

# Hostess® 554 Quadcable and Octacable Hardware Installation Card

## Scope

This *Hardware Installation Card* discusses the following topics for the Hostess 554.

- Installation overview
- Identifying your controller
- Setting the base I/O address and IRQ switches
- Installing the controller
- Connector pinouts
- Building loopback plugs
- Specifications
- Troubleshooting and placing a support call

The Control web/ftp site contains additional information:

- [Signal information for the 78-pin connector on the controller](#)
- [Additional device drivers](#)
- [Software installation documentation](#)

**Note:** Call Technical Support if you require a Hostess Series and Hostess 550 Series Programming Guide.

## Installation Overview

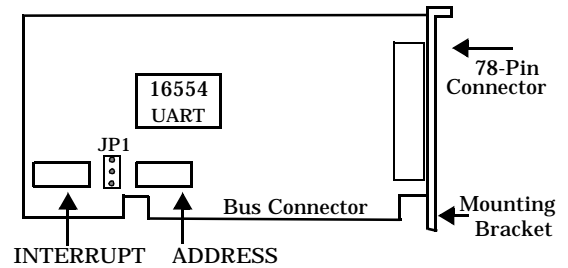
Installation follows these general steps:

1. Set the base I/O address and IRQ switches to unused values for your machine.
2. Install the controller board.
3. Attach peripherals to the interface box.
4. Install the device driver. You may need to download a driver and the software installation documentation at: [www.comtrol.com](http://www.comtrol.com) or [ftp.comtrol.com](http://ftp.comtrol.com)

## Identifying Your Controller

The Hostess 554 Quadcable and Hostess 554 Octacable products are identical, except that one features a 4-port fanout cable and the other features an 8-port fanout.

Throughout this document, both products are referred to as the *controller*, unless you need to know specific information about a specific board.



**Hostess 554 Quadcable or Octacable**

Note the position of the controller's basic parts:

- The INTERRUPT switch, which sets the IRQ.
- The JP1 jumper, which enables you to set IRQ12.
- The ADDRESS switch, which sets the controller base I/O address.

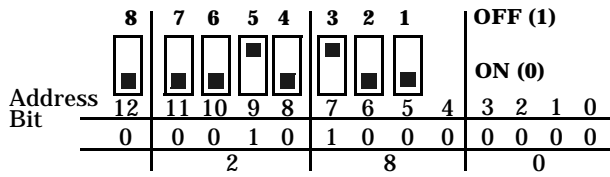
## Setting the Base I/O Address

Use the following table to set the base I/O address. Make sure that you select unused address in your system. If you are unsure what settings are available, refer to your system documentation.

**Note:** The default I/O address from the factory is 280.

Base Address	ADDRESS Switch Settings	4-Port Address Range	8-Port Address Range																								
240	<table style="border: none; text-align: center;"> <tr><td>8</td><td>7</td><td>6</td><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td></tr> <tr><td>□</td><td>□</td><td>□</td><td>□</td><td>□</td><td>□</td><td>□</td><td>□</td></tr> <tr><td>■</td><td>■</td><td>■</td><td>■</td><td>■</td><td>■</td><td>■</td><td>ON</td></tr> </table>	8	7	6	5	4	3	2	1	□	□	□	□	□	□	□	□	■	■	■	■	■	■	■	ON	240 - 25F hex	240 - 27F hex
8	7	6	5	4	3	2	1																				
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280 Default	<table style="border: none; text-align: center;"> <tr><td>8</td><td>7</td><td>6</td><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td></tr> <tr><td>□</td><td>□</td><td>□</td><td>□</td><td>□</td><td>□</td><td>□</td><td>□</td></tr> <tr><td>■</td><td>■</td><td>■</td><td>■</td><td>■</td><td>■</td><td>■</td><td>ON</td></tr> </table>	8	7	6	5	4	3	2	1	□	□	□	□	□	□	□	□	■	■	■	■	■	■	■	ON	280 - 29F hex	280 - 2BF hex
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8	7	6	5	4	3	2	1																				
□	□	□	□	□	□	□	□																				
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580	<table style="border: none; text-align: center;"> <tr><td>8</td><td>7</td><td>6</td><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td></tr> <tr><td>□</td><td>□</td><td>□</td><td>□</td><td>□</td><td>□</td><td>□</td><td>□</td></tr> <tr><td>■</td><td>■</td><td>■</td><td>■</td><td>■</td><td>■</td><td>■</td><td>ON</td></tr> </table>	8	7	6	5	4	3	2	1	□	□	□	□	□	□	□	□	■	■	■	■	■	■	■	ON	580 - 59F hex	580 - 5BF hex
8	7	6	5	4	3	2	1																				
□	□	□	□	□	□	□	□																				
■	■	■	■	■	■	■	ON																				

For additional base I/O address selections, use the following figure to calculate unlisted addresses.



