

# Model 25x86 Logic Processor



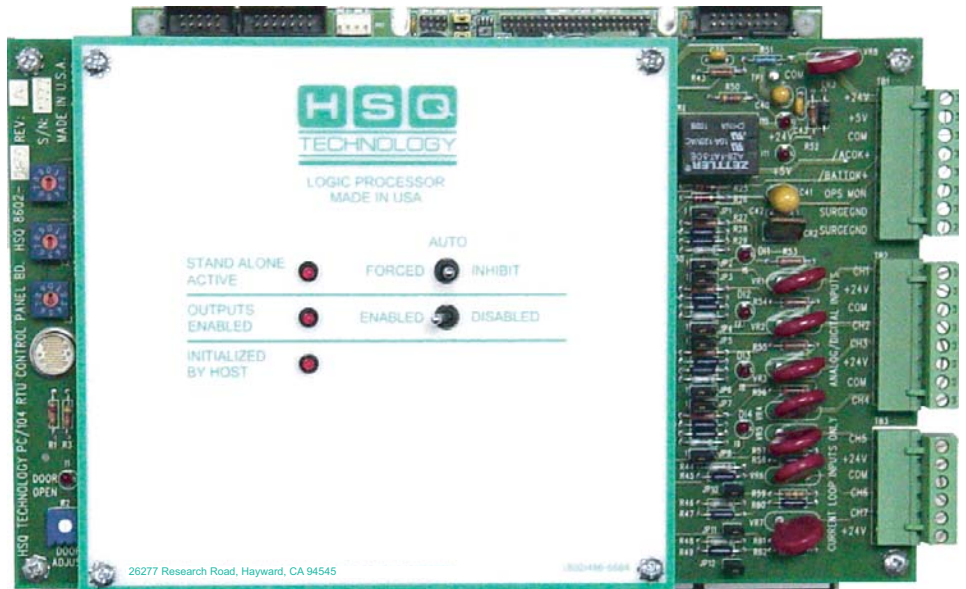
Intelligent Data Acquisition and Control

