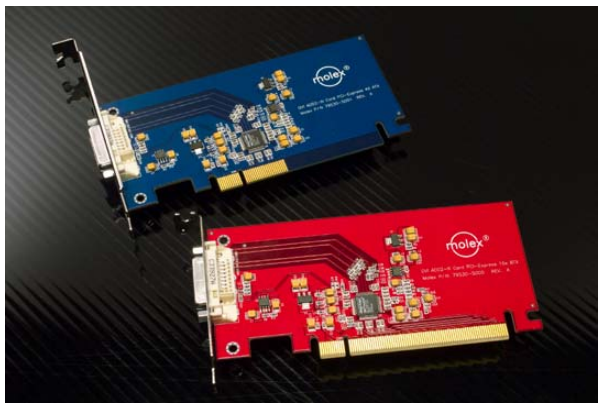
MicroCross™ ADD2 DVI Card User Guide

79530

PRODUCT DESCRIPTION

This User Guide provides instructions for the proper installation and use of MicroCross ADD2-N and ADD2-R DVI cards.

Molex Order No.	Description
79530-5000	MicroCross DVI ADD2-R Card, PCI-Express Standard Bracket, 16X, BTX System
79530-5001	MicroCross DVI ADD2-N Card, PCI-Express Standard Bracket, 4X, ATX System
79530-5002	MicroCross DVI ADD2-R Card, PCI-Express Low Bracket, 16X, BTX System
79530-5003	MicroCross DVI AD2-N Card, PCI-Express Low Bracket, 4X, ATX System



INTRODUCTION

The MicroCross ADD2 DVI Card is designed to work on Intel Motherboards that have PCI-Express* slots and support SDVO† (Serial Digital Video Output) technology. It will not work on motherboards or systems that support earlier DVO‡-based ADD (AGP§ Digital Display) cards. The ADD2 card features the Sil1364 SDVO-to-DVI (Digital Visual Interface) transmitter.

The ADD2-N card (non lane-reversed) is designed to work with Intel** ATX systems and ADD2-R (lane reversed) card is designed to work with Intel BTX systems. They can be easily distinguished from their color code: ADD2-N is color coded (see Figure 1) and ADD2-R is color coded (see Figure 2). Both cards have been designed to meet the DVI 1.0 standard.

Figure 1. ADD2-N (Shown with low profile bracket)

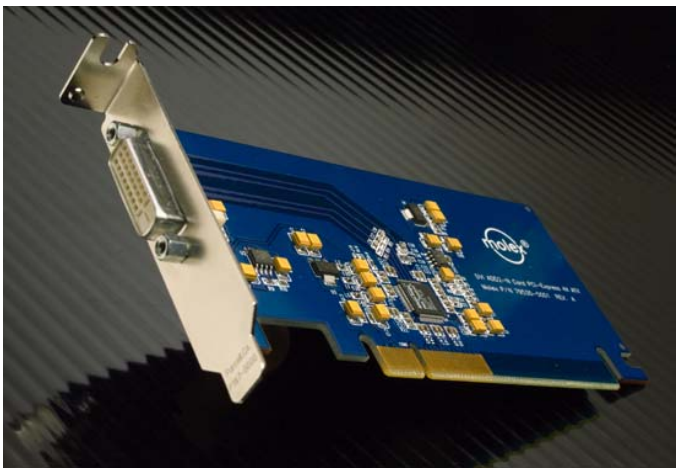
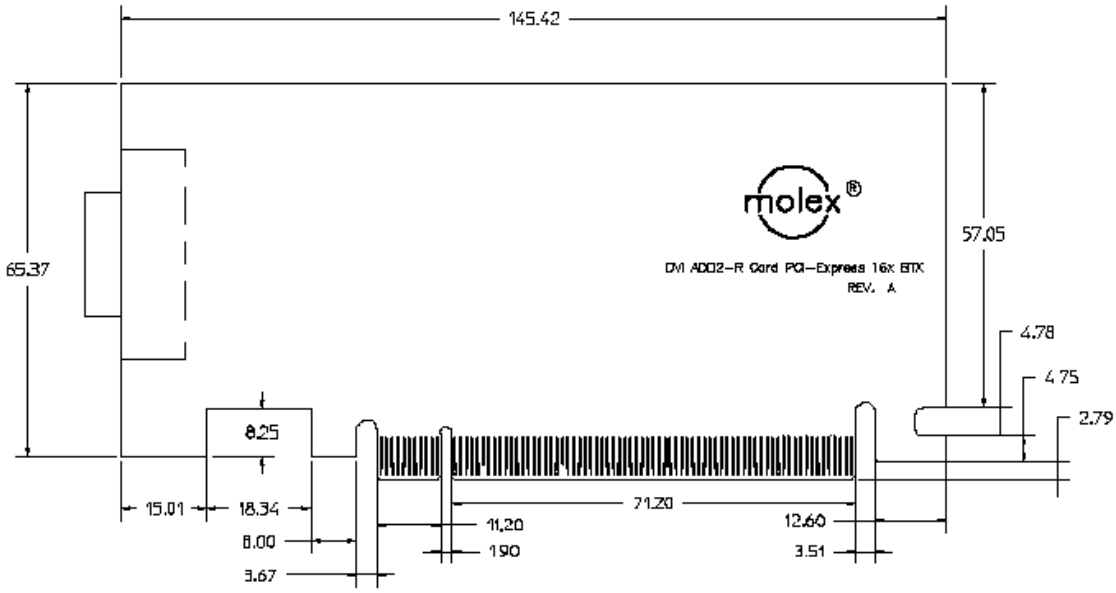


