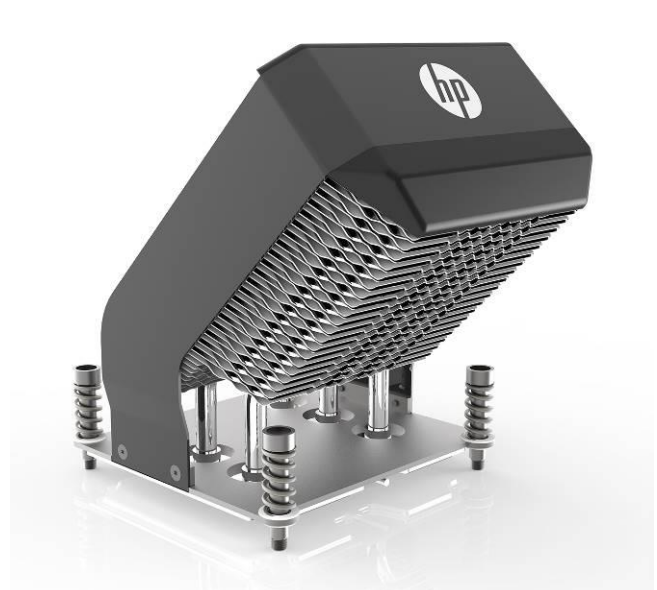


Overview

HP Z Cooler (Z440)



HP Z Cooler (Z840)



Models*

HP Z Cooler (for Z440, and Z840)

N3R54AA

* HP Z Cooler is available for configuration in HP Z440 Workstation only at time of purchase of workstation.

Introduction

Personal workstations have provided users with a substantial increase in processing power over the past decade. Advancements in memory size, graphics capability, mass storage capacity, and processor performance have all contributed to creating more powerful desktop and desk-side systems.

These evolutionary changes in system performance have brought with them increased power and consequently higher heat dissipation requirements. For example, the high frequency Intel dual processor family has increased from 130W (Xeon E5590) to 160W (Xeon E5-2687W v3) in just a few generations. In a two processor system, this results in a 60W power increase creating more heat that must be removed from the system.

To keep these processors and other critical components cool, traditional cooling systems add multiple fans to dissipate the heat to the environment outside of the workstation chassis. HP places great emphasis on employing the latest technology in personal workstations, and the realm of cooling systems is no exception. While HP Z Workstations are already quiet, the innovative new HP Z Cooler uses 3D vapor chamber phase-change cooling with staggered hex-fin heat exchangers to further reduce acoustic noise and maximize processor performance.

As a technology leader, HP continues to innovate in the area of thermal management to improve the user's experience and productivity. HP is using its extensive experience and expertise in thermal management and workstation engineering to develop today's high performance, quiet, and environmentally friendly workstations while innovating for tomorrow's more powerful generation.

Summary of Changes

Date of change:	Version History:		Description of change:
November 17, 2015	From v1 to v2	Removed	Performance charts and tables

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