Technical Summary

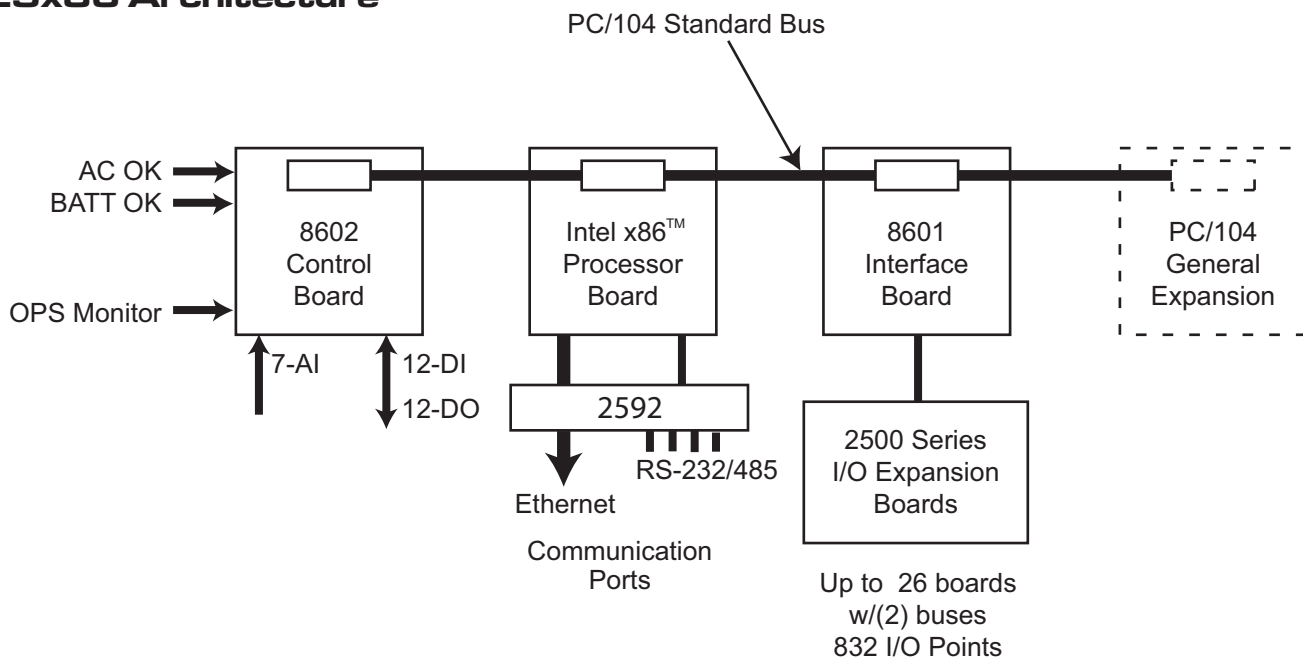
## Key Features

- Industrial Intel x86™-based Processor
- Open PC/104 Bus Architecture
- HSQ Model 2500/86 Compatibility
- Distributed Alarm and Data Processing
- Sequence of Events (SOE) Buffering
- Synchronized Real Time Clock
- Intelligent Stand Alone Control
- VisualCL Programming (IEC 1131-3 Based)
- Scalable I/O Battery
- Backup Power Supply Option
- Redundant Power Supply Option
- Redundant Processor Option
- IEEE 802.3 10Base-T Ethernet
- IP LAN/WAN Support
- MODBUS Master and Slave Capability

The Model 25x86 Logic Processor Stack is an Intel x86™-based data acquisition and control computer intended for a wide range of telemetry, SCADA, distributed automation and facilities management applications. The 25x86 processor board provides software and communications compatibility with existing HSQ Model 2500/86 and HSQ Model 2500 Logic Processors.



## 25x86 Architecture



## Processor Boards

Processor Type:	ULV Intel® Celeron® 400MHz standard, high clock rates available
Memory:	128Mb SDRAM standard, expandable
Non-Volatile Memory:	64Mb CompactFlash standard, expandable
Real Time Clock:	Year, Month, Day, Hour, Minute, Seconds and an On-Board Clock Battery
Watchdog Timer:	Automatic System Reset after Software Failure
Ethernet Interface:	Embedded 10/100, dual port optional
Serial Ports:	Three RS-232 & One RS-232/422/485 standard, expandable, USB available
Comm Protocol:	HSQ COS Protocol, MODBUS RTU, MODBUS ASCII, DNP3, and SC1801
Polling Protocol:	Allen Bradley DF1, ASI, MODBUS RTU, MODBUS ASCII, and 6B13
PC/104 Connector:	32 bit PC/104-Plus Bus

## HSQ 8602 Control Panel Board

Indicators:	Power, Stand Alone Active, Outputs Enabled, Initialized by Host, Door Open
Switches:	Stand Alone Mode (Forced/Auto/Inhibit), Outputs Enable/Disable
Embedded I/O:	12 TTL Digital Inputs, 12 TTL Digital Outputs 4 Analog Inputs, (4-20mA, 0-1mA, 0-5V, 0-10V) (Note: Configurable as 24VDC Digital Inputs) 3 Analog Inputs (4-20mA)
I/O Expansion Bus Port:	2500 Series I/O Expansion Boards, up to 26 boards, 832 points
Battery Voltage Monitor:	On-Board AI Monitors +24VDC Supply Voltage, Reads Battery Volts During Discharge
AC OK Monitor:	TTL from 2585 Power Control Board, Indicates AC Power Being Used, i.e., Battery Not Discharging
Battery OK Monitor:	TTL from 2585 Power Control Board, Indicates Defective Battery
Address Switches:	Unit Address, 1-999
Ops Monitor Relay:	24VDC, 10A Maximum
Door Alarm:	Photocell Activates Internal Alarm Point When Illuminated, Adjustable Threshold

## General

Logic Power:	5 VDC, 15 W Peak, 10 W Idle
Field I/O Power:	24VDC, Power Consumption Varies by I/O Configuration
Temperature:	0-60°C Operating (Optional Thermostatically Controlled Heater for Extended Low Temperature)
Humidity:	5-95 Percent Relative Humidity, Non-Condensing
Dimensions:	17.78 cm x 25.40 cm (7" H x 10" W) - Depth Varies According to Board Configuration

## HSQ TTL I/O Interface Boards

- 1046 Digital Input, 8 Channel 24 VDC
- 1047 Digital Output, 8 Channel 24 VDC
- 1332 Digital Output, 8 Channel Form C 10 Amp relay
- 8646 Digital I/O (12 Input / 12 Output) 24 VDC

## 2500 Series I/O Expansion Boards

- 2507 Analog Output, 4 Channel
- 2508 Analog Input, 32/16 Channel
- 2509 Digital Input, 32 Channel
- 2510 Digital Output, 64 Channel
- 2533 Digital Output, 32 Channel
- 2534 Intelligent Digital Input, 32 Channel (SOE to one Millisecond)
- 2548 Relay Digital Output, 16 Channel Form C 10 Amp Relay
- 2569 16 Digital Inputs and 16 Digital Output
- 2587 64 Digital Inputs or 64-Counter Inputs (TTL)  
(Digital Inputs can be used as Counter Inputs)



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