

DECpc AXP 150

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# COMPAQ QVision 1024/E Controller User Information

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**July 1993**

This manual describes how to install, configure, and use the  
COMPAQ QVision 1024/E controller in the DECpc AXP 150 system.

**Revision Information:**            This is a new manual.

**Digital Equipment Corporation  
Maynard, Massachusetts**

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**FCC Notice:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio or television technician for help.

#### **Modifications**

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Compaq Computer Corporation may void the user's authority to operate the equipment.

#### **Cables**

Connections to this device must be made with shielded cables with metallic RFI/EMI connector hoods to maintain compliance with FCC Rules and Regulations.

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## Preface

<b>Purpose of This Manual</b>	This manual describes how to install, configure, and use the COMPAQ® QVision™ 1024/E controller in the DECpc™ AXP™ 150 system.
<b>Audience</b>	This manual is intended for anyone installing, configuring, or connecting the COMPAQ QVision 1024/E controller in a DECpc AXP 150 system. It is written for both experienced and inexperienced users.
<b>Structure of This Manual</b>	<p>This manual contains three chapters, an appendix, and an index as follows:</p> <ul style="list-style-type: none"><li>• Chapter 1 describes how to install and connect the QVision controller.</li><li>• Chapter 2 describes how to configure the system after you have installed the QVision controller.</li><li>• Chapter 3 contains troubleshooting information.</li><li>• Appendix A lists the specifications for the QVision controller.</li><li>• The index is a reference to the main topics in the manual.</li></ul>
<b>Associated Information</b>	The <i>DECpc AXP 150 and DEC 2000 Model 300 AXP Customer Technical Information</i> manual contains associated information.

## Conventions

The following conventions are used in this manual:

<b>Convention</b>	<b>Description</b>
monospace	Text displayed on the screen is shown in monospace type.
<i>italic type</i>	Italic type emphasizes important information, indicates variables, and indicates complete titles of manuals.
<i>n.nn</i>	A period in numerals signals the decimal point indicator. For example, <i>1.75</i> equals <i>one and three-fourths</i> .
<i>n</i>	A lowercase italic <i>n</i> indicates the generic use of a number. For example, <i>19nn</i> indicates a 4-digit number in which the last 2 digits are unknown.
<b>Note</b>	A note contains information of special importance to the reader.

# 1

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## Installing the QVision Controller

### Introduction

This chapter describes how to install and connect the QVision 1024/E controller.

### About the QVision 1024/E Controller

The QVision 1024/E controller is used in an EISA-based personal computer or system. It allows you to connect a super video graphics array (SVGA) monitor to the system. You can install multiple QVision controllers in a system unit. The QVision controller contains a switch that allows you to select the QVision controller to be the primary video controller or the secondary video controller.

### In This Chapter

This chapter contains the following sections:

- Installing the QVision Controller
- Connecting the Monitor

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## Installing the QVision Controller

### **Before You Begin**

The QVision 1024/E controller contains a switch that you must set to either the primary or secondary switch setting, depending on the number of QVision controllers you are installing. This switch is located on the switch panel SW1 on the QVision controller. Figure 1-1 shows the location of this switch.

### **Setting the Switch**

If you are installing one QVision 1024/E controller, set switch 1 on the board to the primary (PRIM) setting. If you are installing more than one QVision 1024/E controller, set switch 1 to the primary setting on one QVision controller and to the secondary (SECOND) setting on all other QVision controllers.

