

dualFLOW™/quadFLOW™ CPU Coolers for Servers



Description: Designed for cooling dense 1U or 2U applications using CPUs fit the Intel™ LGA2011 square and LGA2066 sockets (Socket R)

Heat Sink Type: Heat Sink with Blower

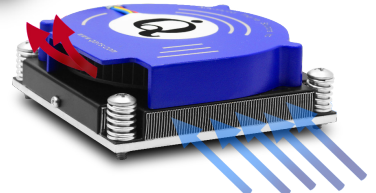
Heat Sink Attachment: Hardware Kit - ATS-HK152-R0

Features & Benefits

- « Ideal for 1U and 2U applications where space and airflow are restricted
- « Designed for CPUs that fit the Intel™ LGA2011 square and LGA2066 sockets (Socket R)
- « Mechanical attachment is PEM, screws and spring – for other types of attachments contact ATS
- « Provided with Chomerics T670 thermal grease
- « Hardware provides 9.2 PSI (63 kPa) when installed
- « PWM enabled blower: Voltage 12VDC (10.8 min – 13.2 max), Current 1.5A
- « Provides at least 20% improvement over comparable products on the market
- « To apply this heat sink to other high power devices and processors contact ATS
- « ATS dualFLOW™ and quadFLOW™ heat sink technology is patented



*Image is for illustration purposes only.



dualFLOW™ airflow direction

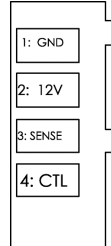


quadFLOW™ airflow direction

Product Details

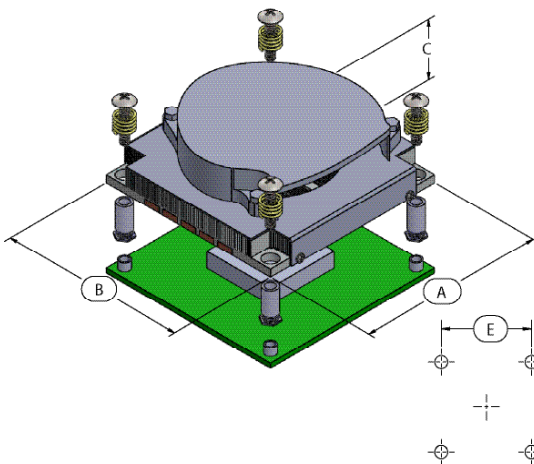
| P/N | DIM A | DIM B | DIM C | DIM D | DIM E | Fin Material | Finish | Weight (g) | R (°C/W) (2)(3) | Max TDP (W) | Application Notes |
|---------------------|-------|-------|-------|-------|-------|--------------|---------------|------------|--------------------|-------------|--|
| ATS-UC-QFLOW-100 | 92.38 | 92.11 | 29 | 80 | 80 | Al | Nickel Plated | 456 | 0.21 | 152 | For PCB layouts with restricted airflow, aluminum fins reduce weight and air enters the heat sink from four directions |
| ATS-UC-DFLOW-100 | 92.38 | 92.11 | 29 | 80 | 80 | Al | Nickel Plated | 436 | 0.20 | 160 | For less-restricted PCB layouts, aluminum fins reduce weight and air enters the heat sink from two directions |
| ATS-UC-QFLOW-200 | 92.38 | 92.11 | 29 | 80 | 80 | Cu | Nickel Plated | 580 | 0.20 | 160 | For dense PCB layouts, copper fins improve heat spreading and air enters heat sink from four directions |
| ATS-UC-DFLOW-200 | 92.38 | 92.11 | 29 | 80 | 80 | Cu | Nickel Plated | 566 | 0.19 | 170 | For less-dense PCB layouts, copper fins improve heat spreading and air enters heat sink from two directions |
| ATS-UC-QFLOW-VC-200 | 92.38 | 92.11 | 29 | 80 | 80 | Cu | Nickel Plated | 493 | 0.20 | 160 | For dense PCB layouts, vapor chamber base maximizes heat spreading from small heat sources and air enters from four directions |
| ATS-UC-DFLOW-VC-200 | 92.38 | 92.11 | 29 | 80 | 80 | Cu | Nickel Plated | 479 | 0.20 | 160 | For less-dense PCB layouts, vapor chamber base maximizes heat spreading from small heat sources and air enters from two directions |

BLOWER CONNECTOR



NOTES:

1. Thermal performance data are provided for reference only. Actual performance may vary by application.
2. Thermal resistance data are for 40 x 40mm component.
3. Thermal resistance is based on 100% duty cycle of the blower
4. The fan connector can be mated to a system in the following ways: via a computer motherboard's included 4-pin header, to a standard 4-pin fan header such as the Molex 0470531000 or a standard 3-pin fan header. If a 3-pin header is used, the speed control option cannot be accessed.
5. Lead wires: Pin 1-Black (-), Pin 2-Red (+12V), Pin 3-Yellow (Tach), Pin 4-Blue (PWM)
6. Max TDP (thermal design power) – maximum amount of heat generated by component
7. ATS reserves the right to update or change its products without notice to improve the design or performance
8. RoHS-6 and REACH compliant



ATS ADVANCED THERMAL SOLUTIONS, INC.
Innovations in Thermal Management®

For further technical information, please contact Advanced Thermal Solutions, Inc.

89-27 ACCESS ROAD, NORWOOD, MA 02062 USA | T: 781.769.2800 | WWW.QATS.COM | ATS-HQ@QATS.COM