

Gamer Storm. There's a 4-pin Molex adapter that will provide a fixed input voltage of 12V, so the CPU fan will always run at the highest speed. A three-pin motherboard fan connector will run the fan at 7V, which will provide you with a low level of noise. The third adapter is a Y-shaped adapter to connect two PWM fans to your motherboard, yielding fan speed control to your motherboard.

We installed the Y-shaped adapter to run our benchmark tests and noted that the fan speed adjusted easily in our tests. Idle temperatures for the Gamer Storm was 41 C, while our stress tests showed temps of 70 C (Prime 95), 68 C (POV-Ray Beta), and 53 C (Orthos). Those numbers were among the top of the air coolers in this roundup.

Gelid GX-7

The GX-7 offers seven heatpipes arranged in a way to maximize heat dissipation from the processor. With a typical arrangement, the various heatpipes on a cooler will be set up in a single row.

Looking at the GX-7 from the top down, it has five heatpipes on the bottom, and Gelid soldered two more to the three middle heatpipes. Another inventive aspect is the V-shaped openings in the bottom of the aluminum fins, which improves airflow through the middle of the fins. The innovations delivered results, too, as the GX-7 delivered the lowest temperatures among the air coolers in our roundup.

In terms of installation, we found the compression bolts were smaller than some of the other CPU coolers in the roundup, which made them tougher to install and easier to lose. Only one fan is provided with the CPU cooler, but you can use the included set of clips to add a second fan. We also like that Gelid provides a fan with a blue LED, which can enhance the interior lighting of your case.

In Prime 95, the GX-7 delivered a maximum temperature of 55 C, which was within 5 to 7 degrees of the closed-loop liquid-coolers in the roundup. It registered 53 C in POV-Ray Beta and 46

C in Orthos. Idle temps were 38 C. All in all, the Gelid GX-7 is a solid option for overclockers looking for a high-end air cooler.

ARCTIC COOLING Freezer 13 PRO CO

The Freezer 13 PRO CO comes with a six-year warranty and is designed for continuous operation. The 300W model sent to us features a 120mm PWM fan, as well as a 50mm radial fan at the base of the heatsink to provide cross ventilation, which ARCTIC COOLING suggests will also help to cool the components, such as the voltage regulators, surrounding the CPU. The air cooler features four 8mm copper heatpipes that protrude from the top of the aluminum fins.

For installation, ARCTIC COOLING provides plastic pins that insert into a plastic clip that locks to the motherboard, so there's no need to remove the motherboard to install the cooler. The Freezer 13 PRO CO screws into the plastic clip, and the screw placements are far enough away that it's easy to install



Gamer Storm | \$69.99
Logisys | www.elogisys.com

Specs: Socket compatibility: Intel LGA775/1155/1156/1366, AMD AM2/2+/3; Materials: Copper (heatpipes), aluminum (fins); Dimensions: 158 x 98 x 134mm (HxWxD); Fan: 1 120mm; Airflow: 66.3cfm; Acoustics: 17.6 to 27.6dBA



GX-7 | \$65
Gelid | www.gelidsolutions.com

Specs: Socket compatibility: Intel LGA775/1155/1156/1366, AMD AM2/2+/3+/FM1; Materials: Aluminum (fins); Dimensions: 159 x 65 x 130mm (HxWxD); Fans: 1 120mm; Airflow: 75.6cfm; Acoustics: 10 to 26.8dBA



Freezer 13 PRO CO | \$58.32
ARCTIC COOLING | www.arctic.ac

Specs: Socket compatibility: Intel LGA775/1155/1156/1366, AMD 754/939/940/1207/AM2/2+/3; Materials: Copper (heatpipes), aluminum (fins); Dimensions: 159 x 96 x 134mm (HxWxD); Fans: 1 120mm; Airflow: 49.7cfm; Acoustics: 0.4 Sone (at 1,350rpm)

the screws. Even better, you don't need to add thermal paste, because ARCTIC COOLING preapplies its MX-4 thermal compound. This was probably the easiest installation of the roundup.

In our benchmarks, the Freezer 13 PRO CO delivered one of the lower idle temperatures at 39 C, and it also posted the second-lowest temperature among air coolers in Orthos (49 C). In Prime 95, we saw maximum temperatures of 72 C, and it reached 69 C in POV-Ray Beta. With one of the longer warranties and its cross-flow cooling, the Freezer 13 PRO CO provides some added reliability.

