



Custom Air Cooling Solutions

CASE STUDIES

PCIe

CHALLENGE: Cooling solution needed for PCIe card with 55W device power dissipation requirement

SOLUTION: Low profile unducted fan-sink with optimized fin geometry to use system airflow



DATACOM

CHALLENGE: Develop a compact air cooled solution for over 110W CPUs and other high power devices

SOLUTION: Very compact, lightweight air cool solution, available with and without vapor chamber, with unmatched thermal resistance number in the industry of 0.13°C/W



AUTOMOTIVE IoT

CHALLENGE: Rugged enclosure cooling solution needed with required power of several 8W devices to be used in the Arrow SAM car

SOLUTION: Heat sink/enclosure solution optimized for natural convection cooling in a harsh-sealed environment



CHALLENGE: CPU & MOFSET cooling solution needed to meet strict cost & thermal requirements

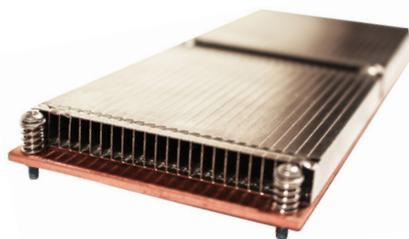
SOLUTION: Low profile, active heat sink solution met target price and thermal performance



TELECOM

CHALLENGE: Solution needed for cooling 4 ASICs in line with power exceeding 120W for a ducted application

SOLUTION: Compact zipper fin, copper & aluminum heat sink, eliminating the need for a heat pipe and large heat sink



ENERGY

CHALLENGE: Air cooling solution needed for an oil drilling application with 128W of dissipation & two 48W ASICs operating in a harsh environment

SOLUTION: Novel designed PCB level heat sink used as a shield for the board and a cooling solution using the superGRIP attachment to hold the heat sink on the PCB



LED

CHALLENGE: Aesthetically pleasing, cost-effective cooling solution needed for canopy lighting fixture with LED case temp below 85°C for increased lumen output of 12,000lm

SOLUTION: One piece, cast aluminium shroud & heat sink with optimized vents and power supply placement with an upgrade in LED power input of 110W



SECURITY SURVEILLANCE

CHALLENGE: Cooling solution needed for a defense camera application, with required internal temperature of 49°C in a desert environment with full solar load

SOLUTION: Heat sink, fan & TEC integrated into the enclosure enabling the system to operate successfully in a 58°C environment



For more information, call 781.769.2800, email ats-hq@qats.com or visit qats.com