

# Model 25x86 Logic Processor



Intelligent Data Acquisition and Control

Technical Summary

## Key Features

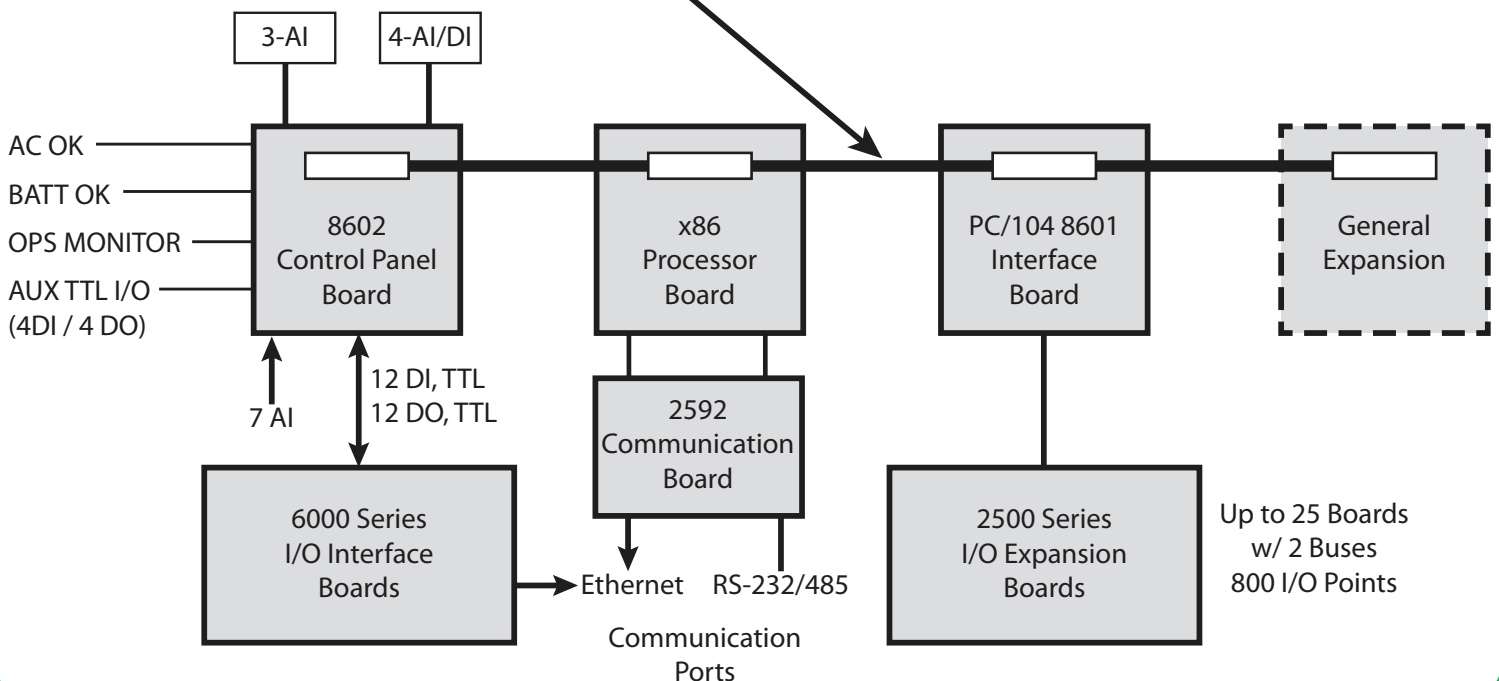
- Industrial Processor
- Open PC/104 Bus Architecture
- HSQ Model 2500/86 Compatibility
- Distributed Alarm and Data Processing
- Sequence of Events (SOE) Buffering
- Synchronized Real Time Clock
- Intelligent Stand Alone Control
- VisualCL Programming (IEC 1131-3)
- IP LAN/WAN Support
- Backup Power Supply Option
- Redundant Power Supply Option
- Modbus Master and Slave Capability
- IEEE 802.3 10/100 Ethernet

The Model 25x86 Logic Processor Stack is an 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

PC/104 STANDARD BUS



## Processor Boards

Processor Type/Speed:	x86 1.0GHz
Memory:	256Mb SDRAM standard, expandable to 512Mb
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 and One RS-232/422/485 standard, expandable, USB available
Comm Protocol:	HSQ COS Protocol, MODBUS (Serial/TCP), DNP3
Polling Protocol:	Allen Bradley DF1, ASI, MODBUS (Serial/TCP)
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, (4-20 mA, 0-1 mA, 0-5 V, 0-10 V) (Note: Configurable as 24 VDC Digital Inputs) 3 Analog Inputs (4-20 mA, 0-1 mA)
I/O Expansion Bus Port:	2500 Series I/O Expansion Boards, up to 25 boards, 800 points
Battery Voltage Monitor:	On-Board AI Monitors +24 VDC Supply Voltage, Reads Battery Volts During Discharge
AC OK Monitor:	TTL from 2585 Power Control Board, indicates either AC Power or Battery being used
Battery OK Monitor:	TTL from 2585 Power Control Board, Indicates Defective Battery
Address Switches:	Unit Address, 1-999
Ops Monitor Relay:	24 VDC, 10 A Maximum
Door Alarm:	Photocell Activates Internal Alarm Point When Illuminated, Adjustable Threshold

## General

Logic Power:	5 VDC, 6 W
Field I/O Power:	24 VDC, Power Consumption Varies by I/O Configuration
Temperature:	0-60° C Operating (Optional Thermostatically Controlled Heater for Extended Low Temperature)
Humidity:	5-95% Relative Humidity, Non-Condensing
Dimensions:	17.78 cm x 25.40 cm (7" H x 10" W) – Depth Varies According to Board Configuration

## 2500 Series I/O Expansion Boards \*

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

## HSQ 6000 Series I/O Remote Multiplexer Expansion Boards \*

- HSQ-6015 7-ch Isolated RTD Input Module
- HSQ-6017 8-ch Isolated Analog Input Module w/ 2-ch DO
- HSQ-6018 8-ch Isolated Thermocouple Input Module with 8-ch DO
- HSQ-6024 12-ch Isolated Universal Input/Output Module
- HSQ-6050 18-ch Isolated Digital I/O Module
- HSQ-6051 14-ch Isolated Digital I/O Module
- HSQ-6052 16-ch Source-type Isolated Digital I/O Module
- HSQ-6060 6-ch Digital Input and 6-ch Relay Module
- HSQ-6060 6-ch Digital Input 6-ch Power Relay Module

## HSQ AUX I/O Interface Boards \*

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

\*NOTE: All Digital Inputs can be used as Counter Inputs.



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