 4. Duplexers
- (1) Duplexer Market Size in Q1 CY2021 (2) Annual Market Size of Duplexer by Band in CY2021
- (3) Annual Detailed Data of Duplexer Market
- 5. Band Pass Filters
- (1) Band Pass Filter Market Size in Q1 CY2021
- (2) Annual Market Size of Band Pass Filter in CY2021
- 6. TCXOs
- (1) TCXO Market Size in Q1 CY2021
- (2) Annual Market Size of TCXO in CY2021

PHASE 4.RF COMPONENT/MODULE **KEY MANUFACTURER TEREND**

- 1. Front End Modules
- (1) Antenna Switch Module ASM Market Share for Q1 CY2021 & CY2021 Forecast ASM Market Share Breakdown per Product Type
- (2) RX Module
 - RX Module Market Share for Q1 CY2021 & CY2021 Forecast RX Module Market Share Breakdown per Product Type
- (3) TX Module
 - TX Module Market Share for Q1 CY2021 & CY2021 Forecast TX Module Market Share Breakdown per Product Type
- (4) FEMiD
- FEMiD Market Share for Q1 CY2021 & CY2021 Forecast FEMiD Market Share Breakdown per Product Type
- (5) PAiD
 - PAiD Market Share for Q1 CY2021 & CY2021 Forecast PAiD Market Share Breakdown per Product Type
- (6) Duplexer Bank
- Duplexer Bank Market Share for Q1 CY2021 & CY2021 Forecast Duplexer Bank Market Share Breakdown per Product Type (7) Multiplexer

Multiplexer Market Share for Q1 CY2021 & CY2021 Forecast Multiplexer Market Share Breakdown per Product Type

2. Antenna Switches

(1) Antenna Switch Market Share for Q1 CY2021 & CY2021 Forecast (2) Quarterly Antenna Switch for Main RF Market Share Breakdown (3) Annual Antenna Switch for Main RF Market Share Breakdown (4) Quarterly Antenna Switch for Diversity Market Share Breakdown (5) Annual Antenna Switch for Diversity Market Share Breakdown (6) Antenna Switch Supply chain

- 3. Power Amplifier Module
- (1) PAM Market Share for Q1 CY2021 & CY2021 Forecast (2) 3G/4G PAM Market Share for Q1 CY2021 & CY2021 Forecast (3) UMTS PAM Supply chain
- (4) M/M PAM Type & Supply Chain
- (5) M/M PAM Market Share for Q1 CY2021 & CY2021 Forecast
- (6) MM PA Shipment Breakdown per Manufacturer (7) Quarterly PAM Market Share Breakdown per Product Type
- (8) Annual Power Amplifier Module Market Share Breakdown
- 4. Duplexers
- (1) Duplexer Market Share for Q1 CY2021 & CY2021 Forecast (2) Duplexer Supply chain
- (3) Quarterly Duplexer Market Share Breakdown per Product Type (4) Annual Duplexer Market Share Breakdown per Product Type
- 5. Band Pass Filters (1) BPF Market Share for Q1 CY2021 & CY2021 Forecast
- (2) BPF Market Share history by Product Type: SAW & BAW 6. TCXOs
- (1) TCXO Market Share for Q1 CY2021 & CY2021 Forecast (2) TCXO Market Share Breakdown per Product Type (3) TCXO Supply chain

PHASE 5. 5G Situation & Forecast

- 1.5G Shipment CY2019-CY2020
- 2.5G Shipment CY2019-CY2020 by Brand
- 3. ANTENNA FEM for Millimeter Wave
- 3.5G RFFE Case Studies -Sub 6GHz-
- (1) Sub 6GHz RFFE of SAMSUNG GALAXY S10 5G SM-G977N (2) Sub 6GHz RFFE of Huawei MATE20X5 EVR-AN00
- (3) Sub 6GHz RFFE of Xiaomi Mi Mix 3 5G M1810E5GG
- (4) Sub 6GHz RFFE of OPPO Reno3 5G
- (5) Sub 6GHz RFFE of SAMSUNG GALAXY S20+ 5G SC-52A
- (6) Sub 6GHz RFFE of Apple iPhone12Pro A2406
- (7) Sub 6GHz RFFE of SAMSUNG GALAXY S21 Ultra SC-52B docomo
- 4.5G RFFE Market Forecast in CY2021
- 5. Market Forecast of 5G TX Module/PAMiF in CY2021 6. 5G TX Module/PAMiF Market Share for Q1 CY2021 & CY2021 Forecast
- www.navian.co.jp

