BACnet™ (Building Automation and Control Network) protocol is an open, standard data communication protocol intended for building based services, and devices for the interoperability in building automation ecosystem. The BACnet protocol implementation in building automation enables sharing data with different vendor system to facilitate building management. This solution provides a BACnet stack for embedded devices with low memory footprint, and can easily port BACnet Stack for both MS/TP and IP data-link layer to the RZ/N2L RSK. The BACnet device profiles considered in the solution are B-SS, B-AS, B-BC, B-RTR, B-GW.

Solution Summary

Features/Benefits

- Data sharing
- Alarm and Event management
- Trending
- Scheduling
- Device Management and Network Management
- Easy interface to existing BACnet tools
- MS/TP Data link Low cost
- BACnet/IP Very fast (10/100/1000 or more mbps)

Diagrams/Graphics

Target Markets and Applications

- Industrial IoT
- Industrial I/O Module interface
- Protocol Convertors
- IoT Gateway
- Windows and Linux based workstations
- Embedded controllers
BACnet consists of a collapsed architecture that corresponds to four layers of the Open Systems Interconnection (OSI) model. The seven-layer reference model is an international standard for conceptualizing network communication protocols and is widely used as the basis of many data communications standards.