

CBRS Solutions

Citizens Broadband Radio Service (CBRS) gives private network providers in the USA new options to build high performance, custom networks, both in-building and in small local geographies.

4G and 5G can be used for CBRS. It provides a number of key advantages:

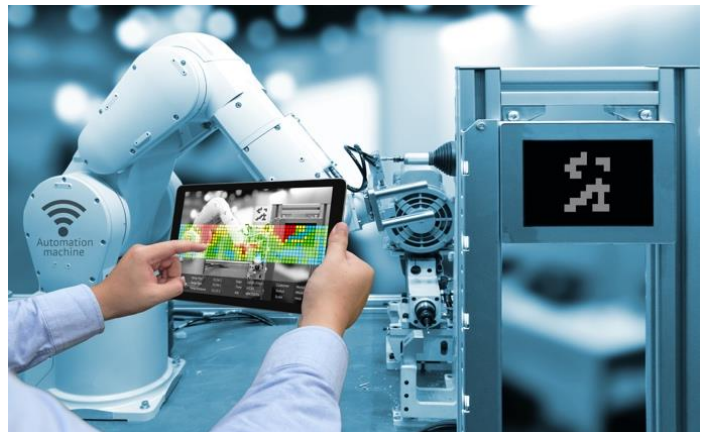
- Spectral efficiency
- Broadband capabilities
- All-IP network
- High data throughput
- Unlicensed spectrum

Demonstration Performance

CommAgility has created a CBRS demo system based on our CA-K2L-RF2 hardware, with the following features:

- LTE Band 48 TD 3500 CBRS (3550-3700MHz)
- Up to 24dBm average RF power
- 2x2 MIMO air interface
- 1.4, 3, 5, 10, 15, 20MHz software defined LTE bandwidths
- Operates across whole CBRS band with programmable centre frequency
- Timing from on-board GPS or external clock
- Operating temperature -40 to +70°C, air or conduction cooled options
- 30W typical power consumption
- 120 active, 360 connected users
- 253Mbps DL/10Mbps UL throughput TDD Config 5
- LTE Release 10 with roadmap features through Release 13
- Binary or source code available

Hardware customisation is also available, for example ruggedized for harsh environments or form customisation for discrete base station deployment.


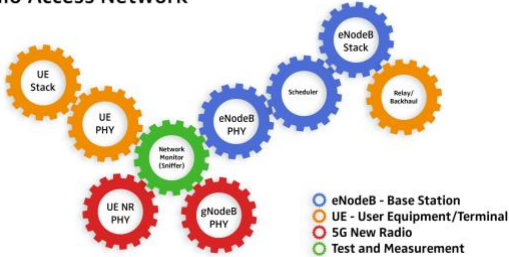


“Network on a Card” Option with Embedded EPC

CommAgility can provide a full 'network on a card' system, with Quortus' ECX Core Virtualized 3GPP-compliant evolved packet core (EPC) software. ECX Core, the industry's leading virtualized mobile core solution, is an ideal fit for CBRS applications. It provides full 4G and 5G EPC functionality with support for any common architecture – centralized, distributed or hybrid.

The Quortus logo features the word 'Quortus' in a bold, sans-serif font. To the right of the text is a stylized graphic consisting of three overlapping hexagons in shades of purple, blue, and pink.

System Capabilities

	<p>Integrated hardware and software</p> <p>CommAgility has developed a range of high performance and flexible DSP, FPGA and RF boards, enabling modular scalable platforms for bespoke solutions.</p> <p>We integrate these with our LTE and 5G eNodeB/gNodeB and UE software, to create proven system level hardware and software solutions.</p> <p>This includes fully-tested reference designs, such as the eNodeB and LTE reference UE, which provide solutions for R&D network testing, and include both hardware and LTE PHY/Stack software. Customized hardware and software services are also available to meet specific requirements.</p>
<p>Radio Access Network</p> 	<p>LTE and 5G software products</p> <p>CommAgility provides 3GPP standards compliant LTE and 5G software, including</p> <ul style="list-style-type: none"> • UE and eNodeB PHY available as reference chains, providing ultimate flexibility to improve portability and scalability • Pre-ported and validated PHY and Stack, and 4G/5G Cores, delivering an IP hardware and software block for integration into your silicon design • Pre-integrated PHY and Stack on silicon devices, for immediate use in your wireless product development • Full source code availability and design services for tailored applications <p>This portfolio helps rapid development of small cells and private networks, for both LTE and 5G.</p>



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