

Control IQ – ASI – ASIC/2 Driver Details

Revised as of CIQProc version 2.12 - August 20, 2009

This document contains the details for using the ASIC/2 Driver

Personality field details in the Subsystem table

WaitForAnswer=[750]	= How many ms to wait for an answer from the comm line
TokenPassing=[False]	= Set to True / False. **Removed
SendTimeSync=[True]	= Set to True / False.
RefreshInterval=[0]	= Wait Time (in seconds) between rescans
SourceAddress=[0x7240]	= The Source address of the CIQProc driver
QuiteTime=[20]	= milliseconds between TX and RX
StartupWriteDelay=[20]	= How many seconds at startup before sending outputs

** Token Passing is not supported as of v2.12

Addressing is as follows

Address.Object.Index.Attribute
7101.33.0.1
Also acceptable is 7101.MON.0.1

Points Table - Conversion Field defines how to further calculate the result

For Inputs set 'Conversion' as follows:

Digital Inputs

'Bit0' through 'Bit15' returns a 1 or 0 for the specific bit of the result.

For example:

Address 7101.33.0.1 Conversion= 'Bit4' then if the 4th bit is set to a '1' the result will be a '1' else the result will be a '0'

Analog Inputs

If Conversion is blank the result is RawValue / 100

'ASIC-17' returns $(((\text{MaxScale} - \text{MinScale}) / 1000) * \text{RawValue}) + \text{MinScale}$
If MinScale = 0 MaxScale=1 From 7040 = 1234 Result = 1.234
If MinScale = 0 MaxScale=10 From 7040 = 1234 Result = 12.34
if MinScale = 0 MaxScale=100 From 7040 = 1234 Result = 123.4
'ASIC-18' returns $(((\text{MaxScale} - \text{MinScale}) / 255) * \text{RawValue}) + \text{MinScale}$
'ASIC-19' returns RawValue directly (no modifications)
'ASIC-20' returns RawValue / 1000
'ASIC-21' returns RawValue 51-255 scaled to 0-100 (percent) for 2-10vdc
'ASIC-22' returns RawValue 255-51 scaled to 0-100 (percent) for 10-2vdc
'ASIC-23' returns RawValue 0-255 scaled to 0-100 (percent) for 0-10vdc

'ASIC-24' returns RawValue 255-0 scaled to 0-100 (percent) for 10-0vdc
'ASIC-29' returns Abs(RawValue)
'ASIC-30' returns $((\text{RawValue} * 250) / 234)^2 / 10000$ (Clover Special)
'ASIC-32' returns the Unsigned Integer for raw values > 32767
'ASIC-34' returns 0-1440 (minutes past midnight) to HH:MM
'ASIC-35' returns 0-192 (Schedule On/Off) to HH:MM
'ASIC-36' returns Reboot Time. Use address.16.1.0
'ASIC-37' returns Controller Time. Use address.12.0.0

Analog Outputs

'x[10]' sends that value of the point * 10 (the multiplier can be any number)
'x10'
'x25'

ASIC-41 sends 0-100 in CIQ to 51 to 255 in the controller (2-10vdc)
ASIC-42 sends 0-100 in CIQ to 0 to 255 in the controller (0-10vdc)

Digital Outputs or Schedules

'Schedx[4]' uses up to 4 consecutive schedule indexes (1-4 is valid)
'Schedx4'

Overriding an AI can now send an override to an AO in system controllers. Specifically this is designed for PIDs where you read the analog value of the PID, and if the AI is overridden, the driver sends an override PID message with the value of the overridden AI. To accomplish this you must put "AO" in the Points.DisabledPosition for each AI. Set the AI up as follows:

AH1Dampers AI 7101.PID.0.1

Overriding an DI can now send an override to a DO in system controllers. To accomplish this you must put "DO" in the Points.DisabledPosition for each DI. Set the AI up as follows:

AH1Start DI 7101.3.0.0