# Control IQ – ASI – ASIC/1 Driver Details
## Revised as of CIQProc version 5.0.1.77 – April 2023

This document contains the details for using the ASIC/1 Driver

**Personality** field details in the Subsystem table

| | |
|---|---|
| WaitForAnswer=[750] | = How many ms to wait for an answer on the comm line |
| ReadData=[True] | = True/False. |
| WriteData=[True] | = True/False. |
| SendTimeSync=[True] | = Set to True / False. |
| PassThrough=[False] | = True/False. If set to True, the driver adds a 500ms delay between transmissions |
| RefreshInterval=[120] | = Wait Time (in seconds) between rescans |
| SourceAddress=[0x7240] | = The Source address of the CIQProc driver |
| SweepInterval=[60] | = How many minutes between sweeps of the overridden Points |
| ReadPersonality=[None] | = None,Name Number<br>Name brings back the controllers personality name<br>Number brings back the controllers personality |
| QuiteTime=[20] | = Amount of milliseconds to wait between TX and RX |

**Addressing**

Addressing on and ASIC1 is Address.Paramter Parameter set to '0' is standard and returns the temperature. To read other inputs set the Parameter as follows. Note a Non-Zero parameter should be set up as an AI or DI point type.

Table Addressing is support for AIs and DIs starting with CIQProc v2.12. Table addressing is Address . Table . Parameter. See below and consult that ASI help files for more information

**Point Type = ASIC1**

Address . Parameter

0 Special Case. Read Zone Temp, status and sets setpoints / schedules

**Point Type = DO**

Address . Parameter

If you have an address of xxxx.0 and a point type of "DO" this will change the state of the ASIC1s. It is sensitive to know if it is overridden On/Off or Auto.

Parameter = 41 - 48 overrides the physical output 1-8 on the controller.

Parameter=49 sets / resets the Changeover status (DO)
On = in Changeover (heating)
Off = not in Changeover (cooling)

**Table Reads**

Address . Table . Parameter

The older style addressing [address . parameter] is not supported any longer for inputs.

Note that bytes 1-17 are not read directly from the table and are used as shortcuts as defined below. Other than 1-17 All bytes from Tables 9, 10 and 18 are available depending on the controller type.

**Point Type = DI**

x.9. [1-62]
x.10. [1-60]
x.18. [1-12]

If the Conversion field is blank, then this will return a 0 or 1

If the Conversion field is 1 through 8 then it will return 0 or 1 based on the bit comparison of the conversion field. I.E. if conversion = 2 then it will test for the 2nd bit being set.

For 8655
Use ASI Expert to set the Input Type to "Binary Input (N.O.)"
CIQ addressing is
x.9.47 – Input 1 as DI
x.9.49 – Input 2 as DI
x.9.51 – Input 3 as DI
x.9.53 – Input 4 as DI
x.9.55 – Input 5 as DI
x.9.57 – Input 6 as DI
x.9.59 – Input 7 as DI
x.9.61 – Input 8 as DI

**Point Type = AI**

**For ASI-6000**

| | | |
|---|---|---|
| Input 1 | Zone Temperature (deg f) | x.9.1 (or x.9.47) |
| Input 2 | Slide Switch Position | x.9.2 (or x.9.49) |
| Input 3 | Variable User Adjust | x.9.3 (or x.9.51) |
| Input 4 | Primary Airflow | x.9.4 (or x.9.33) |
| Input 5 | Aux Temp | x.9.5 (or x.9.55) |
| Input 6 | Aux Temp | x.9.6 (or x.9.57) |
| Input 7 | Aux Temp | x.9.7 (or x.9.59) |
| Input 8 | Aux Temp | x.9.8 (or x.9.61) |

| | |
|---|---|
| Primary Airflow Setpoint (cfm) | x.9.9 |
| Active User Adjust | x.9.10 (*) |
| After Hours Time Remaining | x.9.11 |

| | |
|---|---|
| Active Cooling SP (deg f) | x.10.23 |
| Active Heating SP (deg f) | x.10.24 |
| Cooling Requirement (0-100%) | x.10.16 |
| Heating Requirement (0-100%) | x.10.20 |
| HW Valve Position (0-100%) | x.18.1 |

**For ASI-8055**

| | | |
|---|---|---|
| Input 1 | Zone Temperature (deg f) | x.9.1 (or x.9.47) |
| Input 2 | Slide Switch Position | x.9.2 (or x.9.49) |
| Input 3 | Variable User Adjust | x.9.3 (or x.9.51) |
| Input 4 | Primary Airflow | x.9.4 (or x.9.33) |
| Input 5 | Aux Temp | x.9.5 (or x.9.55) |
| Input 6 | Aux Temp | x.9.6 (or x.9.57) |
| Input 7 | Aux Temp | x.9.7 (or x.9.59) |
| Input 8 | Aux Temp | x.9.8 (or x.9.61) |

| | |
|---|---|
| Primary Airflow Setpoint (cfm) | x.9.9 |
| Active User Adjust | x.9.10 (*) |
| After Hours Time Remaining | x.9.11 |

| | |
|---|---|
| Active Cooling SP (deg f) | x.10.23 |
| Active Heating SP (deg f) | x.10.24 |
| Cooling Requirement (0-100%) | x.10.46 |
| Heating Requirement (0-100%) | x.10.47 |
| HW Valve Position (0-100%) | x.18.1 |

