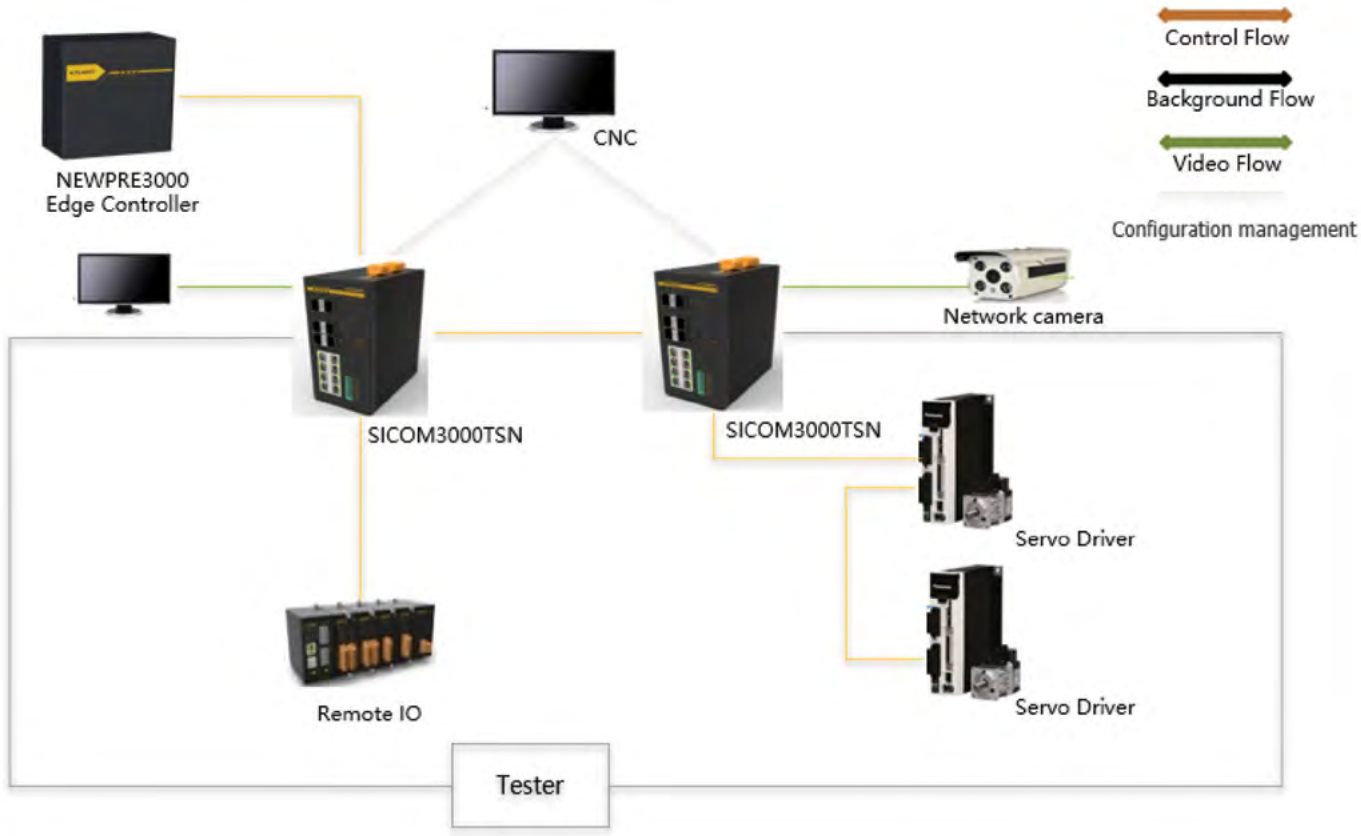
TSN: Time Sensitive Networking

Time sensitive Networking (TSN) is a set of protocol standards developed by IEEE802.1 TSN task force to build a more reliable Ethernet with low delay and low jitter. The standard defines the time sensitive mechanism of time scheduling and bandwidth reservation to ensure deterministic communication on standard Ethernet, which guarantees the delivery and minimizes jitter for those real-time applications that require determinism.

With the significant increase of the amount of data in industrial network, the demand for bandwidth has increasingly become the bottleneck of industrial communication in the future.

TSN enables new levels of connectivity and optimization, leading to cost savings. The characteristics of high reliability, low delay and low jitter of time sensitive network are suitable for many industries.

Highlights



- Time synchronization: 100ns synchronization accuracy
- Flow control: IEEE 802.1Qbv time-enhanced scheduling, IEEE 802.1Qbu frame preemption
- Redundancy reliability: Supports IEEE 802.1CB frame replication and elimination. DRP, DT-RING; DRP/DHP, STP/RSTP/MSTP and other redundancy protocol
- Configuration management: Supports WEB,CLI, and CNC centralized configuration management
- Provides end-to-end solutions for rapid application

» Terminal Solution

PCIE-TSN

- 4 x 10/100/1000Base-TX copper ports
- PCI Express Slot x1,Standard height baffle
- Complies with PCI EX-Press 2.1 Gen1 standard
- Support TSN standard: IEEE 802.1AS PTP/IEEE 802.1Qbv/IEEE 802.1Qbu/ IEEE 802.1Qci/ IEEE 802.1CB
- Time synchronization: IEEE 802.1AS
- System integration: Provide Linux driver software

