



#### ASIC/2-8540 Features

- 8 Universal Inputs
- 8 Relay Outputs, Form C
- 4 Analog Outputs, 0-10 Vdc
- Battery-backed hardware clock
- System bus for communication access
- Local bus for supervision of terminal controllers, or Modbus Master RTU
- Direct RS-232 communication user access.
- Optional Ethernet Adapter (future release)
- Compatible with ASI WebLink & ASI Data Server products

The ASIC/2-8540 is designed for energy management and control for a wide range of building systems including air handlers, chillers, cooling towers, pumps, lighting, etc. Applications range from control of small air handling units and roof top air conditioners in networked systems, to stand alone control of small buildings, such as branch banks, retail stores, and utility company sites. The ASIC/2-8540 configurable unitary controller has an switching power supply for AC operation, and flash and NVRAM memory for program and data storage.

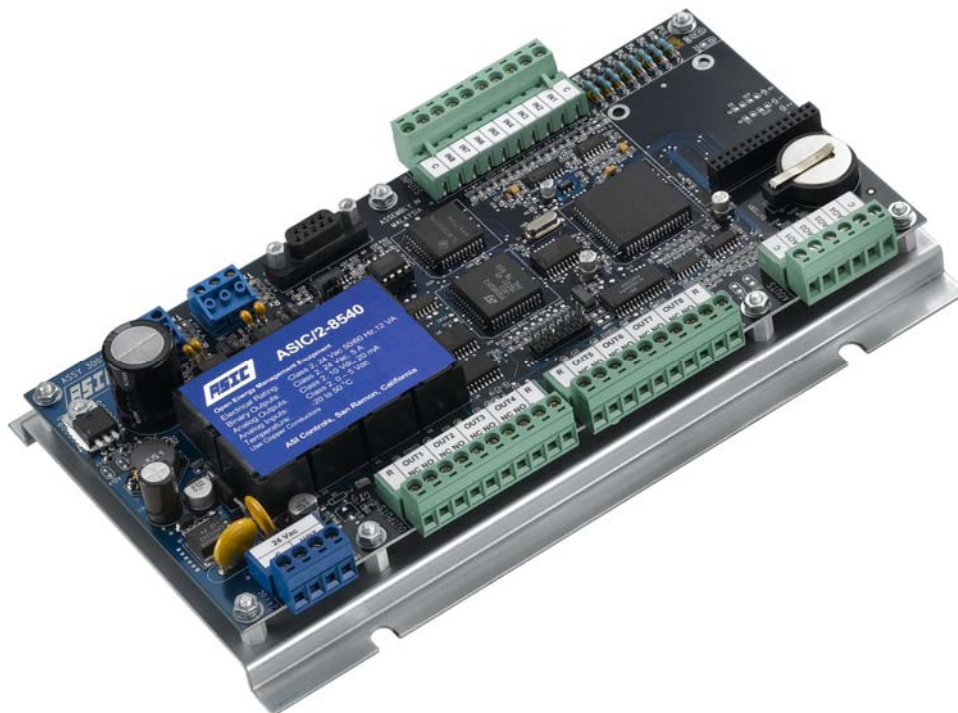
The controller is easily configured using Windows™ based ASI Visual Expert configuration software that links ready-made objects for scheduling, PID control, alarm notification, optimum start, trending, run-time accumulation, event logging, electrical demand management, and more. The ASIC/2-8540 has an on-board battery-backed calendar clock and allows special events, holidays, and schedules to be defined in advance. Configuration data is stored in non-volatile memory that is retained through power loss. Comprehensive product documentation is available.

