 **DIGITAL PROJECTORS AND GRAPHICS CARDS**

Digital projectors		Last month's position	First reviewed	Price (ex VAT)	Warranty	Brightness (Ansi lumens)	Lamp life (hours)	Lamp power (Watts)	Replacement bulb	Weight	Maximum resolution	Dimensions (width x depth x height) mm
 <b>1</b>	<b>Toshiba TLP-551</b> 01932 828 828 www.toshiba.co.uk	1	Jun 02	£2,895	3-year	1,100	2,000	270W	£250	3.9kg	1,024x768	260x295x96mm
 <b>2</b>	<b>Eizo IX421M</b> 01483 719 505 www.eizo.co.uk	2	Jun 02	£2,440	3-year	1,000	1,000	130W	£230	1.5kg	1,024x768	230x177x48mm
<b>3</b>	<b>NEC LT150Z</b> 0645 404 020 www.nec.co.uk	3	Jun 02	£2,867	3-year	1,000	1,000	135W	£313	1.5kg	1,024x768	243x96x53mm
<b>4</b>	<b>Panasonic PT-LC75</b> 0870 100 464 www.panasonic.co.uk	4	Jun 02	£2,495	2-year	1,200	1,200	160W	£210	2.8kg	1,024x768	310x243x86mm
<b>5</b>	<b>NEC VT45</b> 0645 404 020 www.nec.co.uk	5	May 02	£1,965	3-year	1,000	1,000/ 2,000	135/ 110W	£291	2.5kg	800x600	299x207x90mm

Graphics cards		Last month's position	First reviewed	Price (ex VAT)	Warranty	Graphics processor	Installed RAM	DDR RAM	Ramdac	4xAGP	Maximum resolution@ refresh rate	Colours@ 800x600	DVI
 <b>1</b>	<b>Chaintek GeForce4 MX A-G441</b> 0870 745 5061 www.chaintek.com/tw	<b>NEW</b>	Aug 02	£110	3-year	nVidia GeForce4 MX 440	64MB	Y	350MHz	Y	2,048x1,536 @75Hz	16.7 million	N
 <b>2</b>	<b>Gainward GeForce3 Ti/450 Golden Sample</b> 0870 220 0700 www.gainward.de	1	Apr 02	£135	3-year	nVidia GeForce3 Titanium 200	64MB	Y	350MHz	Y	2,048x1,536 @75Hz	16.7 million	N
<b>3</b>	<b>Gainward GeForce4 Ultra/700 XP Golden Sample</b> 0870 220 0700 www.gainward.de	<b>NEW</b>	Jul 02	£245	3-year	nVidia GeForce4 Ti 4400	128MB	Y	350MHz	Y	2,048x1,536 @75Hz	16.7 million	Y
<b>4</b>	<b>Creative 3D Blaster GeForce3 Titanium 200</b> No telephone number www.creative.com	3	Apr 02	£170	3-year	nVidia GeForce3 Titanium 200	64MB	Y	350MHz	Y	2,048x1,536 @75Hz	16.7 million	Y
<b>5</b>	<b>ATI Radeon 8500</b> 01628 477 788 www.ati.com	4	Jan 02	£212	3-year	ATI Radeon 8500	64MB	Y	400MHz	Y	2,048x1,536 @85Hz	16.7 million	Y

 **DIGITAL PROJECTORS**

**1** Toshiba TLP-551

 Toshiba continues to hold on to its Best Buy award for another month, with its superb TLP-551. In truth, its success is due to the incredible screen size: whether you want to watch a DVD movie or impress potential customers with an outstanding presentation, this is the only projector that can fill an entire wall without needing a mile of floor space in front of it. For sharply focused images and storming colour depth, the Eizo and NEC projectors have the advantage, but the Toshiba's 1,100 Ansi lumens more than atones for this.

The TLP-551's 3.9kg frame isn't ultra-portable, but the extra size does allow Toshiba to add some new features, including a visualiser arm to display documents and photographs. Due partly to the 3.4mm manual focusing, the camera image is also surprisingly sharp. The Best Buy Toshiba TLP-551 isn't the cheapest of projectors, but for quiet operation, amazing results and the extra functionality of the visualiser arm, we can't recommend it enough.



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 **GRAPHICS CARDS**

**1** Chaintek GeForce4 MX A-G441

 There's a pretender to Gainward's crown in the shape of Taiwanese company, Chaintek. The name is relatively new to the retail graphics card arena, but its lack of experience clearly hasn't held the company back, as it storms in at number one this month with the GeForce4 MX A-G441.

Chaintek has stuck with the tried-and-tested nVidia chip, using the GeForce4 MX with 64MB of DDR (double data rate) RAM – a memory configuration that few GeForce4 MX cards will top. It only has a TV-out S-Video port to its name, but the software bundle is good, including Aquanox and MDK. The GeForce4 MX 440 processor produced almost identical performance to a GeForce3 Ti 200, despite the reduced price tag. In the all-important Quake3 test, it managed a fantastic 159fps (frames per second) at a resolution of 1,024x768. Even in top resolutions, it stays close to the 50fps mark.