## Setting the IRQ

Use the following table to set your controller to an unused IRQ value for your system.

**Note:** The default IRQ setting from the factory is 3.

IRQ	INTERRUPT	IRQ	INTERRUPT
2/9††	8 7 6 5 4 3 2 1 ↓ [ ][ ][ ][ ][ ][ ][ ][ ] ON	3 Default	8 7 6 5 4 3 2 1 ↓ [ ][ ][ ][ ][ ][ ][ ][ ] ON
4	8 7 6 5 4 3 2 1 ↓ [ ][ ][ ][ ][ ][ ][ ][ ] ON	5	8 7 6 5 4 3 2 1 ↓ [ ][ ][ ][ ][ ][ ][ ][ ] ON
7	8 7 6 5 4 3 2 1 ↓ [ ][ ][ ][ ][ ][ ][ ][ ] ON	10	8 7 6 5 4 3 2 1 ↓ [ ][ ][ ][ ][ ][ ][ ][ ] ON
11	8 7 6 5 4 3 2 1 ↓ [ ][ ][ ][ ][ ][ ][ ][ ] ON	12†††	8 7 6 5 4 3 2 1 ↓ [ ][ ][ ][ ][ ][ ][ ][ ] ON

† Switch 1 sets mask enable.

Set Switch 1 to **OFF** for the following operating systems:

- DOS
- OS/2®
- QNX®
- Windows® 95, Windows 98, and Windows NT

Set Switch 1 to **ON** for the following operating systems:

- AT&T®
- INTERACTIVE® 386/ix
- Microport V/386
- SCO® Xenix®
- SCO Unix® and SCO OpenServer™
- SunOS™

†† IRQ2 is the hardware interrupt, while IRQ9 is the software interrupt.

††† To select IRQ12 set the JP1 jumper on Pins 2 and 3. By default, IRQ12 is disabled and the JP1 jumper is on Pins 1 and 2.

The mask register is an 8-bit register that allows you to disable interrupts for each port individually or in any combination. Any port interrupt can be masked or disabled by writing a 0 to the corresponding bit in the mask register. The interrupt is enabled by writing a 1.

- If position 1 of the interrupt switch is ON, the mask register is enabled. This allows you to individually mask the interrupts received from the I/O ports.
- If position 1 is OFF, the mask register is disabled and the interrupts can not be masked individually.

## Installing the Controller

If you have not done so already, set the switches on the controller. If the switches have already been set, use the following steps to install the controller.

**Warning** Static electricity may damage the controller. When touching and installing the controller, wear a grounding strap. Hold the controller only by its edges or the mounting bracket.

1. 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. Insert the controller in the expansion slot, making sure that it is properly seated.
6. Attach the controller to the chassis with the expansion slot screw. Repeat Steps 3 through 5 for each controller.
7. Replace the cover on the system unit.

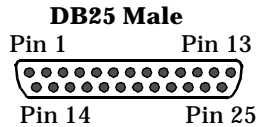
**Note:** If installing in an EISA system, you may need to use the EISA configuration files on the diskette. See the *readme* file in the EISACFG directory for configuration information.

Once the controller or controllers are installed, you can connect your peripherals.

## DB25 Pinouts

Use the following table and figures if you need information about the DB25 connector pinouts.

Pin	RS-232 Signal
1	Not used
2	TxD
3	RxD
4	RTS
5	CTS
6	DSR
7	SigGnd
8	DCD
9 through 19	Not used
20	DTR
21	Not used
22	RI
23 through 25	Not used

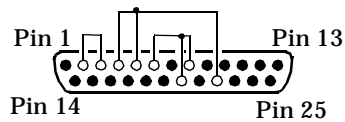


### Building DB25 Loopback Plugs

Loopback plugs are used with the diagnostics to test serial ports.

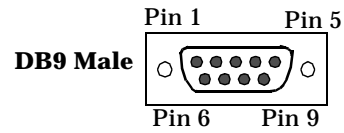
Wire the following pins together:

- Pins 2 to 3
- Pins 4 to 5 to 22
- Pins 6 to 8 to 20



## DB9 Pinouts

Use this table and figure for information about the DB9 connectors.



