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.

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

25x86 Architecture

AC OK
BATT OK
OPS MONITOR
AUX TTL I/O (4DI / 4 DO)

3-AI
4-AI/DI

8602 Control Panel Board

12 DI, TTL
12 DO, TTL
7 AI

12 Di, TTL
12 Do, TTL

2592 Communication Board

Ethernet
RS-232/485
Communication Ports

6000 Series I/O Interface Boards

x86 Processor Board

PC/104 8601 Interface Board

General Expansion

Up to 25 Boards w/ 2 Buses
800 I/O Points

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

HSG 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
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: 0-60º C Operating
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)

HSG 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

HSG 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.