

# Total Thermal Solution

High all-encompassing design High cost-efficient solution

## ■ SUNON Customization Capability



Industrial PC



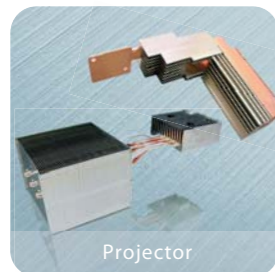
Cold Plate



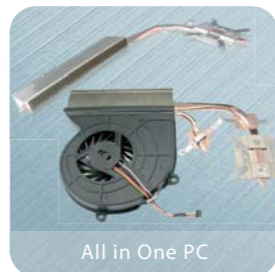
Server



TV Solution



Projector



All in One PC



Automotive Module



LED Lighting

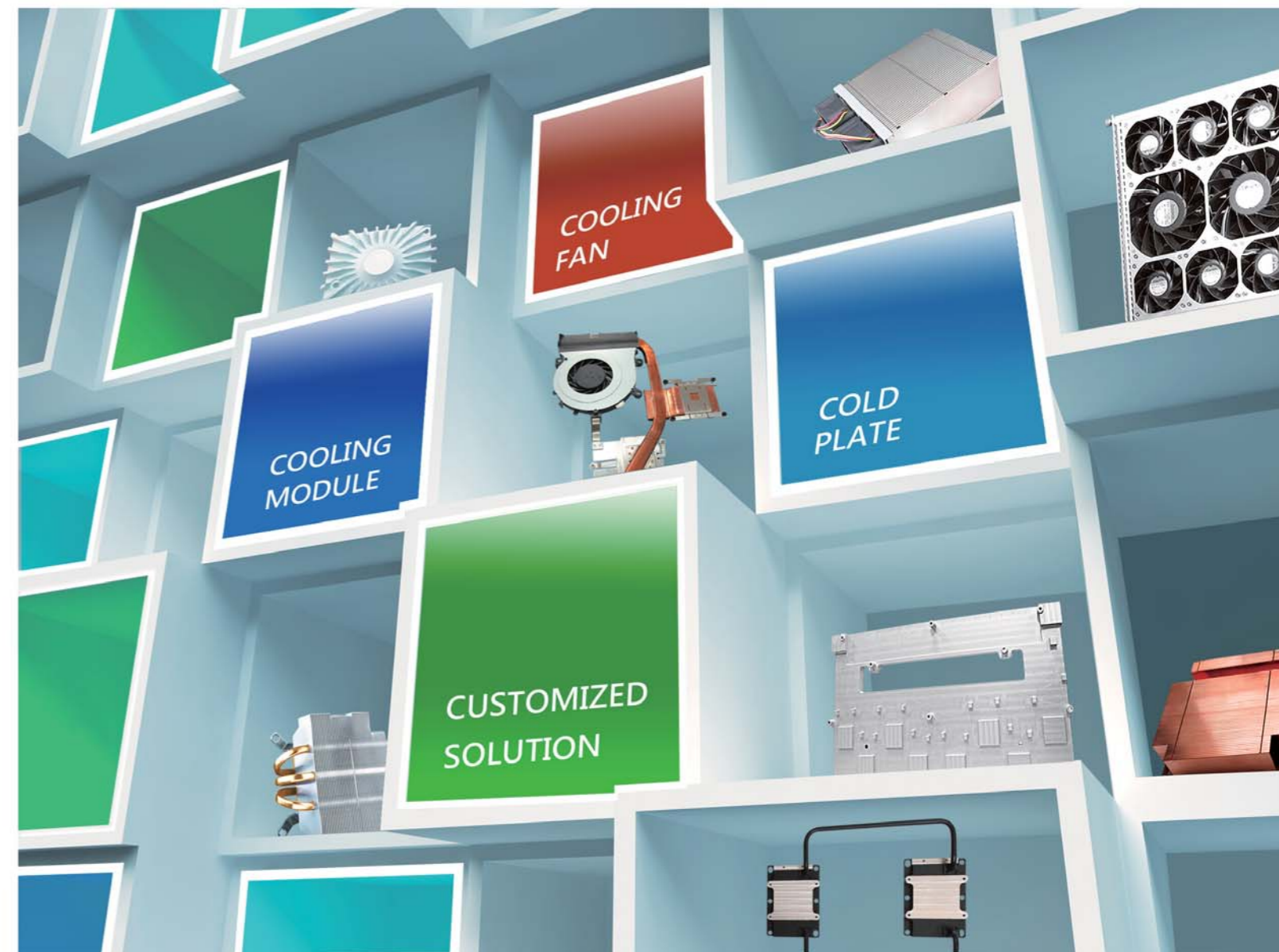
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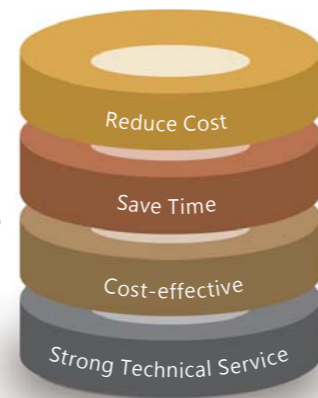


