

BACnet Protocol Implementation Conformance Statement (BACnet Testing Laboratories Version)

Date: March 11, 2011

Vendor Name: Samsung SDS

Product Name: ControlCity-NX

Product Model Number: NX-AWS

NX-System Integrator

NX-Local Integrated Control Center

NX-SmartWeb

NX-Realtime Viewer

NX-GreenBlue

Applications Software Version: 1.13 **Firmware Revision:** 1.13

BACnet Protocol Revision: Revision 4 (135-2004)

Product Description:

ControlCity-NX is an intuitive Windows-based operator interface for building management systems. It provides software flexibility to implement variety of control strategies and operating methodologies. Also various types of event notification are given in ControlCity-NX such as message pop-up, displaying related graphics, email and SMS to mobile phone. Operators have password-controlled access to database, scheduling, control logics, trending, and graphics programming. ControlCity-NX supports BACnet IP for communications to both local and Internet connected systems. ControlCity-NX is composed of various kinds of products for the purpose. Along with BACnet IP, NX-System Integrator uses other communication protocols such as HTTP, XML/SOAP, MODBUS, OPC, and LonTalk to integrate various 3rd party devices. ControlCity-NX integrates widely distributed buildings into a control center by using NX-local Integrated Control Center. ControlCity-NX also supports lighting control including LED(Model: NX-GreenBlue) and web service(Model: NX-SmartWeb).

List all BACnet Interoperability Building Blocks supported (see Annex K in BACnet 2004):

DS-RP-A,

DS-RP-B,

DS-RPM-A,

DS-WP-A,

DS-WPM-A,

DS-COV-A,

DS-V-A,

DS-M-A,

DS-AV-A,

DS-AM-A,

AE-N-A,

AE-ACK-A,

AE-AS-A,

AE-VM-A,

AE-AVM-A,

AE-VN-A,

AE-AVN-A,

SCHED-VM-A,

SCHED-AVM-A,

T-AVM-A,

DM-DDB-A,

DM-DDB-B,

DM-DOB-B,

DM-DCC-A,

DM-TS-A,

SM-UTC-A,

DM-RD-A,

DM-BR-A
DM-OCD-A
DM-ANM-A
DM-MTS-A

Which of the following device binding methods does the product support? (check one or more)

- Send Who-Is, receive I-Am (BIBB DM-DDB-A)
- Receive Who-Is, send I-Am (BIBB DM-DDB-B)
- Send Who-Has, receive I-Have (BIBB DM-DOB-A)
- Receive Who-Has, send I-Have (BIBB DM-DOB-B)
- Manual configuration of recipient device's network number and MAC address
- None of the above

Standard Object Types Supported:

Object-Type	Supp	Dynamically Creatable	Dynamically Deletable	Optional Properties Supported	Writable Properties
Analog Input	Yes	Yes	Yes	Description, Device Type, Reliability, Min Pres Value, Max Pres Value, Update Interval, Resolution, COV Increment	Object Name, Present Value, Description, Reliability, COV Increment, Out of Service
Analog Output	Yes	Yes	Yes	Description, Device Type, Reliability, Min Pres Value, Max Pres Value, Resolution, COV Increment	Object Name, Description, Present Value, Reliability, COV Increment, Relinquish Default, Out of Service
Analog Value	Yes	Yes	Yes	Description, Reliability, COV Increment	Object Name, Description, Present Value, Units, Reliability, COV Increment, Out of Service
Binary Input	Yes	Yes	Yes	Description, Device Type, Reliability, Active Text, Inactive Text, COS Time, COS Count, COS Time, Reset	Object Name, Description, Present Value, Reliability, Polarity, Change of State Count, Out of Service
Binary Output	Yes	Yes	Yes	Description, Device Type, Reliability, Active Text, Inactive Text, COS Time, COS Count, COS Time Reset, Min On Time, Min Off Time	Object Name, Description, Present Value, Reliability, Polarity, Change of State Count, Relinquish Default, Min On Time, Min Off Time, Out of Service
Binary Value	Yes	Yes	Yes	Description, Reliability, Active Text, Inactive Text	Object Name, Description, Present Value, Out of Service, Reliability
Calendar	Yes	Yes	Yes	Description	Object Name, Description, Present Value, Date List
Command	Yes	Yes	Yes	Description, Action_Text	Present Value
Device	Yes	No	No	Description, Location, APDU Seg Timeout, Time Synch Recipients, Max Segments Accepted, Max Master, Max Info Frames, Local Time, Local Date, UTC Offset, DST Status, Configuration Files, Last Restore Time, Backup Failure Timeout, Active COV Subscriptions	Object Name, Description, Location, Time Synch Recipients, UTC Offset, Backup Failure Timeout
Multi-state Input	Yes	Yes	Yes	Description, Reliability, State Text	Object Name, Description, Present Value, Reliability, Out Of Service
Multi-	Yes	Yes	Yes	Description, Reliability,	Object Name, Description,

state Output				State Text	Present Value, Reliability, Out Of Service
Multi-state Value	Yes	Yes	Yes	Description, Reliability, State Text	Object Name, Description, Present Value, Reliability, Out Of Service
Notification Class	Yes	Yes	Yes	Description	Object Name, Description, Priority, Ack Required, Recipient List
Schedule	Yes	Yes	Yes	Description, Schedule Exceptions	Object Name, Description, Present Value, Effective Period, Weekly Schedule, Exception Schedule, List of Object Property References, Priority for Writing
Trend Log	Yes	Yes	Yes	Description, Start Time, Stop Time, Log Device Object Prop, Log Interval, COV Resubscription Interval, Notification Threshold, Records Since Notification, Notification Class, Event Enable, Acked Transitions, Notify Type, Event Time Stamps	Object Name, Description, Log Enable, Start Time, Stop Time, Log Device Object Prop, Log Interval, COV_Resubscription Interval, Stop When Full, Buffer Size, Record Count, Notification Threshold, Notification Class, Event Enable

Data Link Layer Options (check all that are supported):

- BACnet IP, (Annex J)
 - Able to register as a Foreign Device
- ISO 8802-3, Ethernet (Clause 7)
- ANSI/ATA 878.1, 2.5 Mb. ARCNET (Clause 8)
- ANSI/ATA 878.1, RS-485 ARCNET (Clause 8), baud rate(s) _____
- MS/TP master (Clause 9), baud rate(s): _____
- MS/TP slave (Clause 9), baud rate(s): _____
- Point-To-Point, EIA 232 (Clause 10), baud rate(s): _____
- Point-To-Point, modem, (Clause 10), baud rate(s): _____
- LonTalk, (Clause 11), medium: _____
- Other: _____

Networking Options (check all that are supported):

- Router, Clause 6 - List all routing configurations, e.g., ARCNET-Ethernet, Ethernet-MS/TP, etc.:

- Annex H.3, BACnet Tunneling Router over UDP/IP
- BACnet/IP Broadcast Management Device (BBMD)
 - Does the BBMD support registrations by Foreign Devices? Yes No
- MS/TP Slave Proxy

Segmentation Capability (check all that apply):

- Able to transmit segmented messages Window Size 1
- Able to receive segmented messages Window Size 1

Character Sets Supported (check all that apply):

Indicating support for multiple character sets does not imply that they can all be supported simultaneously.

- ANSI X3.4 IBM™/Microsoft™ DBCS ISO 8859-1
- ISO 10646 (UCS-2) ISO 10646 (ICS-4) JIS C 6226

If this product is a communication gateway, describe the non-BACnet equipment/network(s) that the gateway supports:

Include any addition information about the product's BACnet capabilities relevant to interoperability:
