

# Introducing the TimeProvider® XT Extension System for Migrating to a Modern Synchronization and Timing Systems Architecture

Accessory device to Microchip's TimeProvider 4100 grandmaster scales up to 200 fully redundant T1, E1 or CC synchronization outputs

CHANDLER, Ariz., June 03, 2024 (GLOBE NEWSWIRE) -- Critical infrastructure communication networks require highly accurate and resilient synchronization and timing, but over time these systems age out and must be migrated to a more modern architecture. Microchip Technology (Nasdaq: MCHP) today announces the new TimeProvider® XT Extension System, a fan-out shelf used with redundant TimeProvider 4100 grandmasters to migrate legacy BITS/SSU equipment to a modular and resilient architecture. The TimeProvider XT provides operators with a clear path to replace existing SONET/SDH frequency synchronization equipment while adding timing and phase, essential for 5G networks.

As an accessory device to Microchip's widely deployed TimeProvider 4100 grandmaster, each TimeProvider XT shelf is configured with two distribution modules and two plug-in modules to provide 40 fully redundant and individually programmable outputs with synchronization designed to meet ITU-T G.823 for wander and jitter control. Operators can connect up to five XT shelves to scale up to 200 fully redundant T1/E1/CC communication outputs. All configuration, status monitoring and alarm reporting is done via the TimeProvider 4100 grandmaster. This new solution allows operators to consolidate their critical frequency, timing and phase requirements onto a single modern platform, saving maintenance and service costs.

"With the new TimeProvider XT Extension, network operators can take advantage of state-of-the-art technology that is reliable, scalable and flexible to either overlay or replace their SONET/SDH synchronization systems," said Randy Brudzinski, vice president of Microchip's frequency and time systems business unit. "The XT solution is an attractive investment for network operators because it is more than just a replacement for legacy BITS/SSU equipment; it also adds PRTC functionality, delivering frequency, time and phase for next-generation networks."

This solution is compatible with DCD, SSU 2000, TSG-3800 and TimeHub<sup>®</sup> systems' wirewrap and output panels, so that network elements do not have to be rewired. This can save network operators significant deployment time and resources while reducing costs. The TimeProvider XT has a Composite Clock (CC) input which allows for live in-service CC phase cutovers, which are typically performed during maintenance windows to ensure that

the synchronization in a network is maintained. The TimeProvider XT system requires the TimeProvider 4100 grandmaster to be running the latest version 2.4 firmware.

The TimeProvider XT Extension system is the newest product to join Microchip's extensive portfolio of clock and timing systems, which ranges from small plug-in timing server cards to multi-rack national and time scale systems. As a primary contributor to the world's time, Microchip's timing solutions are trusted, reliable and resilient. For more information, visit Microchip's Timing and Synchronization website.

### **Development Tools**

The TimeProvider XT Extension is supported by <u>TimePictra<sup>®</sup> Management Software</u>, a web-based tool to manage and monitor synchronization architectures.

## **Pricing and Availability**

The TimeProvider XT Exension is now available for purchase. For additional information and to purchase, contact a <u>Microchip sales representative or an authorized distributor</u>.

### Resources

High-res images available through Flickr or editorial contact (feel free to publish):

 Application image: <u>www.flickr.com/photos/microchiptechnology/53702373012/sizes/l</u>

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