Figure 2. ADD2-R (Shown with standard bracket)

DIMENSIONS



VIDEO RESOLUTIONS SUPPORTED

The ADD2 card will support all video modes that can be sent over a single link DVI connection, with pixel rates ranging from 25 MHz to 162 MHz. This includes, but is not limited to, the following VESA†† industry standard modes (see Figure 3). Note that some resolution selections may be disabled by the Intel 915-G drivers.

Figure 3. Video Resolutions Supported

Pixels	Vertical Refresh Rate	Horizontal Frequency	Pixel Frequency
640 x 350	85 Hz	37.9 kHz	31.5 MHz
640 x 400	85 Hz	37.9 kHz	31.500 MHz
720 x 400	85 Hz	37.9 kHz	35.500 MHz
640 x 480	60 Hz	31.5 kHz	25.175 MHz
640 x 480	72 Hz	37.9 kHz	31.500 MHz
640 x 480	75 Hz	37.5 kHz	31.500 MHz
640 x 480	85 Hz	43.3 kHz	36.000 MHz
800 x 600	56 Hz	35.1 kHz	36.000 MHz
800 x 600	72 Hz	48.1 kHz	50.000 MHz
800 x 600	75 Hz	46.9 kHz	49.500 MHz
800 x 600	85 Hz	53.7 kHz	56.250 MHz
1024 x 768	60 Hz	48.4 kHz	65.000 MHz
1024 x 768	70 Hz	56.5 kHz	75.000 MHz
1024 x 768	75 Hz	60.0 kHz	78.750 MHz
1024 x 768	85 Hz	68.7 kHz	94.500 MHz
1152 x 864	75 Hz	67.5 kHz	108.000 MHz
1280 x 960	60 Hz	60.0 kHz	108.000 MHz
1280 x 960	85 Hz	85.9 kHz	148.500 MHz
1280 x 1024	60 Hz	64.0 kHz	108.000 MHz
1280 x 1024	75 Hz	80.0 kHz	135.000 MHz
1280 x 1024	85 Hz	91.1 kHz	157.500 MHz
1600 x 1200	60 Hz	75.0 kHz	162.000 MHz

USAGE

Insert the card into the PCI-Express slot of the Intel 915-G system, attach a DVI flat panel display using a DVI cable and boot the system. Use the correct ADD2 card (-N or -R) for the intended system. Using the wrong card will not cause any damage, but it will not be initialized or show a display. The system should have Intel 915-G drivers installed.

ENABLING DVI DISPLAY AND CHANGING RESOLUTIONS

All Intel 915-G video drivers provided by Intel have built-in support to enable the ADD2 cards. No specialty drivers are required. It is important to note that Molex does not release, generate, or provide drivers. All necessary drivers are available from Intel Corporation.

