

## 82335 Interface Configuration Help

Please select one of the following:

[Configuring the 82335 Interface](#)

[Troubleshooting for the 82335 Configuration](#)

## Configuring the 82335 Interface

### NOTE

The 82335 GPIB interface is only supported with 16-bit and 32-bit SICL on Windows 95.

To configure the 82335 GPIB interface for SICL, you need to provide the following information.

### NOTE

The **Base Address** configuration value is read-only. It indicates the memory address selected for the 82335 by its DIP switch settings. To change the Base Address, you must power down your computer, remove the GPIB interface card, re-set the DIP switches, re-install the card, and power up your computer. You can then run I/O Config again to configure the GPIB interface. For information on setting the DIP switches, see the *I/O Installation Guide*.

- ▣ **Interface Name** is a symbolic name that SICL uses to uniquely identify this GPIB interface. The default Interface Name is **hpib**. The Interface Name must be a unique string of alphanumeric characters, starting with a letter. Remember this value and the Logical Unit number in order to address the GPIB interface properly in your SICL applications.
- ▣ **Logical Unit** is a number that SICL uses to uniquely identify this GPIB interface. The Logical Unit number is an integer in the range of 0-10000. Remember this value and the Interface Name in order to address the GPIB interface properly in your SICL applications.
- ▣ **Interrupt Line** is a hardware line over which I/O devices can send interrupts to the CPU. An Interrupt Line must be reserved for exclusive use by each 82335 GPIB interface. For more information, see [Choosing an Interrupt Line](#).
- ▣ **Bus Address** is the address of this interface on the GPIB bus. These addresses are chosen by convention, but any address in the range of 0-30, inclusive, may be used.

If the configuration values that are displayed for the Interface Name, Logical Unit number, Interrupt Line, and Bus Address are acceptable to you, click on the **OK** button.

Otherwise, you can change the configuration values either by clicking on the arrows next to the values, or, if there are no arrows, by typing in the values you want. At any time, you can press the **Defaults** button to return the configuration dialog box to its default configuration values for the GPIB interface.

When you are done changing the values, either press the **OK** button if you want I/O Config to accept the changes, or press the **Cancel** button to cancel the changes and return to the previous configuration values for the GPIB interface.

## Choosing an Interrupt Line

The Interrupt Line assigned for an 82335 interface must be reserved for exclusive use by the interface. If this Interrupt Line is already being used by another interface, this will cause unpredictable behavior (such as system crashes, LAN problems, mouse tracking problems, etc.).

Note that the Interrupt Line on the 82335 must first be selected by setting DIP switches 5 and 6 on the interface card itself. Then you must set the **Interrupt Line** configuration value to the same setting in I/O Config. The following table shows the DIP switch settings for Interrupt Lines on the 82335 card:

| Switches |   | IRQ  |
|----------|---|------|
| 5        | 6 | Line |
| -----    |   | ---- |
| 0        | 0 | 3    |
| 0        | 1 | 4    |
| 1        | 0 | 5    |
| 1        | 1 | 7    |

I/O Config will limit your choices so that you do not pick an Interrupt Line that conflicts with another configured GPIB interface, a parallel port, or an RS-232 port. However, I/O Config will not know about any other interfaces in your system. If you have another interface in your system that uses an Interrupt Line, you will need to avoid assigning this Interrupt Line to your 82335 interface.

If you suspect an Interrupt Line conflict exists between an 82335 interface and another interface on your system, assign another Interrupt Line by resetting DIP switches 5 and 6 on the card, as shown in the previous table. Then edit the configuration entry for the 82335 interface and assign the new Interrupt Line for the interface.

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## Troubleshooting for the 82335 Configuration

Please select one of the following:

[I/O Config Cannot Find the 82335 Interface](#)

[Resolving 82335 Memory Mapped I/O Conflict](#)

[Resolving 82335 Interrupt Line Conflict](#)

## I/O Config Cannot Find the 82335 Interface

The most common problem encountered when using I/O Config is that an interface is not found. For an 82335 interface, this is due to one of the following reasons:

1. The interface was not installed in your system before running I/O Config.

To solve this problem, you need to install the interface card in your system and then run I/O Config again.

2. The interface is set up to use a memory mapped I/O address that is already being used.

To solve this problem, you need to resolve the memory mapped address conflict. See [Resolving 82335 Memory Mapped I/O Conflict](#).

3. The interface has already been configured by I/O Config.

To solve this problem, you need to *edit* the existing configuration entry for the interface, instead of trying to add a new interface. In the main I/O Config window, click on the name of the interface configuration entry for the 82335 in the **Configured Interfaces** list box. Then click on the **Edit** button directly beneath the **Configured Interfaces** list box to edit the configuration entry for the 82335.