**For ASI-8255 / 8355**

| | | |
|---|---|---|
| Input 1 | Zone Temperature (deg f) | x.9.1 (or x.9.47) |
| Input 2 | Slide Switch Position | x.9.2 (or x.9.49) |
| Input 3 | Variable User Adjust | x.9.3 (or x.9.51) |
| Input 4 | Spare | x.9.4 (or x.9.53) |
| Input 5 | Outside Air Temp | x.9.5 (or x.9.55) |
| Input 6 | Discharge Air Temp | x.9.6 (or x.9.57) |
| Input 7 | Water Loop Temp | x.9.7 (or x.9.59) |
| Input 8 | Aux Temp | x.9.8 (or x.9.61) |

| | |
|---|---|
| Active User Adjust | x.9.10 (*) |
| After Hours Time Remaining | x.9.11 |

| | |
|---|---|
| Active Cooling SP (deg f) | x.10.23 |
| Active Heating SP (deg f) | x.10.24 |
| Cooling Requirement (0-100%) | x.9.43 |
| Heating Requirement (0-100%) | x.9.45 |

**For ASI-8655**

| | | |
|---|---|---|
| Input 1 | Zone Temperature (deg f) | x.9.1 (or 9.47) |
| Input 2 | Slide Switch Position | x.9.2 (or 9.49 |
| Input 3 | Variable User Adjust | x.9.3 (or 9.51) |
| Input 4 | CO2 Level | x.9.4 (or 9.53) |
| Input 5 | Outside Air Temp | x.9.5 (or 9.55) |
| Input 6 | Discharge Air Temp | x.9.6 (or 9.57) |
| Input 7 | Water Loop Temp | x.9.7 (or 9.59) |
| Input 8 | Mixed or Aux Temp | x.9.8 (or 9.61) |

| | |
|---|---|
| Active User Adjust | x.9.10 (*) |
| After Hours Time Remaining | x.9.11 |
| Active Cooling SP (deg f) | x.10.23 |
| Active Heating SP (deg f) | x.10.24 |
| Cooling Requirement (0-100%) | x.10.46 |
| Heating Requirement (0-100%) | x.10.47 |
| Economizer Cooling Requirement | x.18.1 |
| AO1 Position | x.18.2 |
| AO2 Position t | x.18.3 |

(*) You must scale this in the Class_AI to be the user adjust range
For example; -3 to +3 in the MinScale / MaxScale. Reading the slide switch (3 position) is not supported in this driver

**For all ASI- 8x55 / 6000**

| | | |
|---|---|---|
| Input 1 Raw | Scaled using MinScale / MaxScale | x.9.17 |
| Input 2 Raw | Scaled using MinScale / MaxScale | x.9.19 |
| Input 3 Raw | Scaled using MinScale / MaxScale | x.9.21 |
| Input 4 Raw | Scaled using MinScale / MaxScale | x.9.23 |
| Input 5 Raw | Scaled using MinScale / MaxScale | x.9.25 |
| Input 6 Raw | Scaled using MinScale / MaxScale | x.9.27 |
| Input 7 Raw | Scaled using MinScale / MaxScale | x.9.29 |
| Input 8 Raw | Scaled using MinScale / MaxScale | x.9.31 |

**Point Type = MVO** (5.0.1.77) (where x=Address)

| | |
|---|---|
| x.33 | Output 1 |
| x.34 | Output 2 |
| x.35 | Output 3 |
| x.36 | Output 4 |
| x.37 | Output 5 |
| x.38 | Output 6 |
| x.39 | Output 7 |
| x.40 | Output 8 |

Set the value of the output

| | |
|---|---|
| 1 | Override On |
| 2 | Override Off |
| 3 | Reset to Automatic |

**x.50 Set State**

Set the value of the state
3 Night Setback
4 Morning Ready
5 Occupied
6 UnOccupied
7 Follow Schedule

**x.51 Set Functions**

x.51.1
1 Force Heat Off
2 Force Heat On
3 Restore Heat

x.51.2
4 Force Fan Off
5 Force Fan On
6 Restore Fan

x.51.3
7 Force Lights Off
8 Force Lights On
9 Restore Lights

x.51.4
10 Force Primary Damper Closed
11 Force Primary Damper Open
12 Force Primary Damper Minimum
13 Force Primary Damper Maximum
14 Restore Primary Damper

x.51.5
15 Force Secondary Damper Closed
16 Force Secondary Damper Open
17 Force Secondary Damper Minimum
18 Force Secondary Damper Maximum
19 Restore Secondary Damper

x.51.6
20 Force Aux CLG Off
21 Force Aux CLG On
22 Restore CLG HTG

x.51.7
23 Force Aux HTG Off
24 Force Aux HTG On
25 Restore Aux HTG

x.51.8

| | |
|---|---|
| 26 | Force Cooling Damper STOP |
| 27 | Force Heating Damper STOP |
| 28 | Force HW Valve Stop |
| 29 | Reserved |

x.51.9

| | |
|---|---|
| 30 | Force Aux 1 OFF |
| 31 | Force Aux 1 On |
| 32 | Restore Aux 1 |

X.51.10

| | |
|---|---|
| 33 | Force Aux 2 OFF |
| 34 | Force Aux 2 ON |
| 35 | Restore Aux 2 |

x.51.11

| | |
|---|---|
| 36 | Force Aux 3 OFF |
| 37 | Force Aux 3 ON |
| 38 | Restore Aux 3 |

x.51.12

| | |
|---|---|
| 39 | Force Thermic Valve OFF |
| 40 | Force Thermic Valve ON |
| 41 | Restore Thermic Valve |