

SmallCellSTACK

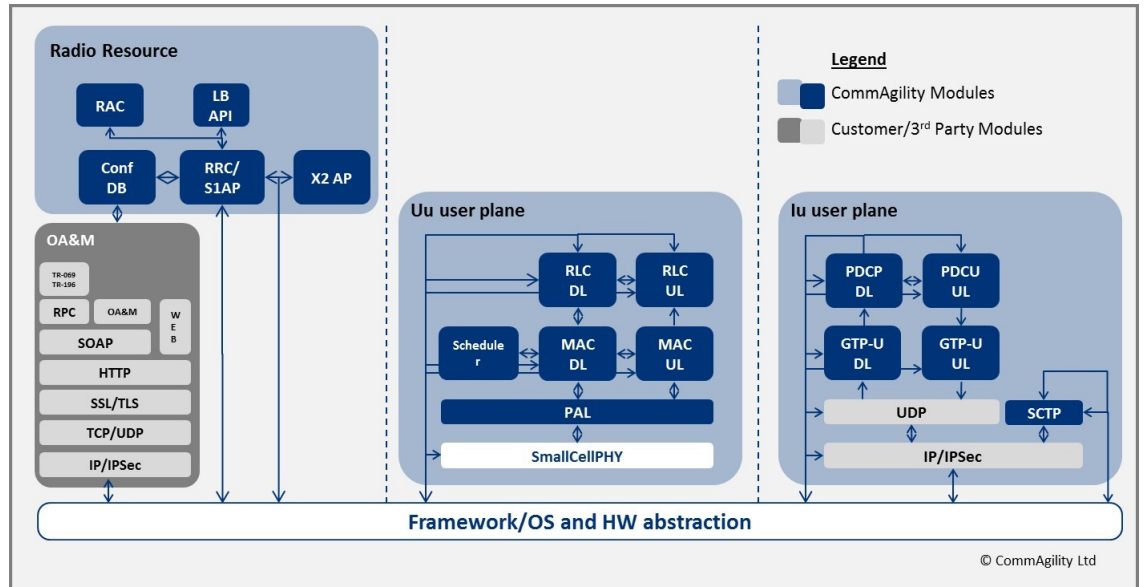
DATASHEET

Complete LTE Protocol Stack, portable to almost any baseband chip and operating system

3GPP Releases 8, 9 and 10 small cell feature sets

Pre-integrated with the SmallCellPHY on selected CommAgility and Texas Instruments platforms

Optimized for low memory, processing power, and power consumption



SmallCellSTACK provides a complete LTE Protocol Stack that is portable to almost any baseband chip and operating system. It is designed in ANSI C for flexibility and scalability, and is easy to customize and upgrade.

It has been pre-integrated with CommAgility's SmallCellPHY on selected CommAgility and Texas Instruments platforms to deliver the complete core LTE RAN software proven with hardware.

SmallCellSTACK is optimised for low memory, processing power, and power consumption, and is scalable for different size small cells (32 RRC connected users and up). It provides innovative algorithms such as advanced schedulers for enhanced spectrum efficiency.

A comprehensive and configurable debug infrastructure helps accelerate time-to-market and minimise risk.

SmallCellSTACK Rel. 9 and 10 are supported on CommAgility's AMC-D24A4-RF2/RF4 (TI's 6636/8 SoCs) and on the AMC-K2L-RF2 (TI 6630 SoC).

KEY FEATURES

- 3GPP Release 8, 9 and 10 compliant features for small cells
- Available integrated on CommAgility hardware
- Advanced multi-threaded architecture for partitioning across multiple cores
- Pre-integrated and validated with SmallCellPHY-TI
- Experienced CommAgility engineering team
- FAPI/SCAPI Interface

KEY PRODUCT FEATURES

- 3GPP Releases 8, 9 and 10 small cell feature set
- Portable and proven on multiple hardware platforms
- Advanced multi-threaded architecture for partitioning across multiple cores for maximum performance
- 3GPP compliant LTE MAC, RLC, PDCP, RRC, S1AP, X2AP, GTP-U, SCTP, RRM and ANR modules
- Configurable for low memory footprint
- Round-robin scheduler provided, with advanced proportional fair scheduler SmallCellAdvancedScheduler available optionally
- Support of trace collection, trace compression and trace group activation throughout all layers
- ASN.1 library from Objective Systems

RESULTING BENEFITS

- ⇒ End products that work with all 3GPP compliant commercial terminals
- ⇒ Reduces risk and cuts development time
- ⇒ Maximises performance and number of UEs
- ⇒ Reduces integration efforts
- ⇒ Customizations for maximum product differentiation
- ⇒ Allows integration with standards-compliant physical layer and schedulers

SUPPORTED TEXAS INSTRUMENTS SOCS

- TCI6630 "Lamarr"
- TCI6636 "Hawking"
- TCI6638 "Kepler"

COMMAGILITY HARDWARE SUPPORT

- Integrated and validated on CommAgility's AMC-D24A4-RF2/RF4 and AMC-K2L-RF2 boards.



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