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**DIGITAL PROJECTORS**

**2 Eizo IX421M**



The IX421M is blessed with exquisite visual appeal



and the Eizo's 1.5kg frame marks it out as one of the most portable models in the charts. The image is incredibly sharp, with text and graphics all beautifully defined. Aided by the excellent 650:1 contrast ratio, the colour scheme is similarly vibrant, although particularly well suited to darker shades. The brightness of 1,000 Ansi lumens may seem fairly miserly compared to some of the other projectors, but the Eizo is proof that there's far more to a strong image than a high brightness rating. Add to this its low price of £2,440 and you can see why the IX421M is our Recommended model.

**3 NEC LT150Z**

The NEC LT150Z has to make do with third place this month, despite delivering probably the best image quality in the chart. It has native XGA (1,024x768) resolution support, but this can be increased to 1,280x1,024 with minor deterioration in image quality. Even when the lamp is switched to a lower power mode, though, fan noise is high. Neither is the NEC LT150Z cheap, and the Eizo almost matches it for image quality. Nonetheless, for unmatched images and the ultra-portable PC Card option, the NEC is definitely worth a look.



**4 Panasonic PT-LC75**

The PT-LC75 isn't as readily portable as some of its rivals, but it performs with credit in most other areas.



The menu system is lengthy, if rather old-fashioned in style, although the slimline remote control is very much a creation for the 21st century. Screen size isn't as generous as the Toshiba's and there's a slight dilution of colour compared to the NEC and Eizo models. But it has a good set of hardware specifications, and the 400:1 contrast ratio and brightness rating of 1,200 Ansi lumens are competitive. The Panasonic's price tag is extremely balanced, particularly taking into account the low running costs.

**5 NEC VT45**

Placing high-quality NEC technology in your home for a sub-£2,000 price, the compact VT45 should find favour with home cinema enthusiasts. The manual lens shift is useful, allowing you to fine-tune picture position without having to move the projector. The VT45 offers a clear picture in PC mode but is hamstrung by its limited resolution support. At a time when 1,024x768 XGA is becoming the standard, the VT45's inability to go beyond 800x600 SVGA mars the effect.

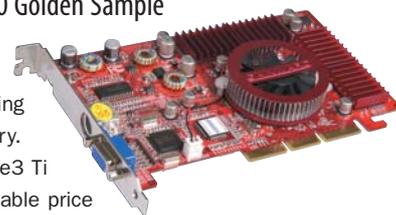


**GRAPHICS CARDS**

**2 Gainward GeForce3 Ti/450 Golden Sample**



Our former Best Buy drops to number two this month after making



way for the new Chaintech entry. However, the Gainward GeForce3 Ti manages to combine a reasonable price with high-quality components, so it's still our Recommended choice. Employing the mid-range GeForce3 Titanium 200 graphics processor, this card delivers sizzling speed, easily reaching 120fps (frames per second) at a resolution of 1,024x768. Even under the most demanding circumstances you'll find it continues to hug the 50fps mark. The hardware specifications are also impressive with 64MB of DDR (double data rate) RAM and a TV-out port included. However, the lack of a DVI (digital visual interface) is disappointing.

**3 Gainward GeForce4 Ultra/700 XP Golden Sample**

Another new entry for German graphics giant Gainward, the GeForce4 Ultra just misses out on a Recommended award this month, although it did receive one when it was first reviewed last month. The Golden Sample rating is a sign that the GeForce4 has passed the most rigorous tests and is capable of running at top speeds. Gainward has opted for the TI 4400 chip rather than the top-of-the-range 4600, but this makes little difference in practice: it produced a searing 181fps (frames per second) in our Quake III tests at a resolution of 1,024x768.



The 128MB of RAM is also a sign that this card can compete at the highest level. However, even though £245 makes this one of the cheaper GeForce4 cards, it's still a lot of money.

**4 Creative 3D Blaster GeForce3 Titanium 200**

The chart is dominated by nVidia, with Creative's Titanium 200 chip featuring the same architecture as the Recommended Gainward card. Although the 3D Blaster GeForce3 is a strong contender, its higher price tag leaves it trailing behind the Best Buy GeForce4 Chaintech and the Gainward GeForce3. The presence of a DVI (digital visual interface) connector does, however, futureproof the card. A TV-out port and a couple of games add spice to the Creative's bundle.



**5 ATI Radeon 8500**

Hanging on at number five is the ATI Radeon 8500, which has been anchored in our chart since we reviewed it back in January. The only card that doesn't feature nVidia architecture, the ATI offers a host of features including TruForm which breaks up surfaces into a number of smaller sections allowing graphics to be more detailed. However, the 8500's unstable performance, poor XP compatibility and £212 price tag means that it must be happy with bottom-of-the-chart placing.