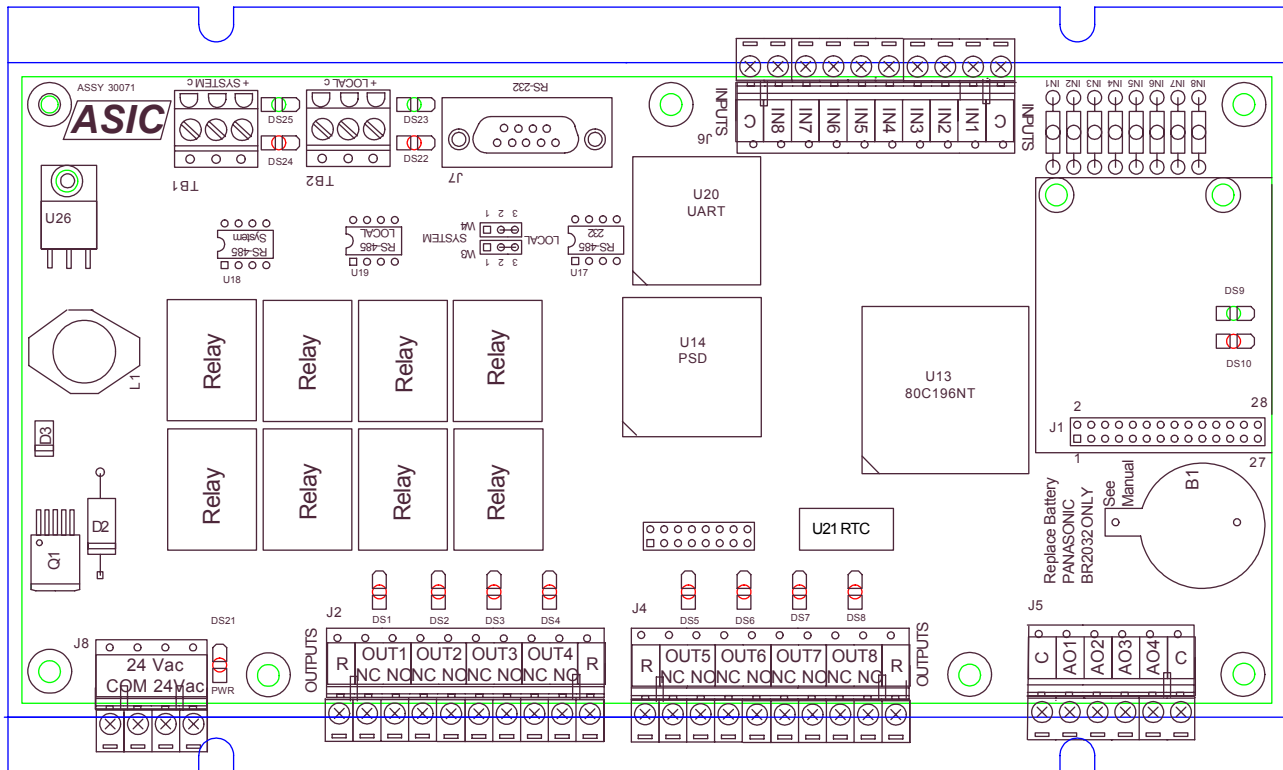
In stand-alone applications a modem may be connected to allow dial-in from a remote location to review conditions and/or to modify schedules or setpoints. The controller can dial-out and send notify messages to a pager, printer, or computer running ASI Monitor software. An ASI EtherLink/2, or optional Ethernet Adapter card, ETH-8540 can enable the ASIC/2-8540 to receive and send information via an Ethernet network.

The ASIC/2-8540 can operate as part of a larger communicating control network with other ASI controllers at speeds up to 19,200 baud.. Controller information may be easily reported to ASI WebLink, or any Windows based software that is a client for OPC.

The controller has separate RS-485 system and local buses. The system bus is used to network multiple ASIC/2 controllers. The controllers may be polled or be configured for peer-to-peer communication using token passing. On a separate local bus the ASIC/2-8540 can poll ASIC/1 terminal controllers and make control decisions based on the data received. No central system is needed to supervise the controller. Red and green LEDs indicate the controller system and local bus communications. Alternately the local bus supports Modbus Master RTU.

Eight on-board Form C 24 Vac relays are ideal for driving low voltage contactors and starters. The four 0-10 Vdc analog outputs capable of 20 mA are used for modulated actuators, electro-pneumatic transducers, variable speed drives and other analog signal devices. The 8 universal inputs may be used for counting pulses, direct reading of thermistors, reading 4 to 20 mA, 0 to 5 Vdc or 1 to 5 Vdc input signals, or multiplex reading of up to four dry contacts on a single input.





### Specifications

#### Control Power

Supply Voltage: 24 Vac +/- 15%, 50/60 Hz  
 Power Consumption: 17 VA (plus loads)  
 Protection: 1.35 A Polyswitch & MOV

#### Relay Outputs 8

Type: Dry Contacts Form "C"  
 2 groups with common return  
 Voltage rating: 24 Vac or Vdc, 1 A .

#### Analog Outputs 4

Type: 4 Analog 0-10Vdc  
 Resolution: 0.4% full scale  
 Current Rating: 20 mA at 10Vdc  
 Protection: TVS, 10 V,600 W peak

#### Universal Inputs 8

Type: Universal Analog/Binary  
 Range: 0 to 5 Vdc, 0.1% full scale

#### Communications

Format: RS-485,RS-232 DB-9  
 Baud Rate: Up to 19200 baud  
 Protection: 100 mA Polyswitch fuse  
 Maximum Length: 4000 ft (1.2 km) RS-485 with Repeater every 32 devices  
 Ethernet: Optional EtherLink/2 or Optional Ethernet Adapter  
 Alternate Local Bus Protocol: Modbus MasterRTU

#### UL-916 Listing

Rated as a Class 2 device, Pilot Duty  
 Meets CE requirements.  
 Complies with FCC Part 15 (CISPR 22) Class A

#### Connections

Power, Input & Output: 2-part screw terminals  
 RS-485: 2-part screw terminals, 3 Position,

#### Other

Memory: Firmware, 128 kbytes Flash  
 Indication: Red LED, 1-Power, 8-Output  
 Red LED 2-Receive, Green LED 2-Transmit

#### Overall Dimensions:

5.5" x 9.2" x 2.0" (WxLxH)  
 140 mm x 234 mm x 51 mm  
 with mounting holes on center  
 6.20" x 5.20" (157 mm x 132 mm)

#### Weight:

1.6 lb (0.7 kg)

#### Environmental

Operating: 0 to 50 °C (32 to +122 °F), 10 to 95% rh non-condensing  
 Storage: -37 to 80 °C (-35 to +180 °F), 5 to 95% rh non-condensing

How to Order:	Order Number
Configurable Controller	ASIC/2-8540

Accessories:	Order Number
Four Input Multiplex Kit	QUADMUX

Software and Documentation:	Order Number
ASI Expert Configuration Software	ASI Expert
ASIC/2-8540 Installation Manual	8540 Manual

