The card is shorter, but the GPU packs almost the same amount of processing power as the Radeon 3800 series GPU (but the memory bus is half as wide).

Overkill? We think so.

HIS Radeon HD 4670

Every single ATI attempt in the entry level segment since the Radeon 1600 series has never really taken off, primarily due to uninspiring GPU architecture. But since the introduction of Radeon HD 4800 series, things have changed quite considerably. ATI has placed NVIDIA under intense pressure through aggressive pricing strategy. First it was the Radone HD 4850 and Radeon HD 4870 combination in June this year, followed by the Radeon HD "twin die" 4870X2, just two months after, and just several weeks back, they released the Radeon HD 4670 to spice up the entry level market. This Radeon 4000 series assault has seemingly turned into an unstoppable locomotive.

We don't normally pay a lot of attention on entry level products because 99% of them fail to offer playable performance on the latest game titles. They would run casual games just fine but anything more than that will reveal their weakness. The Radeon HD 4670, though, spells a different story because for SGD169 you will be getting a performance level that's just a tiny notch lower than that of the Radeon HD 3850, which in case you have forgotten is ATI's high-performance mainstream graphics solution for gamers. The gap is on the average about 10 frames between these two cards, but considering both of them clocked in more than 30 FPS in three out of the four tests we carried out, it's not too shabby for the Radeon HD 4670.

The GPU that drives this card has 320 unit

of share processors and a 128-bit memory controller that's DDR2, DDR3 and GDDR3 compatible. Our sample uses the GDDR3 part and it operates at 1000 MHz. The official clock speed of the GPU, as specified by ATI, is 750 MHz. If the path of the memory controller is left out of the formula, we are basically looking at a GPU that possesses almost the same shader processing capability as the Radeon HD 3800 series, and yet it doesn't require any additional power supply via the PCIe power connector.

At idle, the card would throttle the frequency of its GPU and memory down to 165 MHz and 250 Mhz, respectively. This is the lowest idle speed we've come across in our lab, and this explains why the total system power consumption remains so low. Our Radeon HD 4670 sample came from HIS this time around, and it isn't exactly a 100% replica of the reference card. For the PCB, HIS sticks with what the ATI reference board has to offer but in the cooling aspect the stock cooler was ditched in favour of a dual slot, aluminium made cooler. This implementation is unquestionably an overkill, especially when the GPU isn't exactly a hot chip and neither is it very overclockable. Perhaps the stock cooling solution was a little too loud but this is purely our guess as we have not gotten the opportunity to review a vanilla Radeon HD 4670 card. Gaming experience is generally acceptable. After all, not that many entry level cards can render Crysis even at medium graphics quality setting.—Gui Jue Fok

OVERALL RATING ★★★★◼

GRAPHICS CARD

HIS Radeon HD 4670

PRICE
SGD169

👍

• A lower-end mainstream card that packs acceptable performance.
• Low power consumption, and is capable of accelerating HD video playback.
• Beefy cooler ensures the peak temperature remains below 70 degrees Celsius.

👎

• Takes up two PCI slots.
We wish it could be cheaper

SPECIFICATIONS
GPU Clock Speed 750 MHz
Number of Shader Units 320
Memory Clock Speed 1000 MHz GDDR3 (2000 MHz effective)
Memory Capacity 512 MB
Memory Interface 128-bit

Contact Corbell Technology
Tel 6452-4122
Web www.msi.com.tw

	SPEED CONFIGURATION [Core / Shader / Memory]	DRIVER VER.	CRYSIS*	COMPANY OF HEROES*	WORLD IN CONFLICT*	LOST PLANET: SNOW*	LOST PLANET: CAVE*	TEMPERATURE**			TOTAL SYSTEM POWER CONSUMPTION **	
								IDLE	PEAK	AMBIENT	IDLE	PEAK
HIS RADEON HD 4670 IceQ	STOCK @ 750 / NA / 2000 MHz	8.8	39	56	59	26	33	39 C	68 C	24 C	135 W	214 W
ATI RADEON HD 3850	STOCK @ 600 / NA / 1600 MHz	8.8	42	68	71	36	45					

*HIGHER IS BETTER
**LOWER IS BETTER

TESTBED SETUP: ASUS RAMPAGE FORMULA | INTEL CORE 2 EXTREME 9770 @ 3.6GHz | 4x KINGSTON HYPERX PC6400 @ 5-5-5-18 | SAMSUNG F1 750 HDD | ANTEC TRUE POWER QUATTRO 1000W PSU
RESOLUTION IS 1680 X 1050 | CRYSIS = DX9, MEDIUM, NO AA | COMPANY OF HEROES = DX9, MAX DETAIL, 4x AA | WORLD IN CONFLICT = DX9, MEDIUM, NO AA| LOST PLANET = DX9 MAX, MEDIUM