Total Thermal Solution

High all-encompassing design High cost-efficient solution

www.sunon.com
SUNON's Total Solution:

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

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 solutions offer a variety of customized cooling products to our clients. Moreover, we offer Heat sink, Heat Pipe module, VC module, and Cold Plate, especially the compact / slim thermal solution based on customer requirements due to the trend of more and more multifunctional requirements on the final products. Sunon have gotten experienced and powerful R&D team in Taipei and China, through complete heat dissipation and mechanical simulation resource, we can provide the efficient and strong support to customers. We built advanced equipment and operational system to monitor the production and control the quality.

Sunon simulation capacity:
- Flotherm XT
- Siemens NX

Thermal Solution Design Simulation Analysis Provider:
- Individual module and system thermal analysis
- Custom CM design
- Vent Optimization
- Temperature distribution
- Velocity profile
- Pressure distribution
SUNON Customization Capability

- Industrial PC
- Cold Plate
- Server
- TV Solution
- Projector
- All In One PC
- Automotive Module
- LED Lighting

Thermal simulation case study
Successful case with router: Sunon's total solutions cooling techniques effectively solve the router cooling problem. Sunon provides thermal analysis on modules and systems and highly reliable cooling optimized designs. Compared with clients' original designs, Sunon's optimized designs effectively lower temperature by over 45°C to prolong clients' products' service life and enhance their products' efficiency.

<table>
<thead>
<tr>
<th>Original Design</th>
<th>Sunon Proposal</th>
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<td>IR thermography analysis – Temperature distribution</td>
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Temperature reduced 45°C

Quality Management System
- ISO 9001 certified
- ISO 14001 certified
- OHSAS 18001 certified
- IATF16949 certified
- IECQ QC080000 HSPM certified
- every SUNON interrogate and examine GHGs by third party verification certificates of SGS.
- EICC compliance
- Product Safety certified