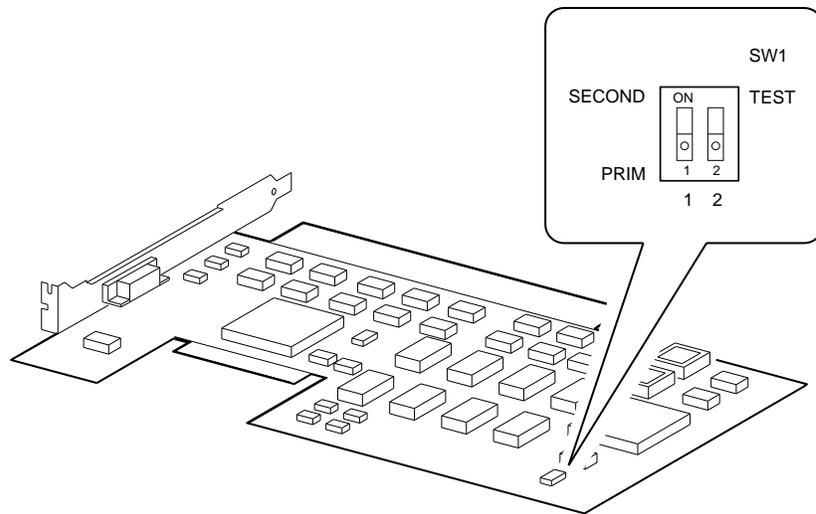
### **Installation Procedure**

For information on opening the system unit and installing an option board, see the *DECpc AXP 150 and DEC 2000 Model 300 AXP Customer Technical Information* manual.

**QVision  
Controller  
Illustration**

Figure 1–1 shows the position of the switch that controls whether the QVision controller is the primary or secondary video controller.

**Figure 1–1 QVision 1024/E Controller Switches**



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## Connecting the Monitor

### Important Information

————— **Note** —————

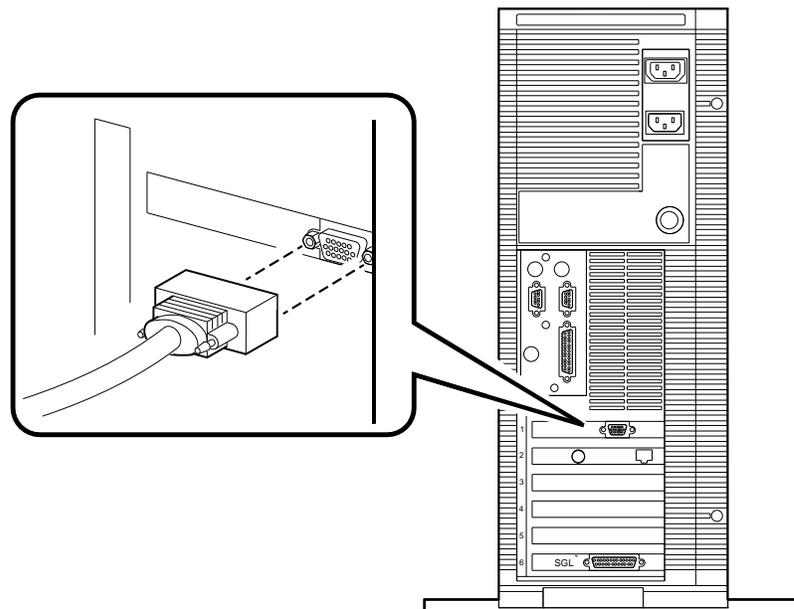
You must reconfigure the system before you can use the monitor. See Chapter 2 for more information.

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### Connection Procedure

Figure 1-2 shows how to connect the monitor to the SVGA port on the QVision controller.

**Figure 1-2 Connecting the Monitor**



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# 2

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## Configuring the QVision Controller

**Introduction** This chapter describes how to configure the system after you have installed the QVision 1024/E controller.

**In This Chapter** This chapter contains the following section:

- EISA Configuration Utility (ECU)

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## EISA Configuration Utility (ECU)

### Running the ECU

To configure the QVision controller within the system or to change the configuration settings, you must run the ECU. See the *DECpc AXP 150 and DEC 2000 Model 300 AXP Customer Technical Information* manual for information on running the ECU.

### Changing the Configuration

You can use the ECU to change the configuration of the QVision controller. Table 2-1 shows the functions and the corresponding choice of settings for the QVision 1024/E controller.

**Table 2-1 Configuration Settings**

Function	Choice of Settings
<b>Video Modes Status:</b>	
Color Text Modes	Supported Secondary
Monochrome Text Modes	Supported Secondary
Graphics Modes	Supported Secondary

(continued on next page)

**Table 2–1 (Cont.) Configuration Settings**

Function	Choice of Settings
<b>Advanced Video Features:</b>	
Extended ROM	Extended ROM supported Advanced VGA ROM support only No ROM support
High Address Video Buffer	Enabled Disabled
Video Interrupt	Disabled Enabled
Video Controller Order	First Second Third Fourth Fifth Sixth Seventh Eighth

**Default Configuration**

Table 2–2 shows the default configuration settings for the QVision 1024/E controller.

