The most compact **four-chip multi-monitor** solution for business markets

Multi-Monitor Series graphics cards

Matrox G450

MMS



Matrox G450 MMS

The world's smallest and most powerful four-chip PCI graphics card for business markets.

With more than 25 years of industry experience, Matrox is an established technology leader of business solutions and dominates over 70% of the premium financial multi-monitor market. The Matrox G450 X2 and X4 Multi-Monitor Series (MMS), with the smallest four-chip graphics accelerator, represents the newest addition to the MMS line of products. The Matrox G450 X2 and X4 MMS offer outstanding multi-monitor support and unparalleled image quality to the financial, medical and industrial markets.



Multiple analog or digital support



Flight information displays (Matrox Multi TV Out)



Process control systems



Direct worldwide support



Unified drivers and features

Stable and reliable

- The Matrox G450 chip is based on a mature and proven technology with millions of units shipped
- Matrox G450 MMS chip set and drivers have been tested and qualified by HP, IBM, DELL and Microsoft-plus many of the world's largest financial, corporate, and industrial institutions

Compact design and flexibility

- Custom 6.5-inch (16.5 cm) graphics card designed for the new generation of half-length PCI systems
- No need to sacrifice system size to have robust full-featured dual- or quad-output
- Every G450 MMS card is digital-, analog- or multi-TV Out- ready

One chip per output

Unlike other multi-monitor solutions on the market, Matrox offers independent graphics chips, 360 MHz RAMDACs and 32 MB of dedicated memory for each display to enable optimal performance and stability

Direct product support

- Same day callback or e-mail response from mmssupport@matrox.com for technical issues
- Matrox offers the best support in the industry by providing a dedicated team of global technical management, technical support and sales representatives with many years of expertise in the multi-monitor market
- Worldwide presence with offices in North America, Europe, and The Pacific Rim

Proven technology leadership

- Matrox is the only graphics manufacturer that designs its own graphics chips, boards and drivers
- All engineering efforts, from chip conception to board design, are focused on ensuring the highest possible image quality

Long product life cycles

- The Matrox MMS product line has a much longer product life cycle than other mass market graphics cards, which ensures that Matrox MMS customers are not burdened with frequent and expensive re-qualifications
- Long transition periods between each MMS generation
- No surprise end of life (EOL) announcements

Adopted by industry leaders

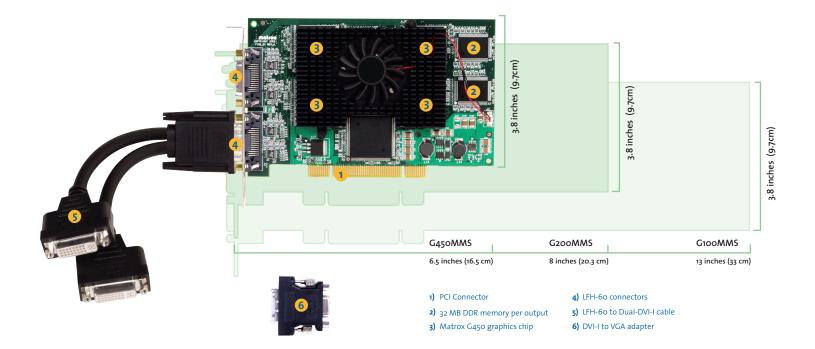
 Fortune 500 companies who have already integrated Matrox multi-monitor technology include: Barclays, Bear Stearns, Credit Suisse First Boston, Delta, Fidelity Investments, Lehman Brothers, Lloyds Bank, Merrill Lynch, Reuters, Citigroup/Salomon Smith Barney, Morgan Stanley, Air Canada and many others.

Potential markets for the G450 X2 and X4 MMS

- Financial and energy trading
- Public information displays/video walls
- Distribution control centers
- Air traffic control centers
- Flight information displays
- Digital menu displays
- Process control systems
- Medical imaging industries

