LAA Small Cell Platform

Abstract

Small Cell development platform from the physical layer to the upper layer communication protocols are designed and developed by the Industrial Technology Research Institute in line with 3GPP LTE R-10 standard including R13 LAA function. The platform uses software radio architecture design, with high computing power, high develop-ment flexibility, etc., to help product development staff to quickly update the functions and increase product differentiation and competitiveness.

Features

- Support smart Antenna with 27 kinds of switchable beams
- Support intra-band Carrier aggregation
- Support SON(Self Organized Networking)
- Support FAPI (Femtocell API)
- Flexible SDR platform
- LAA function (support single UE)

Technical Specification

- Support 5/10/15/20 MHz, Band 7,38,39,40,46
- 2x2 MIMO Transmit Diversity , Spatial Multiplexing
- 2CC CA DL Maximum Throughput : 300 Mbps
- 32 Concurrent UEs always on
- Output power : 24 dBm
- Uu/S1/X2 Interface/IPsec/TR069/196
- Synchronization : 1588/GPS/Network Listen
- Phase Sync. < 0.5µs, Frequency Sync.<100ppb
- Sniffer function for SON
- SPS/DRX/HARQ/ABS
- PWS/CS Fall Back/VoLTE
- Support SON functions : ANR/PCI/TxPower Setting /MRO/Load Balance

Contact Window / Sid Chen

03-5914465 sidchen@itri.org.tw

https://www.itri.org.tw/

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