BACnet® Implementation Conformance Statement (PICS)
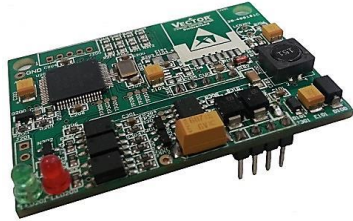# for CS1-BAC-001 chipset used for AEX-BAC and TCX2-Series

AEX-BAC

TCX2-40863-OP-BAC

Last Revision:	December 12, 2014
Vendor Name:	Vector Controls
Product Name:	CS1-BAC-001
Product Model Number:	AEX-BAC, TCX2-40863-BAC, TCX2-40863-OP-BAC, TCX2-13343-BAC, TCX2-14050-BAC, TCX2-14273-BAC, TCX2-14273-230-BAC
Application Software Version:	V1.2 R4
Product Version (CS1-BAC-001):	V1.2 R11
BACnet Protocol Revision:	Revision 14 (135-2012)

TCX2 product description:

The TCX2 communicating BACnet® controllers are universal control devices suitable for a large number of applications. They may be used in zoning and other applications which are monitored by a BACnet® MS/TP network. They are programmed through parameters either on the unit or via a free download tool called EasySet.
The CS1-BAC-001 is a BTL listed BACnet® implementation running on the AEX-BAC. The AEX-BAC is the BACnet® communication plug-in for the TCX2- family of controllers.

BACnet® Standardized Device Profile (Annex L)

☐ BACnet Operator Workstation (B-OWS)
☐ BACnet Advanced Operator Workstation (B-AWS)
☐ BACnet Operator Display (B-OD)
☐ BACnet Building Controller (B-BC)
☐ BACnet Advanced Application Controller (B-AAC)
☑ BACnet Application Specific Controller (B-ASC)
☐ BACnet Smart Sensor (B-SS)
☐ BACnet Smart Actuator (B-SA)

BACnet® Interoperability Blocks Supported (Annex K)

Type	Supported	Name	BIBB
Data sharing	☑	Read property - B	DS-RP-B
	☑	Read property multiple - B	DS-RPM-B
	☑	Write property - B	DS-WP-B
Device management	☑	Device communication Control - B	DM-DCC-B
	☑	Dynamic device binding - B	DM-DDB-B
	☑	Dynamic object binding - B	DM-DOB-B
	☑	Time synchronisation - B	DM-TS-B
	☑	UTC Time synchronisation - B	DM-UTC-B
	☑	Reinitialize device - B	DM-RD-B

Supported standard BACnet® application services

Application Services	Supported
ReadProperty	☑
ReadPropertyMultiple	☑
WriteProperty	☑
DeviceCommunicationControl [1]	☑
I-Am	☑
I-Have	☑
TimeSynchronisation	☑
UTCTimeSynchronisation	☑
ReinitializeDevice ("cold" or "warm") [1]	☑

(1) password is "Vector" (case sensitive and without the quotes)

Segmentation Capability

Able to transmit segmented messages:	No	Window Size:	N/A
Able to receive segmented messages:	No	Window Size:	N/A

Standard Object Types Supported

Object Type	Supported	Created Dynamically	Deleted Dynamically
Analog input	☑	☐	☐
Analog value	☑	☐	☐
Binary value	☑	☐	☐
Device	☑	☐	☐
Multi-state Value	☑	☐	☐

Analog Input Object

Property	Supported	R/W
Object_Identifier	☑	R
Object_Name	☑	R
Description	☑	R/W
Preset_Value	☑	R
Status_Flags	☑	R
Event_State	☑	R
Reliability	☑	R
Out_Of_Service	☑	R
Units	☑	R

Analog Value Object

Property	Supported	R/W
Object_Identifier	☑	R
Object_Name	☑	R
Description	☑	R/W[1]
Preset_Value	☑	R/W[1]
Status_Flags	☑	R
Event_State	☑	R
Out_Of_Service	☑	R
Units	☑	R

(1) Writable for objects with instance number greater than 11.

Binary Value Object

Property	Supported	R/W
Object_Identifier	☑	R
Object_Name	☑	R
Description	☑	R/W[2]
Preset_Value	☑	R/W
Status_Flags	☑	R
Event_State	☑	R
Out_Of_Service	☑	R

(2) Writable for objects with instance number greater than 100.

Device Object

Property	Supported	R/W
APDU_Timeout	☑	R
App Software Version	☑	R
Database_Revision	☑	R
Daylight_Savings_Status	☑	R
Description	☑	R/W
Device Address Binding	☑	R
Firmware_Revision	☑	R
Local_Date	☑	R
Local_Time	☑	R
Max APDU Length Accepted	☑	R
Max Info Frames	☑	R/W
Max_Master	☑	R/W
Model_Name	☑	R
Number_of_APDU_Retries	☑	R
Object_Identifier	☑	R/W
Object_Name	☑	R/W
Object_Type	☑	R
Protocol_Objects_Supported	☑	R
Protocol_Services_Supported	☑	R
Protocol_Version	☑	R
Protocol_Revision	☑	R
Segmentation_Supported	☑	R
System_Status	☑	R
UTC_Offset	☑	R/W
Vendor_Identifier	☑	R
Vendor_Name	☑	R
Object_List	☑	R

Multi State Value Object

Property	Supported	R/W
Object_Identifier	☑	R
Object_Name	☑	R
Description	☑	R/W[1]
Preset_Value	☑	R/W
Status_Flags	☑	R
Event_State	☑	R
Out_Of_Service	☑	R
Number_Of_States	☑	R
State_Text	☑	R

(1) Writable for objects with instance number greater than 100.

Data Link Layer Options:

Link Layer	Supported
BACnet IP, (Annex J)	☐
BACnet IP, (Annex J), Foreign Device	☐
ISO 8802-3, Ethernet (Clause 7)	☐
ATA 878.1, 2.5 Mb. ARCNET (Clause 8)	☐
ATA 878.1, EIA-485 ARCNET (Clause 8), baud rate(s)	☐
MS/TP master (Clause 9), baud rate(s): 9600, 19200, 38400, 57600, 76800, 115200	☑
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:	☐
BACnet/ZigBee (ANNEX O)	☐
Other:	☐

Device Address Binding:

Is static device binding supported? (This is currently necessary for two-way communication with MS/TP slaves and certain other devices.)	☐ Yes	☑ No

Networking Options:

Router, Clause 6 - List all routing configurations, e.g., ARCNET-Ethernet, Ethernet-MS/TP, etc.	N/A
Annex H, BACnet Tunneling Router over IP	N/A
BACnet/IP Broadcast Management Device (BBMD)	N/A
Does the BBMD support registrations by Foreign Devices?	N/A

Character Sets Supported:

☑ ISO 10646 (UTF8)	☐ IBM/Microsoft DBCS	☐ JIS C 6226
☐ ISO 10646 (ICS-2)	☐ ISO 10646 (ICS-4)	☐ ISO 8859-1