

Accelleran Small Cell Software Solutions

LTE FDD and /or TDD MULTI-SEGMENT MULTI-PLATFORM SMALL CELL SOFTWARE

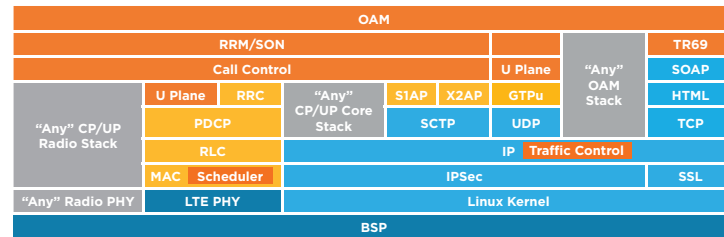
Accelleran has the Small Cell Software solution already integrated into 3 different leading Small Cell SoCs, providing LTE FDD or LTE TDD network coverage and capacity for different segments (home, enterprise, urban/rural/remote) in fully embedded or virtualized architectures, providing carrier and mission-critical grade RAN engineering for different form factors and HW platforms.

EASE OF DEPLOYMENT

For the ODMs, OEMs or CSPs, the Small Cell Software has already been ported to 3 different leading Small Cell SoCs and system tested against all mainstream and vertical EPCs and ACSs. It supports fully embedded and virtualized architectures. CSPs can deploy Hetnets and virtualized networks with the assurance than a carrier-grade Small Cell Software base will need to be integrated just once into their network.

LOWEST COST

For lowest cost solution, the SmallCell Software is available in HW platforms tailored to the needs of the different segments and virtualized environments.



- LTE FDD or TDD 3GPP Compliant Small Cell SW
- Single carrier or multicarrier (dep. HW)
- Configurable Tx power per antenna port (dep. HW)
- 2x2 MIMO / 4x4 MIMO / 8x8 MIMO (dep. HW)
- 5/10/15/20MHz Channels per carrier (up to 80 MHz with 4 carriers, dep. HW)

PRODUCT DESCRIPTION

Accelleran Small Cell Software is a Carrier and Mission-Critical grade Multi-Segment Multi-Platform Software solution for LTE FDD and/or LTE TDD. It has already been ported into 3 different leading Small Cell SoCs and can be deployed in fully embedded or virtualized architectures with different splits thanks to its flexible software architecture.

- It provides a flexible and robust carrier grade solution, developed with mission-critical standards and interoperability, tested against mainstream and vertical EPC vendors, Home eNodeB-GWs, Sec-GWs and ACS/HeMSs.
- It supports different OAM interfaces (TR-069, SNMP, WebGUI, CLI,...), including the innovative SAS from CBRS, depending on the segment and markets targeted by the CSP.
- It provides a flexible approach to SON, from a centralized SON deployment, to a fully distributed one, with hybrid support too.
- Whether you need to deploy fully embedded, virtualized (with different splits and control/user plane decoupling) or mixed Small Cell solutions, Accelleran Small Cell software is the software solution of choice.
- Optionally, it can support embedded EPC functionality within the Small Cell (with different combinations of external and internal HSS/MME/SGW/P-GW/PCRF/... components).
- For Neutral Host models, GWCN, MOCN or MORAN functionality can be optionally included.
- With the path into future 5G, MEC use cases can already be enabled in 4G today.

- All FDD & TDD Bands (dep. HW)
- Flexible Backaul Interface (GbE)
- Flexible OAM (TR-069, WebGUI, SNMP, SAS, CLI,...) and SON Interfaces
- Optional Embedded EPC
- Optional Neutral Host (GWCN, MOCN, MORAN)
- Virtualization and MEC ready

ABOUT ACCELLERAN

Accelleran was founded at the end of 2012 by a team of veterans of the small cell industry. With an average experience of more than 20 years, the team has been active in small cell development for most of the past decade. The results of this experience have been distilled into the E1012 CBRS Small Cell.

Our key objectives in all product developments are:

Carrier & Mission-Critical Grade Quality

We insist on SW development standards and practices from the safety-critical industries in order to ensure our products deliver "five nine's" reliability out of the box.

Ease of Deployment and Configuration

Through careful design and close collaboration with our partners we are driving down the costs and complexities of small cell deployment in the field - where it counts.