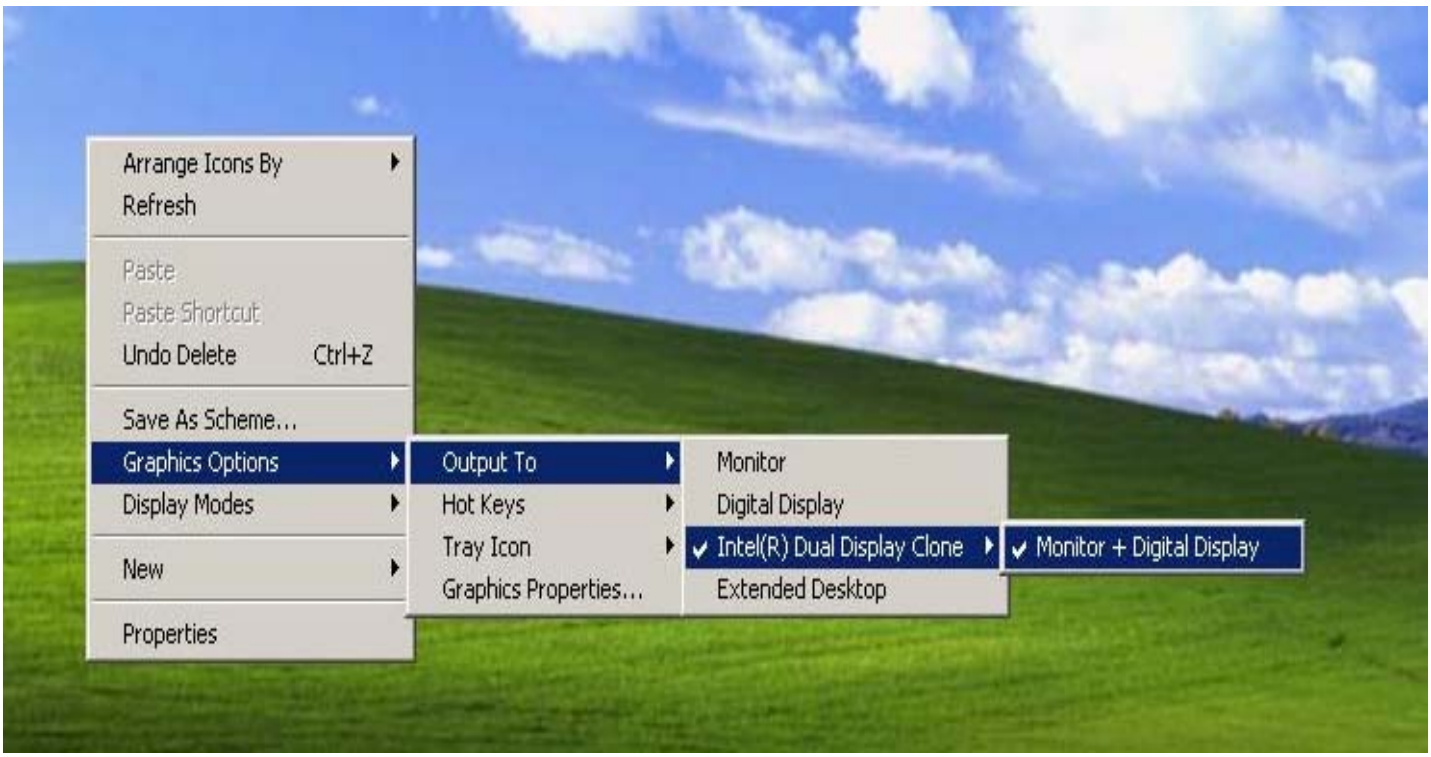
Download the latest Intel 915-G drivers from the Intel website or https:\\platformsw.intel.com. Install the driver using the setup.exe file. Once installed, re-boot the system and follow the instructions below.

The following section provides guidance in using this application to capture and generate a DVI compliance report.

a. Attach a DVI flat panel display to the ADD2 card. Ensure that the display is turned on.

