

## Cyan by Per Vices – The Highest Performance SDR Available

Leading RF and digital systems innovator continues pushing boundaries with new software defined radio (SDR) product

Ontario, Canada- February 20<sup>th</sup>, 2019

Per Vices, an industry leader in wireless platforms in North America, has announced the release of Cyan, the company's latest Software Defined Radio (SDR). Known to provide end users with the best possible performance available from a commercial vendor, Per Vices has released their newest product.

Per Vices has been developing Software Defined Radio solutions since 2006 offering customers high performance solutions to meet their needs. Securing their place and continuing to grow their influence in the wireless communications, radar, signals intelligence, defence, medical imaging, and test and measurement markets. Their newest product, Cyan, is the best SDR currently available on the market, offering the highest bandwidth on a compact radio platform. A step above other SDRs, Cyan continues to fulfill the company's push to provide the market with the highest performance radio solutions.

Offering a high channel count, ultra wide band, high gain direct conversion quadrature transceiver and signal processing platform, Cyan provides users with a tunable operating frequency from 100kHz to 18GHz with a configurable number of phase coherent radio channels up to 16 total radio channels each offering a standard 1GHz instantaneous RF bandwidth with the option to upgrade to a 3GHz variant.

"Aerospace, defense, and test and measurement applications require high bandwidth and dynamic range, along with precise synchronization, to quickly and accurately process and act on a wide range of signals," said Matt Hann, high-speed data converter manager at Texas Instruments (TI).

"To address these requirements, Per Vices' new SDR takes advantage of the high signal-to-noise ratio (SNR) of our company's RF-sampling ADC32RF45 and JESD204B-enabled ADS54J60 analog-to-digital converters available at 3-GSPS and 1-GSPS, respectively, as well as our 19-GHz RF synthesizer with synchronization capability, the LMX2595."

Through the implementation of TI's ADC32RF45 and ADS54J60 Per Vices' Cyan is able to achieve high levels of dynamic range spanning over a large frequency while maintaining high channel to channel isolation. This is accomplished while being able to minimize power consumption, meeting the stringent performance requirements of many industries.

On the digital front, the platform is designed around an Intel Stratix 10 FPGA SoC enabling significant DSP resources for a variety of applications. The platform also features 4 x 40 Gbps digital backhaul enabling ultra-high data throughput while maintaining low latency for applications that require raw radio data to be transferred to another platform.

To learn more about Cyan, Per Vices, or their other product offerings, contact Per Vices by e-mail at [solutions@pervices.com](mailto:solutions@pervices.com) or visit the website at [www.pervices.com](http://www.pervices.com)

Headquartered in Toronto, Canada, Per Vices builds high performance and flexible software defined radio platforms. By offering cost effective stock products as well as custom developments, they have

been able to meet the needs of a diverse and growing range of market segments. The use of FPGAs in the design of Per Vices' SDRs has allowed them to provide customers with application agnostic technology, giving them flexibility in addressing the design requirements of different markets, while permitting for the integration of various applications into one platform. Most notably, this has been used to provide customers with secure and powerful signals intelligence, low latency and high bandwidth communications, radar solutions, and electronic warfare abilities.