**Table 2–2 Default Configuration**

Function	Default Setting
Color Text Modes	Supported
Monochrome Text Modes	Supported
Graphics Modes	Supported
Extended ROM	Extended ROM supported
High Address Video Buffer	Enabled
Video Interrupt	Disabled
Video Controller Order	First



# 3

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## Troubleshooting

### Summary

This section describes some of the problems that can occur with the QVision 1024/E controller. It suggests possible causes for the problems and actions that you can take to correct them.

### Identifying and Solving Problems

Table 3–1 describes how to identify and solve problems by interpreting correctly the symptoms that are occurring.

**Table 3–1 Troubleshooting Table**

Symptom	Possible Cause	Recommended Action
The QVision controller device name does not appear in the power-up self-test display, or the system is on but there is no display.	The QVision controller is not seated firmly.	Remove the QVision controller and reinsert it <i>firmly</i> in the option slot.
	The QVision controller is not correctly configured or the configuration conflicts with another installed option board.	Use the ECU to check the configuration and if necessary, reconfigure the QVision controller to resolve the conflict.

(continued on next page)

**Table 3–1 (Cont.) Troubleshooting Table**

Symptom	Possible Cause	Recommended Action
The system power-up test displays a VGA error.	The monitor, power cable, or signal cable is faulty.	<p>If the monitor has a power light emitting diode (LED), check that it is on. If it is off, the power cable is probably faulty. Replace the power cable.</p> <p>Swap the cables and then the monitor to check if they are faulty.</p> <p>Connect the cables and the monitor to another system. If the monitor and cables work on another system, the QVision controller or the system unit is faulty. See the <i>DECpc AXP 150 and DEC 2000 Model 300 AXP Customer Technical Information</i> manual for more information.</p>
	The monitor or the system is not switched on.	Check that the monitor and the system are both switched on.
	The brightness and contrast controls on the monitor are set incorrectly.	Set the brightness and contrast controls to the correct settings. See the monitor documentation for more information.
	The QVision controller is faulty.	See the <i>DECpc AXP 150 and DEC 2000 Model 300 AXP Customer Technical Information</i> manual for information on testing option boards.
	The system board is faulty.	See the <i>DECpc AXP 150 and DEC 2000 Model 300 AXP Customer Technical Information</i> for more information. If the problem persists, contact your system administrator.

# A

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## Specifications

### **Introduction**

This appendix lists the specifications for the QVision 1024/E controller.

### **In This Appendix**

This chapter contains the following sections:

- QVision Controller Specification
- SVGA Connector Pin Specification

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## QVision Controller Specification

### QVision Controller Specification Summary

Table A-1 lists the physical specifications for the QVision controller.

**Table A-1 Specification Table**

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<b>Host Interface</b>	
32-bit RAM 16-bit ROM	
<b>RAM</b>	
1 Megabyte	
<b>Board Address</b>	
RAM (DOS Video Address)	A0000 - BFFFF
RAM (High Address)	1 Megabyte - 4 Gigabytes
ROM	C0000 - C7FFF 32 Kbytes
<b>Hardware Interrupt</b>	
Interrupt Request Line (IRQ)	IRQ9 (Edge/Level)
<b>Power Requirements</b>	
9 Watts	
<b>EISA Identification</b>	
COMPAQ QVision 1024/E Controller	CPQ3011

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## SVGA Connector Pin Specification

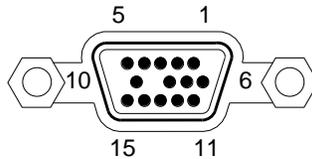
### Summary

This section lists the pin specifications for the SVGA connector.

### SVGA Connector Illustration

Figure A-1 shows the pin numbers on the SVGA connector.

Figure A-1 SVGA Connector



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### SVGA Connector Pin Specification

Table A-2 describes the functions of the pins on the SVGA connector.

Table A-2 SVGA Connector Pin Specification

Pin	Function	Pin	Function
1	Red	9	Key
2	Green	10	Ground
3	Blue	11	Unused
4	Unused	12	Unused
5	Ground	13	Horizontal sync
6	Ground	14	Vertical sync
7	Ground	15	Unused
8	Ground		



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