Efficient Mass Production
- Cut Test Time, Prevent Problems -

Universal Wireless Test Set
MT8870A
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• Universal Wireless Test Set MT8870A

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**Smartphone Technology Trend**

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Impact RF port design
- Diversity
- Connectivity
- DSDA (Dual Sim Dual Active)
- Band 42/43 (3.5 G/3.8 G)
- 5 GHz and MIMO

**RF Port**
- Diversity
- Connectivity
- W/TDS/G/FDD/TD-LTE
- Band 42
- Main (400 MHz – 3.8 GHz)

- 5 GHz and MIMO

**Product Volume Zone**
- Entry Model
- High-end Model

- Increase Data Rate
- Operating Frequency Bands
- RF Antennas
- Communication Technologies
- Impact on
  - Test Time
  - Test System
  - Test Items
Current Test System

Existing test system optimized for current smartphones

- Need to support multiple standards and wide frequency range
- Need to increase RF connectors for multi-DUT measurement
- Need to buy measurement instruments for new technology

Effective methods: Ping-pong (Multi-DUT), List Mode

Potential Problems
For Continued Efficient Manufacturing

Thinking about future use?

One-Stage Measurement

- Efficient Instrument Use (Cover all measurements)
- Better First Run Rate (Simple and reliable test system)
- Lower Operating Cost (Fewer operators and jigs, smaller footprint, etc.)

Multi-standard, Shared Antennas

Multi-DUT Measurement

Ping-Pong Measurement Scheduler

Number of Connectors

Multi-port Switch (Up to 32 ports)
Higher Throughput

- One-Stage Measurement
- One-Stage Measurement with Ping-Pong
- One-Stage Measurement with Ping-Pong and Measurement Scheduler

Improve Throughput
Universal Wireless Test Set MT8870A

MU887000A TRx Test Module
- 10 MHz to 6 GHz wide frequency
- 160 MHz bandwidth
- Four RF connectors
- Multi-standards
  - All cellular standards
  - Small Cell
  - Wi-Fi (IEEE802.11b/g/a/n/ac)
  - Bluetooth (BR/EDR/BLE)
  - Bluetooth Low Energy
  - GNSS (GPS/BeiDou/GLONASS/Galileo)
  - ZigBee (IEEE 802.15.4)
  - Digital broadcasting (DVB)
  - Analog (FM) broadcasting
  - IEEE802.11ac wave2
  - LTE-LAA (LTE-U)

MT8870A
- Supports configuration of up to four instruments (MU887000A)

MN8116A Multi-port Switch
- Increases RF connectors to 32 ports max. for ‘Ping-Pong’ and ‘One Stage Measurement’.