RF Devices/Modules for Cellular Terminal **Quarterly Market Report 1Q2021**

- 7. Market Forecast of AiP (Antenna in Package) CY2021
- 8. AiP (Antenna in Package) for Q1 CY2021 & CY2021 Forecast 9. Market Forecast of 5G RX Module in 2020
- 10. 5G RX Module for Q1 CY2021 & CY2021 Forecast
- 11. Market Forecast of 5G Band Pass Filter (BPF) in CY2021
- 12. 5G Band Pass Filter (BPF) for Q1 CY2021 & CY2021 Forecast
- 13. 5G RFFE Market Forecast in CY2021
- 14.5G RFFE Vendor Trend in CY2021

PHASE 6. Hot Products Teardown

- 1. Teardown Summary of 21 IOT modules
- (1) Outline of 21 IOT Modules
- (2) Teardown of 21 IOT Modules
- (3) Outline of Cellular IOT Standard
- (4) RF band count of 21 IOT Modules
- (5) Chipset Share of 21 IOT Modules
- (6) RF Components/Modules in 21 IOT Modules
- (7) Filters & TCXO in 21 IOT Modules
- (8) Share of FEM & PAM in 21 IOT Modules
- (9) Share of PAM in 21 IOT Modules
- (10) Share of Dupelxer in 21 IOT Modules
- (11) Share of SAW/IHP Filter in 21 IOT Modules
- (12) Share of TCXO/XTAL UNIT in 21 IOT Modules
- (13) 21 IOT Module list
- 2.FEMs and Filters in RF Section of Low-end Smartphones
- -Picture/RF Block Diagram/FEMs/Filters/Chipset/XTALs-
- 1 Quectel-BC95-B5-NB-IOT
- 2 Quectel-BC95-G-NB-IoT
- ③Quectel-BC28-NB-IOT
- (4)U-Blox-SARA-N280-02B-NB-IOT
- ⑤U-Blox-SARA-N201-02B-NB-IOT
- 6SIMCom-SIM7000G -CAT M1/NB-IoT
- ⑦SIMCom-SIM7000E -CAT M1/NB-IoT
- ⑧NimbeLink"-NL-SW-LTE-QBG96-B-CAT M1/NB-IoT
- (9)Sequans Communications"-GM01Q-CAT M1/NB-IoT
- DSierra Wireless-AirPrime WP7702-CAT M1/NB-IoT
- ①Sierra Wireless-AirPrime HL7800-CAT M1/NB-IoT
- 12 Telit-ME910C1-NV-CAT M1/NB-IoT
- ③SIMCom-SIM7600E mini-LTE CAT1
- (I)SIMCom-SIM7600G-LTE CAT1
- (5)SIMCom-SIM7600E L1C-LTE CAT1
- 16 Thales DIS-ELS61-US REL.2-LTE CAT1
- 1)Telit-LN930-AP DW5814e-LTE CAT4
- 18Huawei-ME909s-821A V2-LTE CAT4
- ① Quectel-EC25-E-LTE CAT4
- Quectel-EC25-AU-LTE CAT4
- Quectel-EC25 -AF-LTE CAT4

ORDER FORM ATTN: NAVIAN INC. Fax : +81-3-5303-1304

RF Devices/Modules For Cellular Terminal Quarterly Market Report English Version

Report Title			Price	Initial
RF Devices/Modules Fo Quarterly Market Repor			JPY168,000	
Annual Report (four quarterly issues)	From YY (), QTF *Example: YY (21), Q	R.()for one year. TR. (1).	JPY560,000	

* Additional notes for companies with more than 10,000 employees on a consolidated basis.
If you will share our reports between different departments or subsidiaries and affiliated companies, you need to purchase the corporate license. Please confer with us.

Annual subscribers (four quarterly issues) – please check ONE invoicing option below.

Full invoicing (invoiced upon first report delivery).

Split invoicing (quarter invoicing upon quarterly report delivery).

YOUR P.O. NUMBER		
	For our invoice referencing p	purpose.

Date of order	(YYYY) / (I	MM)	/ (DD)	
First name		Last name		
Company				
Job title		Department		
Address				
State/Province		Zip code	Со	untry
Contact Phone		FAX		
E-mail	@			

Authorizing Signature

Signature Date

CONTACT

ATTN: Yoshiyasu Andoh E-mail: andoh@navian.co.jp

Navian Inc. 2-18-2, Zenpukuji, Suginami-ku, Tokyo 167-0041, Japan Phone: +81-3-5303-1303 Fax: +81-3-5303-1304