



## SPECTRA7 AND PUREWAVE TO REVOLUTIONIZE MOBILE INFRASTRUCTURE

### *Spectra7's ActiveDX™ Active Duplexer to Become a Key Component In Next Generation Small Cells*

**July 23, 2013** – Palo Alto, CA, Santa Clara, CA and Toronto, ON – (TSX-V:SEV) Spectra7 Microsystems Inc. (“Spectra7”), a high performance analog semiconductor company delivering unprecedented speed, resolution and signal fidelity to consumer and wireless infrastructure products, today announced a strategic collaboration with PureWave Networks Inc. (“PureWave”), to optimize Spectra7’s *ActiveDX™* active silicon duplexer for high performance LTE Small Cell applications.

The wireless infrastructure market is rapidly shifting away from large “macro cell” base station sites, typically found along highways and on building tops, to smaller pole or wall mounted “Small Cell” base stations. The smaller area supported by each Small Cell allows wireless carriers to achieve much better frequency re-use, resulting in as much as a ten-fold increase in achievable data capacity. This increased density translates into more “revenue per hertz”, resulting in a faster return on the billions of dollars invested on spectrum.

Small Cell installations are expected to explode in the next few years, growing into a \$20 billion-plus marketplace, according to the Small Cell Forum. However, the electromechanical “Air Cavity” duplexers used to drive and receive signals from the antenna weigh up to 5kg and can be as large as a shoebox, creating major design challenges and costs for Small Cell developers.

*ActiveDX™*, based on Spectra7’s patented tuning technology, uses solid state silicon chips instead of mechanical assemblies to provide the high fidelity of the air cavity duplexer at a fraction of the cost and size. Spectra7 believes it will reduce the duplexer weight by up to 95% and volumetric size by up to 90%.

As part of the companies’ ongoing collaboration, PureWave is contributing system design expertise and product requirements and will be testing this groundbreaking solution for use in its PureWave Constellation line of advanced eNodeB Small Cells. Spectra7 is designing and implementing the active duplexer silicon, with first silicon expected in the fourth quarter.

“We are excited to collaborate with Spectra7 on this groundbreaking project,” commented Dan Picker, CTO of PureWave. “We are constantly looking for disruptive technologies to make our products smaller and more affordable, particularly in the context of dense urban deployments. The ability to shrink the size of the duplexer by this factor will enable a wide new array of design possibilities that would otherwise be impossible. Together, we believe PureWave and Spectra7 have set the stage to lead a disruptive change in this rapidly growing Small Cell infrastructure market.”

“We are delighted to work with PureWave on this revolutionary product”, said Tony Stelliga, CEO of Spectra7. “Purewave’s team is extremely innovative and at the forefront in making Small Cells easily deployable and cost effective for mobile operators.”

## **ABOUT PUREWAVE NETWORKS INC.**

PureWave is a rapidly growing, privately held company headquartered in Silicon Valley. A Small Cell pioneer, PureWave has commercially introduced multiple generations of Small Cell and compact 4G wireless base stations, starting with the 2009 launch of PureWave Quantum 1000.

PureWave's product portfolio includes the PureWave Constellation, a family of advanced, Small Cell base stations that deliver jaw-dropping peak data rates of up to 1Gbps of LTE capacity and offer an array of advanced options, including multi-channel and multi-frequency support, advanced SON and traffic shaping. The company's PureWave Quantum family of award winning, outdoor, mobile WiMAX base stations is selling around the globe and has been deployed in over 160 commercial networks. [www.pwnets.com](http://www.pwnets.com). Follow PureWave on [Twitter](https://twitter.com/PureWave) or like us on [Facebook](https://www.facebook.com/PureWaveNetworks).

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## **ABOUT SPECTRA7 MICROSYSTEMS INC.**

Spectra7 Microsystems Inc. is a high performance analog semiconductor company delivering unprecedented speed, resolution and signal fidelity to consumer and wireless infrastructure products. Spectra7's new system-level components address throughput bottlenecks and satisfy the exponential demand for more bandwidth and lower costs in mobile and internet infrastructure equipment, including handsets, tablets, base stations and microwave backhaul systems. Spectra7 is headquartered in Markham, Ontario with development centers in Silicon Valley, Irvine, California and Cork, Ireland. For more information, please visit [www.spectra7.com](http://www.spectra7.com).

*Certain information in this news release may constitute forward-looking information. This information is based on current expectations that are subject to significant risks and uncertainties that are difficult to predict. Actual results might differ materially from results suggested in any forward-looking statements. Spectra7 assumes no obligation to update the forward-looking statements, or to update the reasons why actual results could differ from those reflected in the forward looking-statements unless and until required by securities laws applicable to Spectra7. Additional information identifying risks and uncertainties is contained in Spectra7's filings with the Canadian securities regulators available at [www.sedar.com](http://www.sedar.com).*

*Neither the TSX-V nor its Regulation Services Provider (as that term is defined in the policies of the TSX-V) accepts responsibility for the adequacy or accuracy of this release.*

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