IEEE 1588-2019 - Standard for a Precision Clock Synchronization Protocol for Networked Measurement and Control Systems

return to the IEEE Standards

Table 1: Data sheet for IEEE Standard for a Precision Clock Synchronization Protocol for Networked Measurement and Control Systems

Title	Standard for a Precision Clock Synchronization Protocol for Networked Measurement and Control Systems
Acronym	
Version	2019
Document Number	IEEE 1588-2019
Approved Date	2019-11-07
Published Date	2020-06-16
Reference	https://standards.ieee.org/standard/1588-2019.html

> **Note**: The following is an excerpt from the official IEEE catalog. It is provided here as a convenience and is not authoritative. Refer to the original document as the authoritative reference.

Standard Details

A protocol is defined that provides precise synchronization of clocks in packet-based networked systems. Synchronization of clocks can be achieved in heterogeneous systems that include clocks of different inherent precision, resolution, and stability. The Protocol supports synchronization accuracy and precision in the sub-microsecond range with minimal network and local computing resources. Customization is supported by means of profiles. The protocol includes default profiles that permit simple systems to be installed and operated without the need for user management. Sub-nanosecond time transfer accuracy can be achieved in a properly designed network.