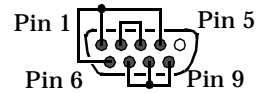
Pin	RS-232 Signal
1	DCD
2	RxD
3	TxD
4	DTR
5	SigGnd
6	DSR
7	RTS
8	CTS
9	RI

### Building DB9 Loopback Plugs

Loopback plugs are used with the diagnostics to test serial ports.

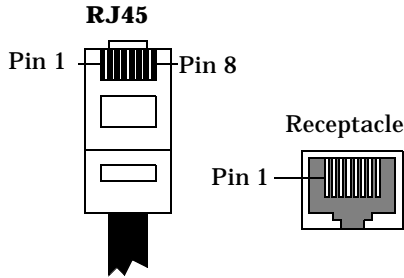
Wire the following pins together:

- Pins 1 to 4 to 6
- Pins 2 to 3
- Pins 7 to 8 to 9



## RJ45 Pinouts

Use the following table and figures for pinout information on the RJ45 connectors.



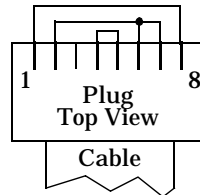
Pin	RS-232
1	RTS
2	DTR
3	SigGnd
4	TxD
5	RxD
6	DCD
7	DSR
8	CTS

## Building RJ45 Loopback Plugs

Loopback plugs are used with the diagnostics to test serial ports.

Wire the following pins together:

- Pins 4 to 5
- Pins 1 to 8
- Pins 2 to 6 to 7



## Specifications

The following tables list the controller's conditions and specifications.

Environmental Condition	Value
Air temperature: System on System off	0 to 40°C -20 to 85°C
Humidity (non-condensing): System on System off	8% to 80% 20% to 80%
Altitude	0 to 10,000 feet

Electromagnetic Compliance	Status
Emission: Canadian EMC requirements CISPR-22/EN55022 Class A FCC PART 15: Class A	Yes
Immunity: EN50082: 801-2 ESD, 801-3 RF, 801-4 FT	Yes
UL Recognized	Yes

Card	Specification
Baud rate:	50 to 115.2K baud
Bus interface	ISA
Data bits	5, 6, 7, or 8
Current consumption:	<i>+5V</i> <i>+12V</i> <i>-12V</i>
Quadcable	260 mA    50 mA    90 mA
Octacable	300 mA    100 mA    180 mA
Dimensions	7.2" x 3.95"
Heat output:	
Quadcable	10.16 BTU/HR
Octacable	16.58 BTU/HR
Hostess cards/system	4
I/O port address default	280 hex
I/O ports/expansion slot	From 4 to 8
Interface	RS-232
Interrupt (IRQ) Hardware selectable	2/9*, 3, 4, 5, 7, 10, and 11 Optionally, IRQ12 with JP1 Default: 3 * IRQ9 is the software interrupt for IRQ2.
Mean time between failures (MTBF):	
Quadcable	28.04 years
Octacable	20.63 years
Modem control	RTS, CTS, DSR, DCD, DTR, RI
Stop bits	1, 1.5, or 2

Card	Specification (Continued)
Surge protection	Provides ESD surge protection exceeding 10 KV.
UART	16C554

## Troubleshooting

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

- Reinstall the controller and device driver, selecting a different I/O address range and IRQ.
- Check the signals between your peripherals and the controller connectors to verify that they match.
- Check to make sure the cables are connected properly.
- Reseat the controller in the slot (power must be OFF).
- Reboot the system.

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

1. Turn off your PC.
2. Boot the PC from the diagnostic diskette and follow the instructions.

## Technical Support

Control has a staff of support technicians available to help you. Before you call, please have the following information available:

Item	Your System Information
Model number	
Serial number	
Interface type	
I/O address and IRQ	
Operating system type and release	
Device driver version	
PC make, model, and speed	
List other devices in the PC and their addresses	

Control	Headquarters	Europe
Phone	(651) 631-7654	+44 (0)1869 323220
FAX	(651) 631-8117	+44 (0)1869 323211
Email	<a href="mailto:support@control.com">support@control.com</a>	<a href="mailto:support@control.co.uk">support@control.co.uk</a>
web site	<a href="http://www.control.com">www.control.com</a>	<a href="http://www.control.co.uk">www.control.co.uk</a>
ftp site	<a href="ftp://ftp.control.com">ftp.control.com</a>	

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**2000024 Rev A**