2-Phase Immersion Cooling Concept
64 Xeon Phi™ - 64 Teraflops in a 3U case >25kW

Commodity Hardware
Intel® HPC Mainboards with InfiniBand®
Intel® Xeon Phi™
Redundant PSUs (>95% 80Plus Platinum)

Custom Hardware
Vertical 3U Enclosure
PCIe Backplane
PDU Backplane

3M™ Novec™ 649
Engineered Fluid
Boiling at 49°C (120°F)

Heat generated on chip turns fluid into vapor

Vapor condenses on coil or lid condenser
Cooler fluid recirculates passively to bath

Rack mount 3U vertical (4-6 per 19” server rack)

3M and Novec are trademarks of the 3M Corporation. Intel, Xeon and Xeon Phi are trademarks of Intel Corporation. InfiniBand is a trademark and service mark of the InfiniBand Trade Association. Copyright 2013 by Allied Control Limited. All rights reserved.
Website: http://www.allied-control.com Email: tech@allied-control.com