

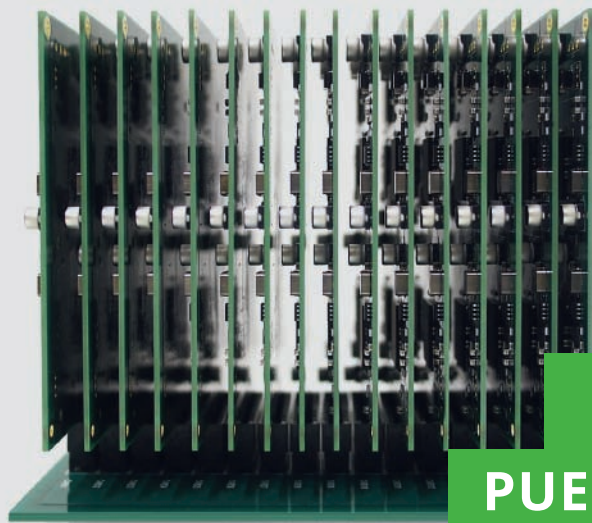
WORLD'S LARGEST FPGA CLUSTER

70 kW High Density using 3M™ Novec™ Engineered Fluids

PASSIVE 2-PHASE IMMERSION COOLING

- + 6048 Spartan®-6 LX150 FPGAs
- + Massive space saving
- + 8.5 mm board to board (0.34")
- + No fans, no noise, no dust
- + Reduced junction temp (Tj)
- + Built within months
- + Budget less than CRACs
- + Built in-house
- + Lower maintenance effort

>\$6500/MONTH ELECTRICITY SAVINGS
CO2 REDUCED: 44,717 TONS/YEAR



PUE 1.02
In Hot & Humid Hong Kong

AIR COOLING + AIR CONDITIONING

- More than 230,000 BTU/h to cool
- Thousands of fans, heatsinks, wires
- Dust and noise
- Ten 42U server racks > 6kW each
- Dozens 4U enclosures with case fans
- Raised floor installation
- 4 costly and power hungry CRACs or 6-8 comfort style AC units
- Maintenance overhead



PUE 1.95
Hong Kong average 2.52*