Cooler Master GeminII S524

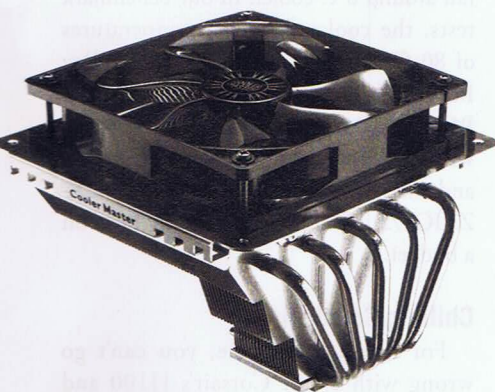
The GeminII S524 offers an arched CPU cooler design that lets system builders use high-end memory modules with tall heatsinks. Cooler Master includes a 120mm fan, but you can upgrade to 140mm if you wish to increase the GeminII S524's cooling capacity. The electroplated copper base moves heat to the five 6mm heatpipes, which angle upward and outward to spread the

heat evenly over the 140mm aluminum fins. Cooler Master also indicates that the 120mm fan pushes air through the heatpipes and over other components on the motherboard.

The 120mm fan included with the GeminII S524 includes PWM to automatically adjust fan speed (from 800 to 1,800rpm) based on the CPU heat. Similar to other Cooler Master air coolers,

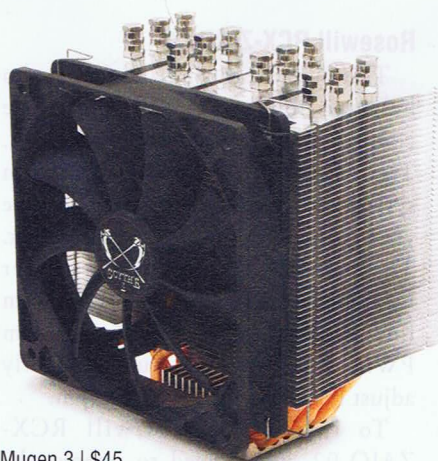
installation consists of adding a back plate to the motherboard, where you'll push through the CPU mounting bracket and secure the CPU cooler using hex bolts. Cooler Master provides a handy hex bolt head that you can place over the bolts to tighten them with a screwdriver.

The GeminII S524 produced temperatures of 70 C (Prime 95), 67 C (POV-Ray Beta), and 50 C (Orthos). The overclocking headroom provided by the GeminII S524, combined with the clearance for tall memory heatsinks, gives you the freedom to select processor and memory components with high frequency potential.



GeminII S524 | \$49.99
Cooler Master | www.coolermaster.com

Specs: Socket compatibility: Intel LGA775/1155/1156/1366, AMD AM2/2+/3/3+/FM1; Materials: Copper (base, heatpipes), aluminum (fins); Dimensions: 105 x 144 x 144mm (HxWxD); Fans: 1 120mm; Airflow: 34.2 to 77.7cfm; Acoustics: 15.1 to 31.6dBA



Mugen 3 | \$45
Scythe | www.scythe.com

Specs: Socket compatibility: Intel LGA775/1155/1156/1366, AMD AM2/2+/3/3+/FM1; Materials: Copper (heatpipes), aluminum (fins); Dimensions: 158 x 130 x 132mm (HxWxD); Fans: 1 120mm; Airflow: 40.17cfm; Acoustics: 10.7dBA

| Benchmark Results | Idle | Prime 95 | POV-Ray Beta | Orthos |
|---|------|----------|--------------|--------|
| Intel Core i7-2600K stock cooler | 43 | 87 | 84 | 60 |
| Corsair H100 | 26 | 49 | 44 | 32 |
| Antec KÜHLER 920 | 27 | 49 | 44 | 33 |
| Corsair H80 | 28 | 50 | 46 | 32 |
| Logisys Gamer Storm | 41 | 70 | 68 | 53 |
| Gelid GX-7 | 38 | 55 | 53 | 46 |
| ARCTIC COOLING Freezer 13 PRO CO | 39 | 72 | 69 | 49 |
| Cooler Master GeminII S524 | 38 | 70 | 67 | 50 |
| Scythe Mugen 3 | 38 | 69 | 67 | 51 |
| Cooler Master Hyper 212 Evo | 42 | 75 | 72 | 52 |
| Rosewill RCX-ZAIO-92 | 42 | 80 | 78 | 52 |

*All temps in degrees Celsius

Scythe Mugen 3

Although the Mugen 3 is the successor of the popular Mugen 2, you'll be surprised to learn that Scythe made this new cooler smaller than its predecessor. The redesign of the Mugen 3 includes Scythe's M.A.P.S. (Multiple Airflow Pass-through Structure) technology that improves the airflow throughout the aluminum fins, as well as the addition of a sixth copper heatpipe. Scythe includes a 120mm Slip Stream PWM Silent series fan. Motherboards with fan control options can adjust the fan speed between 300 to 1,600rpm.

Installing the Mugen 3 isn't overly complicated, but it also wasn't the