1PPS Signal

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1PPS Signal

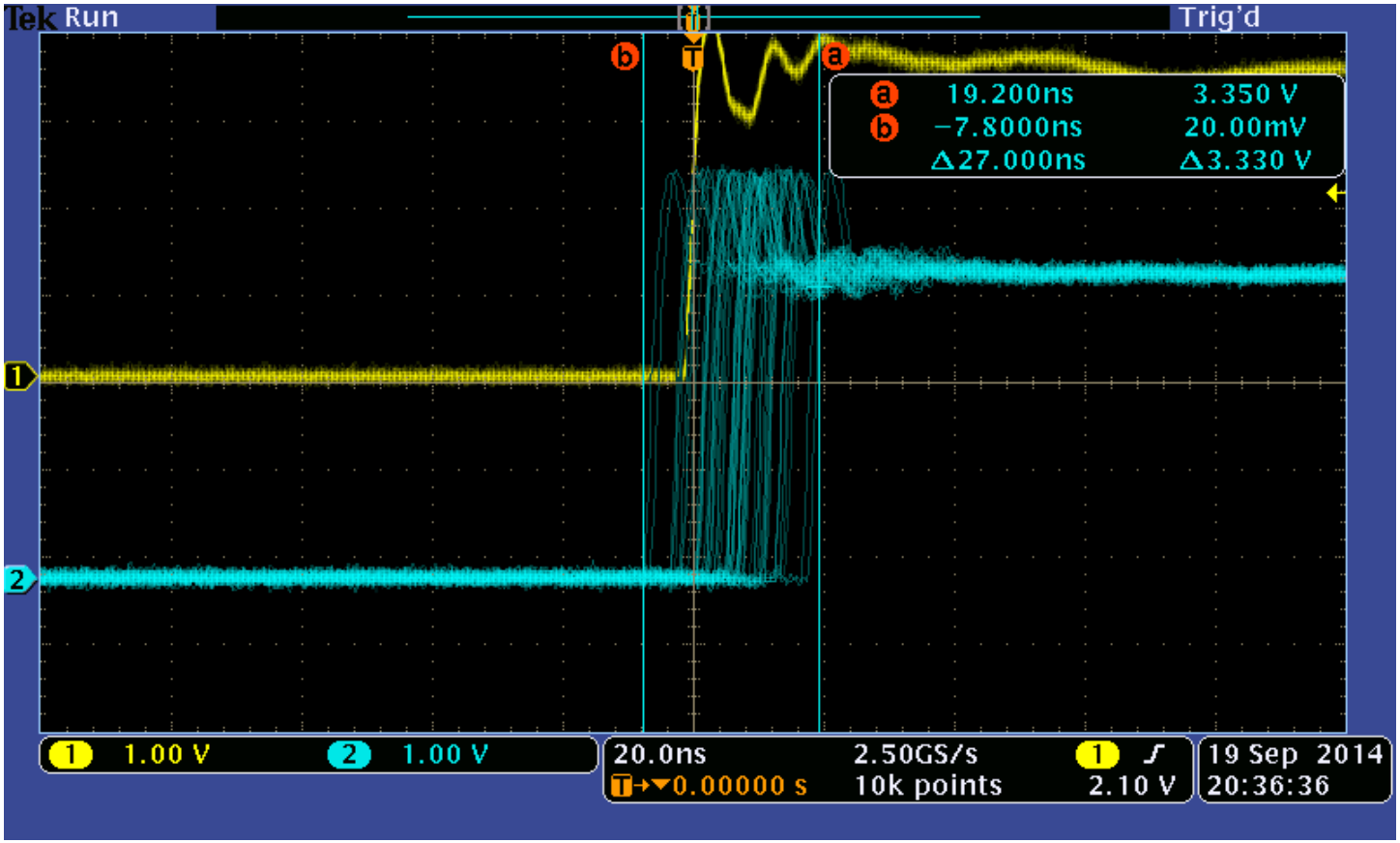
- 1PPS output signal provides a simple way to test node time synchronization
  - Rising edge of 1PPS signal indicates node's understanding of when each second starts
  - G.8271/Y.1366 Annex A talks about the timing of the 1PPS coinciding with the transition to a new second. Clause A.1 describes the balanced interface, and clause A.2 describes the 50-ohm 1PPS signal.
- Recommend adding the following text somewhere in 1904.3 specification:
  - RoE endpoint devices should provide a 1PPS output as described in clause A.1 or clause A.2 of ITU-T G.8271/Y.1366.

1PPS = 1 Pulse Per Second

Backup

1PPS Signal in Action

- Screen shot shows 1PPS output from NICs with low-cost XO's, synchronized via 1588



Yellow = 1588 Master (standard NIC)
Blue = 1588 Slave (standard NIC)

XO = Crystal Oscillator
NIC = Network Interface Card