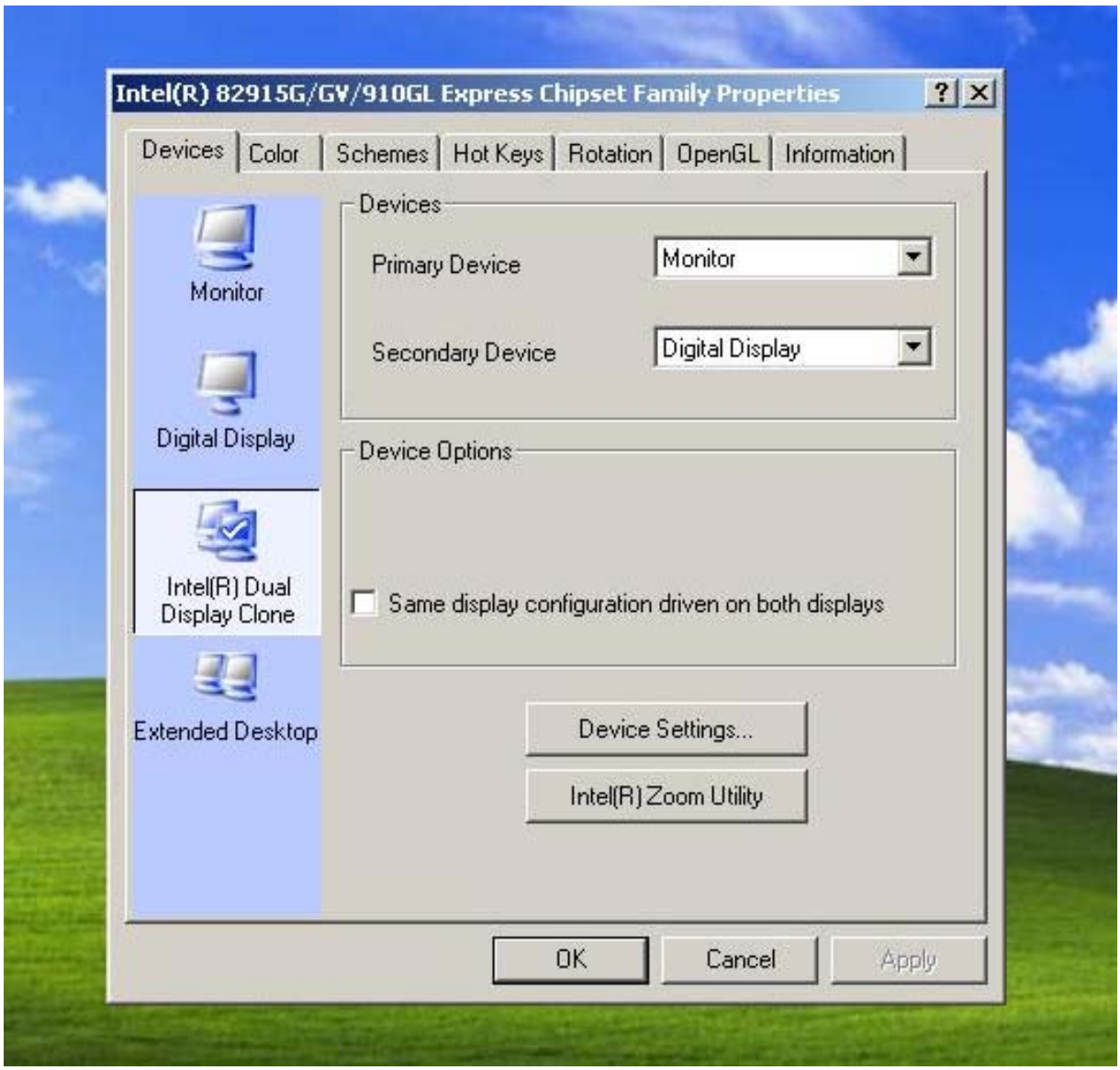
b. On the Windows Desktop, perform a right click and a dialog box will appear. Select “Graphics Options” and, if a digital flat panel is attached to the system, the “Output To” selection will be available. Select either the “Digital Display” option or the “Intel Dual Display Clone” option to enable the digital flat panel (see Figure 4).

