The ETS-T40's heat pipes directly contact the CPU for more efficient thermal transfer.

Batwing fins in the ETS-T40's fan yield high airflow and low noise. Speaking of the latter, note the three user-selectable maximum fan speeds.

"Vortex generators are commonly applied in the aviation industry," says Lee. "They make sure that the air stream is lead as close as possible along the airplane's wings.

"During the CPU cooler development, the ENERMAX engineers recognized the potential of this technology to optimize the air stream inside the heatsink," says Lee. "Small spoilers on the fins, also known as Vortex Generators, conduct the air close along the heat pipes. Much cooler air can then be transferred to the back of the heat pipes."

SEF (Stack Effect). This feature is designed to help heat escape through small "chimneys" in the fin structure.

"As warm air rises up due to its lower density, it leaves behind a low pressure that in exchange pulls cool air (upward)," says Lee. "Two openings in the middle of the heatsink make use of this effect. The openings interrupt the air stream so that the warm air gains space to escape and the heat dissipation can thus be accelerated.

"In a nutshell, the SEF design conducts the heat flux of a CPU, and carries it to the top of the cooler for a more efficient dispersal."

HDT (Heat-pipe Direct Touch). Like other efficient CPU coolers, the ETS-T40 brings its four 6mm copper heat pipes directly into contact with the heat spreader of the CPU. This design, which flattens the heat pipes flush with the bottom of the heatsink assembly, can more quickly carry thermal energy away from the processor than a cooler with additional metal between the pipes and the CPU heat spreader.

VEF (Vacuum Effect). The ETS-T40 also employs VEF, or a Vacuum Effect feature, to optimize airflow inside the cooler. VEF draws air from the side of the cooler as the fan forces other air straight through the fins.

"The best example to explain this effect is through the aerodynamics of a moving car," says Lee. "The car pushes air aside as it goes down the road and leaves a lower pressure. Air from the sides will be sucked inwards to compensate for the difference in pressure.

"In a nutshell, the SEF design conducts the heat flux of a CPU, and carries it to the top of the cooler for a more efficient dispersal." -Lee