# Sunon Offers Heat Dissipation Total Solution Technology and Services

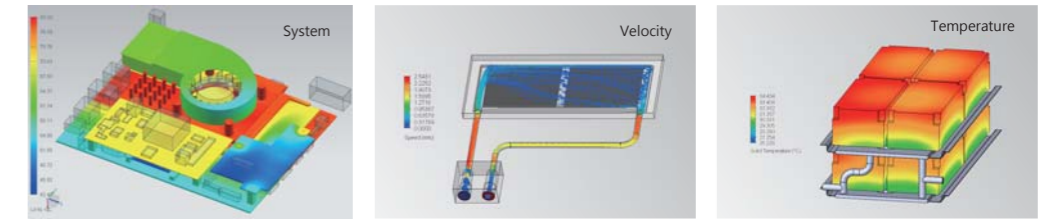
With 40 years experience, Sunon has been concentrating on the research and development of motor core techniques, which has given Sunon a vast clientele with a wide assortment of system experiences and cooling problem-solving abilities. Sunon has been utilizing state-of-the-art equipment and innovative techniques to tailor-make the optimized cooling systems for our clients' latest concept commodities. From function, accessory shape and cost, to perception about commodity experience, Sunon has been paying careful attention to meet clients' particular goals and requirements.

## SUNON's Total Solution

- ✓ Increases product profitability
- ✓ Reduces development costs and increases profits
- ✓ Decreases prototype development time
- ✓ Provides the most economic design solution



## Intel Ice Lake Server Processor Heatsink Module



## Thermal Solution Design & Simulation Analysis

- Individual module / system thermal analysis
- Custom CM design
- Vent Optimization
- Temperature distribution
- Velocity profile
- Pressure distribution

# Which Cooling Module Suits You the **BEST?**

~300W  
Heat Sink & Fan



Fan From 8x8x5mm~Ø254x89mm

400W  
Heat Pipe



### High Power Heat Pipe

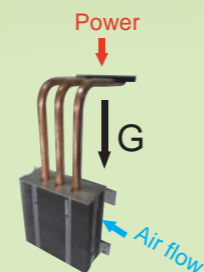
The High-Power Heat Pipe possesses high capability of delivering heat energy.

D8 round heat pipe, Qmax could reach 100W for 400mm in length or so.

**600W** Module QMax.

Dimension: 286x266x40mm  
Heat Pipe: D8x6pcs,L:295~388mm  
Air Flow: 100CFM

### Anti-Gravity Heat Pipe Module



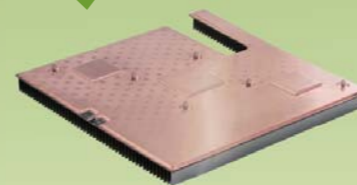
71W

162%

27W

ORG Heat Pipe

Vapor Chamber

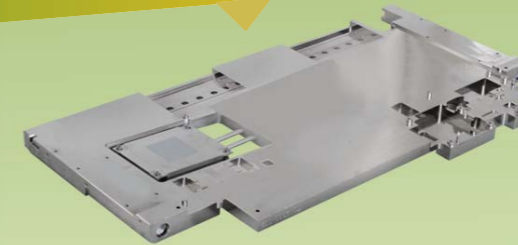


Thickness : 0.4 mm ~ 3 mm  
Qmax : 40~1000W

### Great for Multiple Heat Source

- Isothermal to 1-2°C
- High Qmax
- High power density
- Lower thermal resistance
- Planar or Radial heat flow

1000W  
Cold Plate TYPE : Integral / Pipelining / Embedded

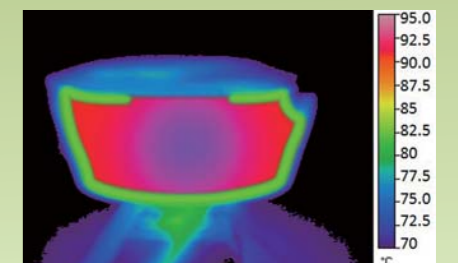


Integral Type + Pipelining Design  
Application : Switch  
TDP : 800 W  
Size : 510 x 250 x 22 mm

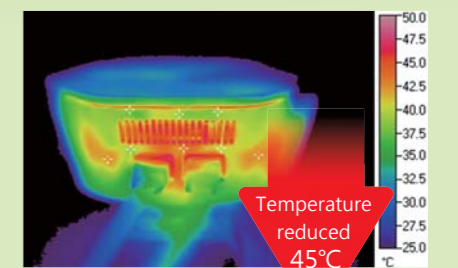
### Great for High Power Application

- High Power Density
- Large Power
- Multi Heat Sources
- Thermal Efficiency

## IR thermography Analysis Temperature Distribution



Original Design



Sunon Proposal

Temperature reduced 45°C