» Switch Solution

SICOM3000TSN
DIN-RAIL TSN Switch

- Provide variety of interface, including 10 x Gigabit ports, full Gigabit copper ports and fiber combo ports, automatic detection, full/half duplex, MDI/MDI-X adaptive
- Support TSN standard: IEEE 802.1AS PTP/IEEE 802.1Qbv/ IEEE 802.1Qbu/ IEEE 802.1Qci/IEEE 802.1CB
- Support CNC centralized network configuration
- Support IEEE 802.3/802.3u/802.3x/802.1D/802.1W/802.1P/802.1Q standard
- IP40 protection
- Operation temperature (-40ºC ~ 75ºC)
- Complies Industral level 4 electromagnetic compatibility requirements

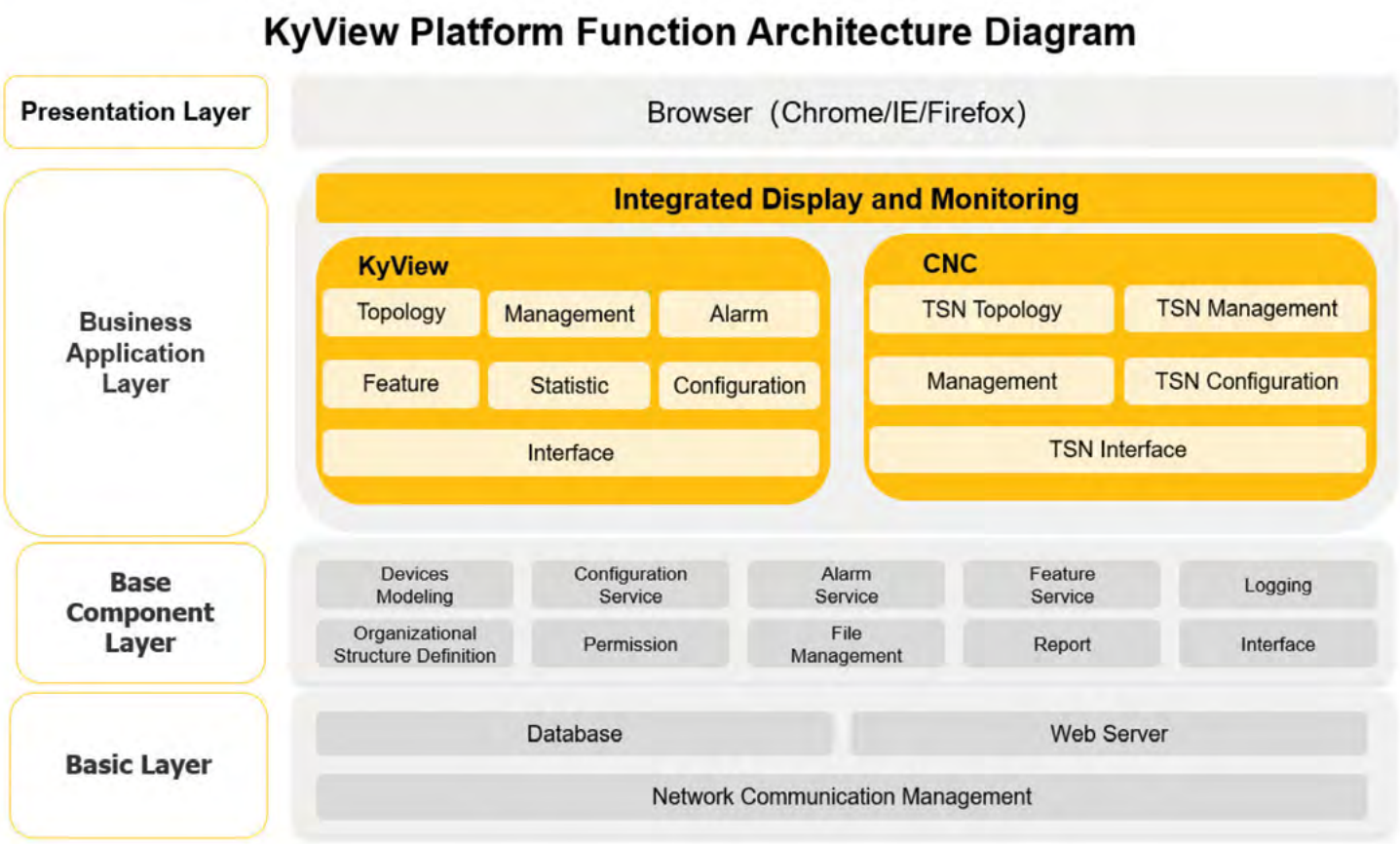
SICOM6424GTSN
Rackmount TSN Switch

- Support up to 4 x 10 Gigabit ports, 8 x Gigabit Combo ports, and 16 x Gigabit copper ports
- Support TSN standard: IEEE 802.1AS PTP/IEEE 802.1Qbv/IEEE 802.1Qcc/ IEEE 802.1Qbu/ IEEE 802.1Qci/ IEEE 802.1CB
- Support CNC centralized network configuration
- Support IEEE 802.3/802.3u/802.3x/802.1D/802.1W/802.1P/802.1Q standard
- IP40 protection
- Complies Industral level 3 electromagnetic compatibility requirements

Aquam8124TSN
EN50155 TSN Switch

- Support up to 24 x Gigabit copper ports, or 4 x Gigabit copper ports and 20 x 100M copper ports, and support 8 PoE ports
- Support POE power up to 60W
- Gigabit ports support X-Coded M12 connector, 100M ports support D-Coded M12 connector
- Support optional bypass functionl
- Support DT-Ring, RSTP/MSTP, DRP and VRRP
- Complies EN50155 and EN50121 industry standard requirements

CNC Solutions



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