

ATI's Radeon X1800 GTO claims to offer solid midrange power at a competitive \$249 price.

Upside: Like most of ATI's cards, the Radeon X1800 GTO only takes up a single x16 PCI Express slot, though it requires a discrete connection to your PC's power supply. You can configure two X1800-based cards in a dual-card setup using ATI's CrossFire platform

Downside: We'll need to conduct further tests before we make our final judgment, but, as our F.E.A.R.-based gaming benchmark tests demonstrate, the Radeon X1800 GTO offers little added value over nVidia's GeForce 7600 GT. It scored 49.3 frames per second (fps) at 1,024x768 resolution—a mere 9 percent performance increase over the cheaper GeForce 7600 GT's 45.3 fps. Also, to install a second card alongside the Radeon X1800 GTO in a CrossFire configuration, you'll need to buy the 256MB Radeon X1800 CrossFire Edition, which sells for around \$419. That's a total of \$668 for the two cards, versus less than \$400 for a pair of GeForce 7600 GT-based cards you could employ on a motherboard supporting nVidia's Scalable Link Interface (SLI) technology.



When it comes to price/performance ratio, nVidia's GeForce 7600 GT has the edge over ATI's Radeon X1800 GTO. The ATI card barely squeaked by the nVidia on our initial benchmark tests, and it costs significantly more. Unlike ATI, nVidia doesn't sell cards based on its graphics processing units under its own brand. Cards based on the 7600 GT chipset, from third-party manufacturers, sold for an average of \$179 at press time.

Upside: Based on preliminary tests, the PCI Express-based GeForce 7600 GT is a better value than ATI's Radeon X1800 GTO. It's cheaper, it's easier to install, and, thanks to a 90-nanometer manufacturing process, it has a faster core clock speed (560MHz, versus the Radeon's 500MHz). Plus, unlike the X1800 GTO, it doesn't require a direct connection to your PC's power supply.

Downside: Our cursory examination of the GeForce 7600 GT has turned up little to complain about. Traditionally, nVidia's cards have done well with games based on the Doom 3 engine, such as Quake 4 and the upcoming Enemy Territory: Quake Wars, but they have lagged behind ATI's cards on DirectX 9-based games such as F.E.A.R. (and pretty much everything else). Still, although the 7600 GT came in second to the ATI card on our F.E.A.R. benchmark, it was by such a narrow margin that we think nVidia may be catching up.

