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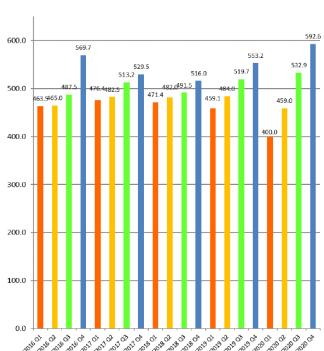
# RF Devices/Modules For Cellular Terminal Quarterly Market Report Q4 2020

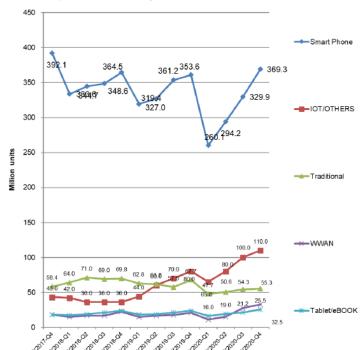
#### July 20th ,2021

### **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**









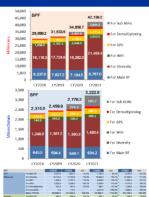




#### Voice

## Report Sample

#### Market Forecast of Band Pass Filter by Application CY2021



- ◆ Market size of Band Pass Filter in 2020 solidly expanded to 34,858.7 million pcs (YoY 110.5%, quantity) and 2,778.2 million dollars (YoY 112.9%, amount)
- The increase in demand for BPF for Sub 6GHz brought forth by spread of 5G is a major positive factor.
- Also, approx. 5% of excess demand exceeding actual demand is estimated.
- ◆ Market size of Band Pass Filter in 2021 is expected to be 40,939.2 million pcs (YoY 117.4%, quantity) and 3,176.1 million dollars (YoY 114.3%, amount).
- Of those, market size of BPF for Sub 6GHz is expected to account for 3,694.2 million pcs (YoY 180.0%, quantity) and 561.7 million dollars (YoY 204.8%, amount).

# **Multiplexer Market Share**



- MURATA's share is ranked second only to Qorvo with COB
- padcom is expected to have 36.1% (minus 6.5%), and MURATA 6% (plus 1.1%). (share fluctuation from 2020 about 1.1%).

#### Sub 6GHz RFFE of **SAMSUNG GALAXY S10 5G SM-G977N**

- SAMSUNG's GALAXY S10 5G (SM-G977N
- Band count for Sub 6GHz is single band of 3.5GHz. band (n78). Spec of MIMO is 4X4 MIMO with TX x1/RX x4
- ◆ Implementation is: 1 Qorvo 5G TX Module (PAMiF) for send/receive, and 3 MURATA RX Module for



#### 2. DOOGEE X95 Global Version **RF Section-1** SAW Duplexer MURATA



7-11. SAW Filter SHOULDER

12. SAW Filter Unknown 13. TX Module Unknown

14. LTE Transceiver MT6169V MediaTek

15. Anntena Switch for Diversity

uplexer x 6 pcs SAW Filter x 8 pcs CC Filter x 1 pcs

#### RF Devices/Modules For Cellular TerminalQuarterly Market Report Q4 2020 -CD-ROM (PDF file)-

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Non-Voice

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#### AND UPDATE

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- 4All-in-One FEM

#### ⑤PAMiD

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Antenna Switch TOTAL Market Size

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Market Size of Antenna Switch

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RX Module Market Share Breakdown per Product Type

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TX Module Market Share for Q4 CY2020 & CY2021 Forecast
TX Module Market Share Breakdown per Product Type

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FEMiD Market Share for Q4 CY2020 & CY2021 Forecast FEMiD Market Share Breakdown per Product Type

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PAiD Market Share for Q4 CY2020 & CY2021 Forecast
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- (6) UMIDIGI A9 Pro Global Bands
- (7) POCO M3 Global Version



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Phone: +81-3-5303-1303 Fax: +81-3-5303-1304

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