



NEWS RELEASE

Adtran expands Oscilloquartz timing portfolio with White Rabbit for sub-nanosecond synchronization

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News summary:

- Industries like metrology, finance, data centers and research require ultra-precise timing to ensure data consistency and performance
- Adtran's Oscilloquartz grandmaster clocks now support White Rabbit technology, delivering unprecedented accuracy on existing hardware
- License-based software upgrade simplifies White Rabbit integration into existing networks for more precise time transfer

HUNTSVILLE, Ala.--(BUSINESS WIRE)-- Adtran today launched White Rabbit on its Oscilloquartz timing platforms, delivering sub-nanosecond synchronization for industries that depend on ultra-precise timing. White Rabbit extends IEEE 1588 PTP with additional techniques, including precise delay calibration and phase tracking, to achieve sub-nanosecond accuracy. Metrology labs, financial institutions, data centers and research organizations can now achieve superior data consistency, efficiency and performance. Unlike other White Rabbit implementations that require dedicated hardware, Adtran's software-based approach offers a seamless upgrade on widely deployed Oscilloquartz timing solutions, making reliable, high-precision synchronization easily accessible.

Adtran is adding White Rabbit to its Oscilloquartz timing solutions, making it easier than ever to achieve sub-nanosecond synchronization. (Photo: Business Wire)

"Ultra-precise timing is now a competitive necessity for industries that rely on real-time data," said Gil Biran,

GM of Oscilloquartz, Adtran. "Financial networks, national laboratories and data center interconnectivity all require every event, transaction and process to be synchronized with absolute accuracy to maintain efficiency and reliability. Adding White Rabbit to our PTP grandmaster solutions makes it easier than ever to achieve sub-nanosecond synchronization. Our customers can now seamlessly integrate this advanced technology into their existing networks, reinforcing Adtran's position as a leader in high-precision timing solutions."

Adtran's [OSA 5412](#), [OSA 5422](#), [OSA 5430](#) and [OSA 5440](#) timing solutions now feature White Rabbit, which extends the capabilities of standard PTP to achieve sub-nanosecond accuracy. This enhancement ensures stable synchronization over fiber, keeping networks perfectly in sync across multiple sites. Available as a license-based software upgrade, Adtran's implementation supports seamless deployment as a master, client or intermediary timing node, making it ideal for finance, data centers and research institutions, where even the smallest timing deviations can impact operations.

“Accurate time synchronization has evolved from a niche requirement to a key enabler of critical network infrastructure,” commented Igal Pinhasov, VP of product line management at Oscilloquartz, Adtran. “Sub-nanosecond accuracy is no longer optional for many industries. That’s why we’ve integrated White Rabbit technology into our existing timing solutions, pushing precision beyond a single nanosecond and into the picoseconds range. Picoseconds are trillionths of a second – an almost unimaginably tiny fraction of time. Yet that’s the level of precision we’re now operating at to support the most advanced applications in science and communications. With this degree of accuracy, organizations can timestamp events with absolute certainty, eliminate timing drift across distributed networks and enable the next generation of ultra-responsive, high-performance infrastructure.”

About Adtran

ADTRAN Holdings, Inc. (NASDAQ: ADTN and FSE: QH9) is the parent company of Adtran, Inc., a leading global provider of open, disaggregated networking and communications solutions that enable voice, data, video and internet communications across any network infrastructure. From the cloud edge to the subscriber edge, Adtran empowers communications service providers around the world to manage and scale services that connect people, places and things. Adtran solutions are used by service providers, private enterprises, government organizations and millions of individual users worldwide. ADTRAN Holdings, Inc. is also the majority shareholder of Adtran Networks SE, formerly ADVA Optical Networking SE. Find more at [Adtran](#), [LinkedIn](#) and [X](#).

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