Figure 4. Enabling Digital Display via the Mouse



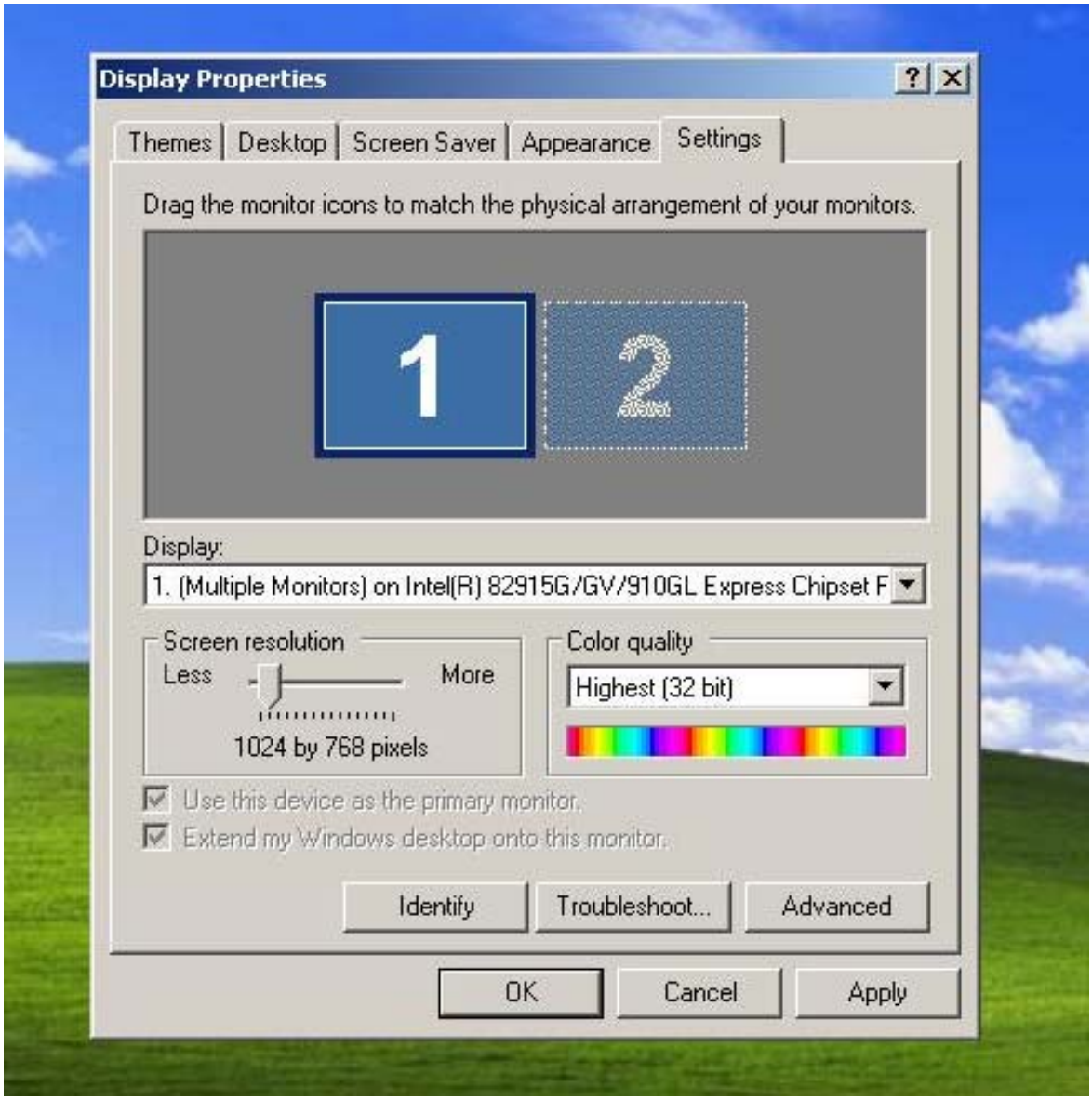
c. To see the dialog box shown (see Figure 5), simultaneously press "SHIFT+CTRL+F12" and release. On the left column, icons list the available options for display. Select either Digital Display for single display only or Intel Dual Display Clone for simultaneous Analog and Digital Display.

Figure 5. Enabling Digital Display via the Keyboard



d. To change resolution, right click on the mouse and select “Properties”. Select the “Settings” tab as shown (see Figure 6). The slider in the “Screen Resolution” box allows change of resolution. Slide the marker on the slider bar to the intended resolution and click “OK”.

Figure 6. Changing Resolution



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Americas Headquarters
2222 Wellington Ct.
Lisle, Illinois 60532 USA
1-800-78MOLEX
amerinfo@molex.com

Far East North Headquarters
Yamato, Kanagawa, Japan
81-462-65-2324
feninfo@molex.com

Far East South Headquarters
Jurong, Singapore
65-6-268-6868
fesinfo@molex.com

European Headquarters
Munich, Germany
49-89-413092-0
eurinfo@molex.com

Corporate Headquarters
2222 Wellington Ct.
Lisle, Illinois 60532 USA
630-969-4550
www.molex.com