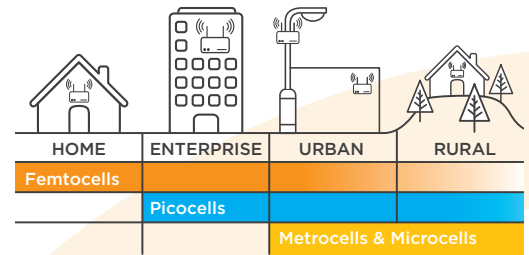
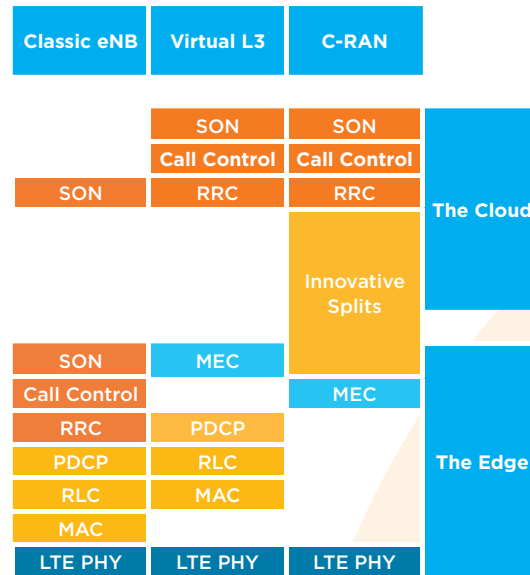
Best-in-Class Manageability

We understand the increasing demands for realtime insight into network performance and enduser experience. We have engineered an open and flexible management platform designed to enable easy integration with standards-based or proprietary OSS and SON systems.

Security

All our products are built on trusted platform technology embedding per-device keys and secure tunnelling endpoints into the same silicon. All code is signed and checked at runtime to protect against the possibility of unit hijack.

The Flexible Small Cell Software for HetNets



Deploy Accelleran Small Cell Software in any segment (Home, Enterprise, Urban/Rural/Remote) in different platforms (from fully embedded to virtualized architectures) to enable your HetNet scenarios to cost effectively provide the coverage and capacity needed in your network. Whether you are deploying a multiple layer network or a single layer network with key interference cancellation techniques, you will always get the most out of the licensed or lightly licensed spectrum capabilities of your network.

Small Cell Software Technical Specification

Single Carrier or Multi-Carrier (Dep HW) LTE FDD or TDD Small Cell SW	
Transceiver Specification (HW dependent) <ul style="list-style-type: none"> • 2 x 2 MIMO / 4x4 MIMO / 8x8 MIMO • Home/Local/Wide Area Basestation Class • From 50 mW up to 5W RF power/antenna port • Single Carrier or Multi carrier 	Band Support (HW dependent) <ul style="list-style-type: none"> • All standard LTE FDD and TDD Bands (incl. CBRS with SAS integration)
Network Interfaces	
Layer 1 & 2 <ul style="list-style-type: none"> • GbE Interface with flexible service configuration 	Layer 3 and OAM <ul style="list-style-type: none"> • S1, X2, TR-069/SNMP/WebGUI/SAS/CLI/Proprietary Centralized/Hybrid/Distributed SON
LTE Feature Support	
<ul style="list-style-type: none"> • 3GPP Release 9 (upgradeable to Release 12) • Up to 512 active users HW dep. • LTE FDD or LTE TDD or both, HW dep. • Integrated GNSS/1588v2 Timing • Cell Selection/Re-selection • Radio Bearer Control • Admission Control 	<ul style="list-style-type: none"> • Scheduler & Rate Control • Handover • Short and Long Range Configuration • Open, CSG or Hybrid Access Control • OAM (CM, PM, FM, Diagnostics) & SON • Embedded EPC • Neutral Host (GWCN/MOCN/MORAN)
Security	
<ul style="list-style-type: none"> • 3GPP standard LTE air interface security • IPSec AES encrypted tunnels on all network connections 	<ul style="list-style-type: none"> • Trusted Platform technology embedded in silicon • Per Device PKI key pairs • Secure Boot through digital signatures of all executables

FURTHER INFORMATION

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