Compare the size advantage

of the Matrox G450 MMS to the previous Matrox MMS line of graphic cards



Specially designed software and hardware features

for Matrox multi-monitor customers

| Customizable Unattended Install | Enables large corporate installs to create a standard set of desktop features and settings |
|------------------------------------|---|
| | that can be implemented site-wide with a one-click install |
| | Customize all of the Matrox PowerDesk settings and features |
| Matrox MultiDesk (MMD) | New 2nd generation MMD with enhanced features |
| | Create multiple virtual desktops to accommodate applications running simultaneously |
| | • Use hot keys to navigate between each virtual desktop to see a completely different set of applications |
| | Save your MMD desktop and export to another system |
| Matrox Multi-Pivot / Portrait** | Set up multiple screens for viewing in landscape or portrait mode or both |
| | Each display can be turned independently 90, 180, or 270 degrees |
| Matrox Multi-Clone** | Display the same desktop across all displays |
| | Create flexible multi-monitor clone display setup (i.e. Clone display 1 on display 4,7, and 8) |
| Matrox NT Style Fixed Resolution** | Enables the desktop to be setup as one single large desktop in Win[®] 2K instead of four |
| | independent ones |
| Full-Featured Display Outputs | - Matrox MMS cards support up to 16 monitors in NT and 10 monitors in Win $^{\odot}$ 2K and XP |
| Matrox Multi TV Out** | G450 MMS cards support the option of outputting to multiple TVs (NTSC or PAL) for public |
| | display settings (special TV Out cables required) |
| Matrox Unified Drivers | Support previous generations of Matrox cards across the entire work site with a single driver |
| Standard Multi-Monitor Features | Control dialog box positioning |
| | Control logon/logoff positioning |
| | Maximize a window full-screen or to a single screen |
| | Save an application's previous size and position |
| | |

**Support under Windows®2000 and XP only

| Feature | Benefit |
|---|--|
| Multiple MGA-G450 graphics chips | Two or four chips per board deliver superior 2D performance |
| 32 MB DDR memory per output | Quad provides maximum of 128 MB enabling faster and more robust graphics execution |
| 360 MHz integrated RAMDAC per G450 chip | Provides high-resolution flicker-free displays and crisp images that Matrox is renowned for |
| Ultra-compact board design | 6.5" (16.5 cm) board length enables support for all half-length PCI systems |
| Multiple cards supported in same system | Mix and match Matrox MMS dual and quad cards and support up to 16 displays from one system* |
| Maximum analog resolution per output: 2048 x 1536 24bpp @85 Hz | Enables support for a wide range of CRT, LCD panel and Plasma resolutions |
| Maximum digital resolution per channel 1280 x 1024** | Achieves higher color accuracy and image focus for image and quality critical work |
| High-quality connectors and cables | Offers maximum versatility by allowing user to connect to both 15-pin analog displays or DVI digital flat panels |
| Multi TV Out capability | Allows for multi NTSC or PAL TV outputs (with cable upgrade) |
| Unified Microsoft certified drivers | The most stable optimized driver support available for Windows NT® 4.o,Windows® XP, Windows® 2000,Windows® 98 and Linux |
| FCC, CE, CSA, VCCI certifications | Guarantees optimal worldwide EMI (electromagnetic interference) conformity |
| 3-year warranty | Backed by experienced technical support teams and 24-hour internet access to information and latest drivers |

16 displays supported under Microsoft® Windows NT® only / 10 displays supported

in Windows 2K and XP

** 1600 x 1200 possible for some panels supporting reduced timings

| System requirements | |
|---------------------|---|
| System | PCI bus |
| | Pentium 133 or greater with 64 MB of RAM PCI 2.1 and 2.2 compliant |
| | Windows NT° 4.0, Windows XP°, Windows° 2000, and Linux |

G450 X2 and X4 MMS Products:

- P/N: **G45X2DUAL-B** (Dual-display analog and/or digital card, 64 MB DDR)
- P/N: G45X4QUAD-B (Quad-display analog and/or digital card, 128 MB DDR)

G200 MMS and G450 X2 and X4 MMS Cable Options:

- P/N: **DL-CAB-DVI-I** (One-foot LFH-60 to Dual-DVI-I cable*)
- P/N: **DVI-I-VGA** (DVI-I to VGA adapter*)
- P/N: DL-CAB-DVI (Six-foot LFH-60 to Dual-DVI-D cable)
- P/N: DL-CAB-VGA (One-foot LFH-60 to Dual VGA cable) *Ships standard with all G450 X2 and X4 MMS cards

G450 X2 and X4 MMS TV Out Cables:

- P/N: DL-TVO-SCART (LFH-60 to Dual TV Out cable for SCART connectors)
- P/N: DL-TVO-CSV (LFH-60 to Dual TV Out cable for S-Video and composite connectors)

Matrox offers unprecedented worldwide support for our multi-monitor product line with offices or agents in:

London, Paris, Milan, Munich, Hong Kong, Taipei, Tokyo, Montreal, Toronto, San Francisco, Seoul, Singapore



Where to buy your G450 MMS:

matrox Corporate customers call 1-800-361-1408, Retail customers call 1-877-628-9669 or visit www.shopmatrox.com

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