

BACnet Protocol Implementation Conformance Statement (BACnet Testing Laboratories Version)

Date: October 16, 2010

Vendor Name: Samsung SDS

Product Name: Network Digital Controller AAC-300

Product Model Number: AAC-300-X, AP-100-X

Applications Software Version: N/A **Firmware Revision:** 1.03

BACnet Protocol Revision: Revision 4 (135-2004)

Product Description:

The AAC-300 is the native BACnet/IP direct digital controller which is equipped with the universal input and output points. It uses Internet Protocol (IP) Ethernet network technology to communicate with devices in many facilities.

It provides comprehensive standalone equipment monitoring and control, scheduling, alarm and event management, energy management, data trending and logging features. Web access and user display & keypad interface are also available.

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

DS-RP-A.

DS-RP-B.

DS-RPM-A.

DS-RPM-B.

DS-WP-A.

DS-WP-B.

DS-WPM-B.

DS-COV-B.

AE-N-I-B.

AE-ACK-B.

AE-ASUM-B.

AE-ESUM-B.

AE-INFO-B.

SCHED-I-B.

SCHED-E-B.

T-VMT-I-B.

T-ATR-B.

DM-DDB-A.

DM-DDB-B.

DM-DOB-A.

DM-DOB-B.

DM-DCC-B.

DM-TS-B.

DM-RD-B.

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, Min Pres Value, Max Pres Value, COV Increment, Time Delay, Notification Class, High Limit, Low Limit, Deadband, Limit Enable, Event Enable, Acked Transitions, Notify Type, Event Time Stamps	Object Name, Description, Present Value(conditional), Out of Service, Units, Min Pres Value, Max Pres Value, COV Increment, Time Delay, Notification Class, High Limit, Low Limit, Deadband, Limit Enable, Event Enable, Notify Type
Analog Output	Yes	Yes	Yes	Description, Min Pres Value, Max Pres Value, COV Increment, Time Delay, Notification Class, High Limit, Low Limit, Deadband, Limit Enable, Event Enable, Acked Transitions, Notify Type, Event Time Stamps	Object Name, Description, Present Value, Out of Service, Units, Relinquish Default, Min Pres Value, Max Pres Value, COV Increment, Time Delay, Notification Class, High Limit, Low Limit, Deadband, Limit Enable, Event Enable, Notify Type
Analog Value	Yes	Yes	Yes	Description, COV Increment, Time Delay, Notification Class, High Limit, Low Limit, Deadband, Limit Enable, Event Enable, Acked Transitions, Notify Type, Event Time Stamps	Object Name, Description, Present Value, Out of Service, Units, Relinquish Default, COV Increment, Time Delay, Notification Class, High Limit, Low Limit, Deadband, Limit Enable, Event Enable, Notify Type
Binary Input	Yes	Yes	Yes	Description, Inactive Text, Active Text, Change Of State Time, Change Of State Count, Time Of State Count Reset, Elapsed Active Time, Time Of Active Time Reset, Time Delay, Notification Class, Alarm Value, Event Enable, Acked Transitions, Notify Type, Event Time Stamps	Object Name, Description, Present Value(conditional), Out of Service, Polarity, Inactive Text, Active Text, Change Of State Count, Elapsed Active Time, Time Delay, Notification Class, Alarm Value, Event Enable, Notify Type
Binary Output	Yes	Yes	Yes	Description, Inactive Text, Active Text, Change Of State Time, Change Of State Count, Time Of State Count Reset, Elapsed Active Time, Time Of Active Time Reset, Min Off Time, Min On Time, Time Delay, Notification Class, Feedback Value, Event Enable, Acked Transitions, Notify Type, Event Time Stamps	Object Name, Description, Present Value, Out of Service, Polarity, Inactive Text, Active Text, Change Of State Count, Elapsed Active Time, Min Off Time, Min On Time, Time Delay, Notification Class, Event Enable, Notify Type
Binary Value	Yes	Yes	Yes	Description, Inactive Text, Active Text, Change Of State Time, Change Of State Count, Time Of State Count Reset, Elapsed Active Time, Time Of Active Time Reset, Min Off Time, Min On Time, Priority Array, Relinquish Default, Time Delay, Notification Class, Alarm Value, Event Enable, Acked Transitions, Notify Type, Event Time Stamps	Object Name, Description, Present Value, Out of Service, Inactive Text, Active Text, Change Of State Count, Elapsed Active Time, Min Off Time, Min On Time, Relinquish Default, Time Delay, Notification Class, Event Enable, Notify Type
Calendar	Yes	Yes	Yes	Description, Date List	Object Name, Description, Date List
Device	Yes	N/A	N/A	Description, Max Seg Accepted, Local Time, Local Date, APDU Seg Timeout, Max Master, Max Info Frames, Active COV Subscription	Object Name, Description, Local Time, Local Date, APDU Segment Timeout, APDU Timeout, Number of APDU Retires, Max Master, Max Info Frames
Multi-state Value	Yes	Yes	Yes	Description, Reliability, State Text, Priority Array, Relinquish Default, Time Delay, Notification Class, Alarm Values, Fault Values, Event Enable, Acked Transitions, Notify	Object Name, Description, Present Value, Out Of Service, Number Of States, State Text, Relinquish Default, Time Delay, Notification Class,

				Type, Event Time Stamps	Alarm Values, Fault Values, Event Enable, Notify Type
Notification Class	Yes	Yes	Yes	Description	Object Name, Description, Priority, Ack Required, Recipient List
Schedule	Yes	Yes	Yes	Description, Weekly Schedule, Exception Schedule	Object Name, Description, Present Value(conditional), Effective Period, Weekly Schedule, Exception Schedule, Schedule Default, List of Object Property Reference, Priority for Writing, Out of Service
Trend Log	Yes	Yes	Yes	Description, Log Enable, Start Time, Stop Time, Log Device Object Property, Log Interval, Notification Threshold, Records Since Notification, Last Notify Record, Notification Class, Event Enable, Acked Transitions, Notify Type, Event Time Stamps	Object Name, Description, Log Enable, Start Time, Stop Time, Log Device Object Property, Log Interval, Stop When Full, Record Count, Notification Threshold, Notification Class, Event Enable, Notify Type

Range Restrictions:

Object-Type	Property	Range Restriction
All Object Types	Time Delay, Min On Time, Min Off Time	Less than 3600
Analog Input, Analog Output	Min Pres Value, Max Pres Value	Max Pres Value >= Min Pres Value
Analog Input, Analog Output, Analog Value	Low Limit, High Limit	High Limit >= Low Limit
Binary Input, Binary Output, Binary Value	Change Of State Count, Elapsed Active Time	Accepts writes of value of zero only
Trend Log	Log Interval	More than 100

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:
