Hardware Reference Card Hostess i/S 16

Scope

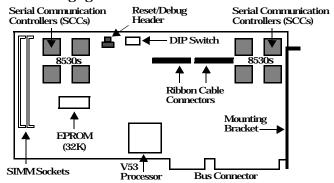
This reference card discusses the following topics for the Hostess *i/S* 16 controller:

- Identification
- Configuration
- Installation
- Specifications
- Memory addresses
- Troubleshooting and
- Warranty
- technical support

Note: You must write your own device driver, as Comtrol does not supply one for this controller.

Identifying the Controller

The following figure illustrates the Hostess *i*/*S* 16 controller.



Notes: The reset/debug header is only available on controllers set up for development by special request. See the Programmer's Reference for information on this header:

Configuring the Controller

Use the following table to configure the controller by setting the base I/O address on the DIP switch.

	Address	Settings	
I/O	DIP	I/O	DIP
Address	Switch	Address	Switch
218h (Default)	ON 123	318h	ON 123
21Ch	ON 123	31Ch	ON 123
238h	ON 123	338h	ON 1 2 3
23Ch	ON 1 2 3	33Ch	ON 1 2 3

If you want to upgrade with larger SIMM memory, do so before installing the controller. The controller is shipped with 512K of SIMM memory (2-256K by 8 or 9). The controller supports up to 2MB (2-1MB by 8 or 9).

Installing the Controller

Use the following steps to install the controller.

Warning: Static electricity may damage the controller. When touching the controller, wear a grounding strap.

Hold the controller only by its edges or the mounting bracket.

- Turn the power switch for the system unit to the OFF position.
- 2. Remove the system unit cover.
- 3. Select a slot to install the controller.
- 4. Remove the expansion slot cover.
- 5. Partially assemble the mounting bracket, by inserting a screw in the upper portion of the bracket.
 Do not completely tighten the screw at this time. The movable portion of the bracket must be able to swing freely, because it is used to secure the interface ribbon
- Insert the controller in the expansion slot, making sure that it is properly seated. Repeat steps 3 through 6 for each controller.

Once the controller or controllers are installed, refer to your *Interface Reference Card* to attach the interface.

Controller Specifications

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The following tables list controller specifications.

Conditions Specifications

Condition	Values
Air temperature:	
System on	0 to 70 degrees C
System off	-65 to 150 degrees C
Humidity:	
System on	8% to 80%
System off	20% to 80%
A1.1. 1	0 to 10,000 feet
Altitude	0 to 3,048 meters
Heat output	58 BTU/Hr

Controller Specifications

Function	Specification
I/O ports/expansion slot	16 ports
Interface	EIA-232-D
Base memory address	Software selectable
Base I/O address	DIP Switch selectable
Processor	12 MHz V53
Serial Communication Controller	8530
Hardware interrupt	Software selectable (IRQs 3-5, 9-12, and 15)

Controller Specifications (Continued)

Function	Specification
Modem control	RTS, CTS, DCD, DTR, DSR, and RI
Synchronous communication	DIE or DCE
Current consumption (± 10%):	
+5 VDC	2.900A
+12 VDC	0.045A
-12 VDC	0.165A
Power requirements: +5 VDC	14.50W
+12 VDC	00.54W
-12 VDC	01.98W
Total	17.02W
Mean Time Between Failure	8.9 Years
RAM	512K dual-ported memory local RAM upgrades to 2MB, using 80ns or faster SIMMs
EPROM	32K
Bus interface	ISA or compatible 16-bit data, 24-bit address or 32-bit data and address.
FCC Certification	Yes - Class A
UL Recognition	Yes - Recognized Component
Dimensions	13.3" x 4.5" x .6"

Memory Addresses

The controller contains 128K of memory. The controller uses this memory to store data that moves between the peripheral device and the computer system. To use this memory, the controller's device driver communicates to the operating system, telling it where the memory resides. The following tables show the system memory and system I/O addresses (up to 3FF) and their known uses. The controller can use base I/O address ranges from 218 to 33C.

System Memory Map

Address	Used By	Comments
0000- 9FFFF	640K on system board	May be 64K to 640KB, depending on the model.
A0000- BFFFF	Display adapter reserved	EGA and VGA [™] use all of this, CGA and MDA use a portion of it.
C0000- DFFFF	Reserved for ROM expansion	Used for I/O channel BIOS, as in the disk controller: •C0000 through C7FFF (EGA/VGA BIOS) •C8000 through CBFFF (Hard disk BIOS) •D0000 through DFFFF (Cluster/network adapter BIOS)
E0000- EFFFF	Expansion of system ROM	For the $AT^{^{TM}}$.

System Memory Map (Continued)

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Address	Used By	Comments
F0000- FFFFF	System ROM	May be duplicate of ROM in higher memory.
100000- FDFFFF	Memory expansion	For the AT.
FE0000- FEFFFF	Reserved	For the AT.
FF0000- FFFFFF	64K ROM BIOS	For the AT.

System I/O Addresses - Up to 3FF

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Address Block	Addresses Used	Description
000-03F		Reserved for Motherboard
040 – 07F		Reserved for Motherboard
080 – 0BF		Reserved for Motherboard
0C0 – 0FF		Reserved for Motherboard
100 – 13F		
140 – 17F		
180 – 1BF		
1C0 – 1FF	1F0-1F8	Fixed Disk
200 – 23F		
240 – 27F	278 – 27F	LPT2, IDE controllers, and multifunction boards (game ports)
280 – 2BF		
2C0 – 2FF	2E8 – 2EF 2F8 – 2FF	COM4 COM2
300 – 33F		
340 – 37F	378 – 37F	LPT1
380 – 3BF	3B0 – 3BF	Monochrome Display and LPT3
3C0 – 3FF	3D0 – 3DF 3E8 – 3EF 3F0 – 3F7 3F8 – 3FF	Graphics Monitor Adapter COM3 Floppy Disk Controller COM1

Troubleshooting and Technical Support

If installation fails or you are trying to resolve a problem, try the following before calling the Comtrol technical support line:

- Check the signals between your peripherals and the interface box to verify that they match.
- · Check to make sure the cables are connected properly.
- Make sure that the expansion slot screw was replaced after inserting the controller.
- Check modem signal settings if the modem cannot send or receive data.
- Verify that the DIP switch setting is correct.
- Reinstall the controller, making sure that the SIMMs are seated properly.

If you have not been able to get the controller operating:

- 1. Turn off your PC and insert the diagnostic diskette.
- 2. Boot the PC and follow the instructions provided by the

diagnostic diskette.

Use the following table to gather information before calling Comtrol's technical support.

Support Call Information

Item	Your System Information
Controller type	16-port
Interface type	
Base I/O address	
Operating system type and release	
PC make, model, and speed	
List of other devices in the PC and their addresses	

Contacting Comtrol

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Comtrol has a staff of hardware and software engineers, and technicians available to help you.

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