vPRTC Overview



A Leading Provider of Smart, Connected and Secure Embedded Control Solutions



Joe Parrilli, Frequency and Time Systems

Corporate Overview

Leading Total Systems Solutions Provider:

- High-performance standard and specialized
 Microcontroller, Digital Signal Controller and
 Microprocessor solutions
- Mixed-Signal, Analog, Interface and Security solutions

- Clock and Timing solutions
- Wireless and Wired Connectivity solutions
- FPGA solutions
- Non-volatile EEPROM and Flash Memory solutions
- Flash IP solutions



\$6.8 Billion Revenue in FY2022



Headquartered near Phoenix in Chandler, AZ



~21,000 Employees



Resilient Timing for Critical Infrastructures

The vPRTC is a highly secure and resilient timing architecture with advanced monitoring, visibility, and control capabilities to deliver protected timing over secure networks.

Transportation

Power

Utility



Virtual Primary Reference Time Clock

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Atomic Clock



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Trusted Time™ PTP

5G and loT



Data Centers



GNSS is the source of UTC traceable time. The BlueSky™ GNSS Firewall assures GNSS is validated and protected from potential jamming and spoofing cyber attacks. DHS PNT Resilience Level 4.

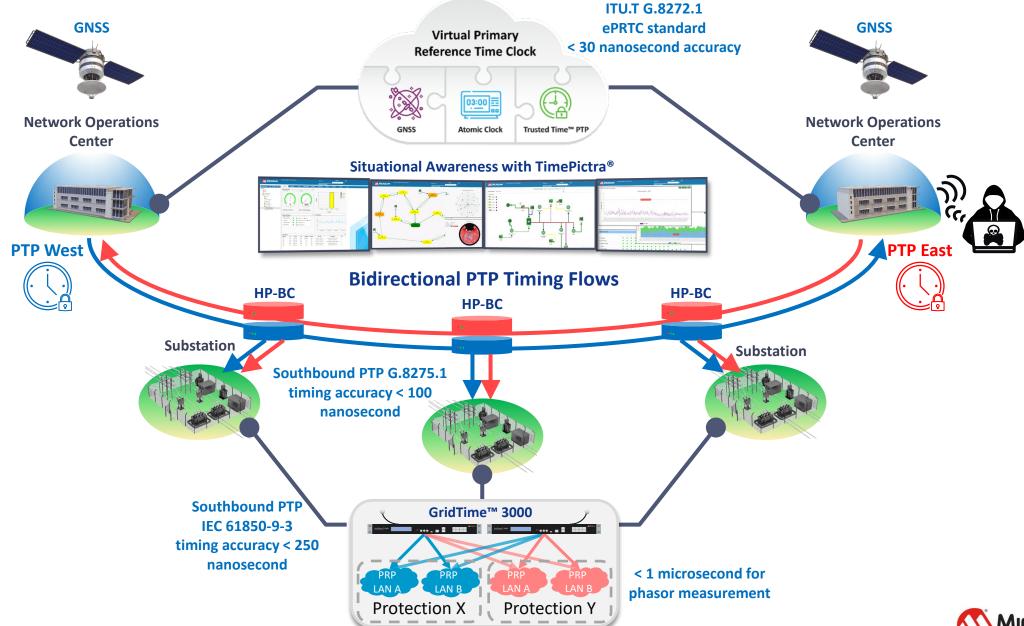
Highly precise Atomic Clocks provide long-term stability to hold time independently from GNSS. Fully autonomous atomic clocks are the heartbeat of the vPRTC resiliency.

GNSS plus Atomic Clocks are combined to establish an automatic timescale that can hold and distribute time for critical infrastructure using advanced PTP systems.

Modern smart power grids are complex networks that are highly dependent on precise and resilient timing to assure control and communication for efficient and continuous supply. The vPRTC architecture reduces dependency on GNSS while providing increased resiliency and protection.



vPRTC for Resilient Synchrophasor Timing



Thank You