## Resolving 82335 Memory Mapped I/O Conflict

If I/O Config does not find an 82335 interface when you try to add a configuration entry for it, you may have a memory mapped I/O conflict with that interface. The memory address (Base Address) used by the interface is specified by its DIP switch setting. Neither I/O Config nor SICL will recognize the HP 82335 interface if a conflict exists with the memory used by the interface.

A memory conflict could exist for one of the following reasons:

1. The memory for the 82335 interface is being used by an Expanded Memory Manager.

This is the most common problem. Make sure that you have excluded the memory used by the HP 82335 interface from Expanded Memory Manager drivers used by DOS and Windows. For information on how to do this, see [Excluding 82335 Memory Mapped I/O Space](#).

2. The 82335 interface is set to use a memory segment already used by another interface.

To handle this situation, you can try using another memory segment for the HP 82335 interface. You will need to change the DIP switch setting on the card and then exclude this memory segment from use by the Expanded Memory drivers. For information on how to do this, see [Setting 82335 Memory Mapped I/O Space](#).

## Setting 82335 Memory Mapped I/O Space

DIP switches 1 through 4 on the 82335 interface select the memory segment that will be used by the interface. You will need to know the memory segment used by your interface to make sure that this memory segment is excluded from use by Expanded Memory drivers. The following table lists the memory segments selected by the different switch settings:

| Switches | Memory Segment | Base    |
|----------|----------------|---------|
| 1 2 3 4  | Range          | Address |
| -----    | -----          | -----   |
| 0 1 1 1  | DC00-DFFF      | 7       |
| 0 1 1 0  | D800-DBFF      | 6       |
| 0 1 0 1  | D400-D7FF      | 5       |
| 0 1 0 0  | D000-D3FF      | 4       |
| 0 0 1 1  | CC00-CFFF      | 3       |

Note that the default factory setting for the 82335 interface specifies a memory segment of DC00-DFFF.

Go to [Excluding 82335 Memory Mapped I/O Space](#).

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## Excluding 82335 Memory Mapped I/O Space

To properly exclude the memory of an 82335 interface card, do the following:

1. Identify the memory segment used by the interface. To do this, match the DIP switch setting of your 82335 interface with its corresponding memory segment. For more information, see [Setting 82335 Memory Mapped I/O Space](#).
2. Exclude the memory segment from the Expanded Memory driver used by DOS. To do this, check for a memory manager device line (for example, **DEVICE=EMM386.EXE**) in the **CONFIG.SYS** file in your system's root directory. Add a parameter to exclude the memory segment (for example, **X=DC00-DFFF**) to the memory manager line for the memory segment used by the HP 82335 interface. If you are using an Expanded Memory Manager other than **EMM386**, consult the documentation for the Expanded Memory Manager to find out how to exclude memory segments. Note that you will need to reboot your computer after editing **CONFIG.SYS** for the changes to take effect.
3. Exclude the memory space from the Windows Expanded Memory Manager. To do this, edit the **SYSTEM.INI** file in your **WINDOWS** directory and add a memory exclude line to the **[386enh]** section (for example, **EMMEXCLUDE=0DC00-0DFFF**). Note that you should edit **SYSTEM.INI** before booting Windows for this change to take effect.

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## Resolving 82335 Interrupt Line Conflict

The Interrupt Line assigned for an 82335 interface must be reserved for exclusive use by the interface. If this Interrupt Line is already being used by another interface, this will cause unpredictable behavior (such as system crashes, LAN problems, mouse tracking problems, etc.).

If you suspect an Interrupt Line conflict exists between an HP 82335 interface and another interface on your system, assign another Interrupt Line by resetting DIP switches 5 and 6 on the card, as shown in the following table. Then edit the configuration entry for the HP 82335 interface and assign the new Interrupt Line for the interface.

| Switches |   | IRQ  |
|----------|---|------|
| 5        | 6 | Line |
| -----    |   | ---- |
| 0        | 0 | 3    |
| 0        | 1 | 4    |
| 1        | 0 | 5    |
| 1        | 1 | 7    |

Note that I/O Config will not let you choose an Interrupt Line that is already being used by another interface. However, if the same Interrupt Line is assigned to another interface (for example, via the Device Manager in the Control Panel) *after* I/O Config is run, a conflict may occur.

In such a case, you can check the Interrupt Lines assigned for the various interfaces in your system via the Device Manager in the Control Panel. To do this, click on the **System** icon in the **Control Panel**. Then click on **Device Manager**, which will display information about the interfaces on your system. Select the HP 82335 interface listed in the dialog box, and then click on **Properties**. This will show what interfaces, if any, are in conflict with the HP 82335.

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