

SUSTAINABLE, HIGH-DENSITY, SCALABLE COOLING

# ZUTACORE

## DIRECT-ON-CHIP, WATERLESS, TWO-PHASE LIQUID COOLING (2PLC)

ZutaCore is transforming the economics of high-density computing, reducing capital and operating costs while improving performance, energy consumption and utilisation of space. It triples processing capacity using 50 percent less energy and half the space of conventional cooling systems. HyperCool™ helps customers meet and surpass the challenges posed by high performance computing requirements. This solution goes beyond the limits of air and eliminates the use of water, mitigating the risk of IT failure and maximising cooling efficiencies. 2PLC solves thermal challenges and provides significant datacentre power reduction. Furthermore, 2PLC is future proof and prepared for any evolution in high-powered chips: there is no limit to what it can cool as processors progress toward 1000W and even beyond.

### KEY FEATURES

#### COOLED-BY-ZUTACORE

The Cooled-by-ZutaCore In-Rack solution fits into any rack in almost any environment. It uniquely supports up to 15kW computing power with an in-rack air cooled condenser and 70kW computing power with an in-rack water cooled condenser. It needs no plumbing or special environment outside of the rack – making it an ideal solution for existing data centers needing to accommodate higher power density in servers and racks as well as edge applications.



**50%**  
LESS  
ENERGY



**3X**  
PROCESSING  
CAPACITY



**50%**  
LESS  
SPACE



**0%**  
RISK OF  
MELTDOWN



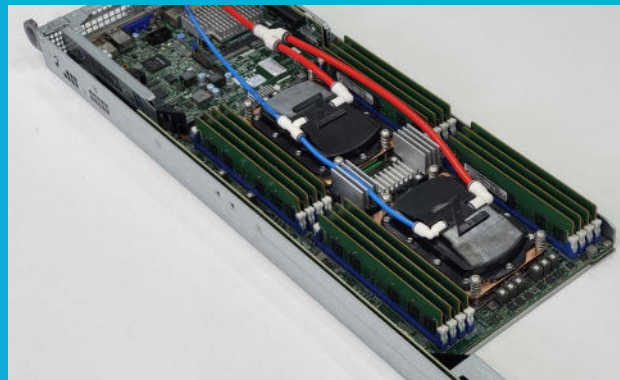
**50%**  
CAPEX  
REDUCTION



**>1000W**  
CHIP  
COOLING

## COOLED BY ZUTACORE RACK

The ZutaCore HyperCool waterless two-phase, liquid cooling (2PLC) based system provides a unique combination of benefits that directly addresses today's computing density needs and the future cooling demands of the world's computing infrastructure. Mechanically self-regulated, HyperCool provides on demand capabilities simply and reliably for high performance computing applications requiring high densities in new design and retrofits.



## TWO-PHASE, LIQUID COOLING (2PLC)

In-rack units combine the hardware system with a Software-Defined-Cooling (SDC) platform. By reducing the datacenter design to commissioning cycle and halving costs, ZutaCore empowers datacenter owners and operators to accelerate ROI and maximize real estate assets by supporting the proliferation of autonomous and central datacentres.

### BENEFITS

- Minimal additional space (RHx door or in-rack HRU).
- No chilled water-cooling system required to remove the high heat load.
- Easily deployed without modifying existing infrastructure and easy maintenance.
- Installation of high-powered computing nodes in an existing data center facility served by a traditional room cooling technology.
- The direct-on-chip system uses a non-conductive refrigerant, eliminating water inside the rack

## WHY ZUTACORE?

### BIG IMPACT IN A SMALL FOOTPRINT

ZutaCore's Hypercool can be configured for use in racks, in rear doors and in whole rows.

### ENERGY EFFICIENT DATACENTRES

HyperCool slashes the consumption of scarce resources including energy, water and land.

### MORE COOLING IN LESS SPACE, WITH LESS ENERGY

HyperCool triples the processing capacity of highly dense computing environments.

### UNRIVALED HEAT DISSIPATION AT THE CHIP

HyperCool is uniquely built for dense, high temperature compute environments.