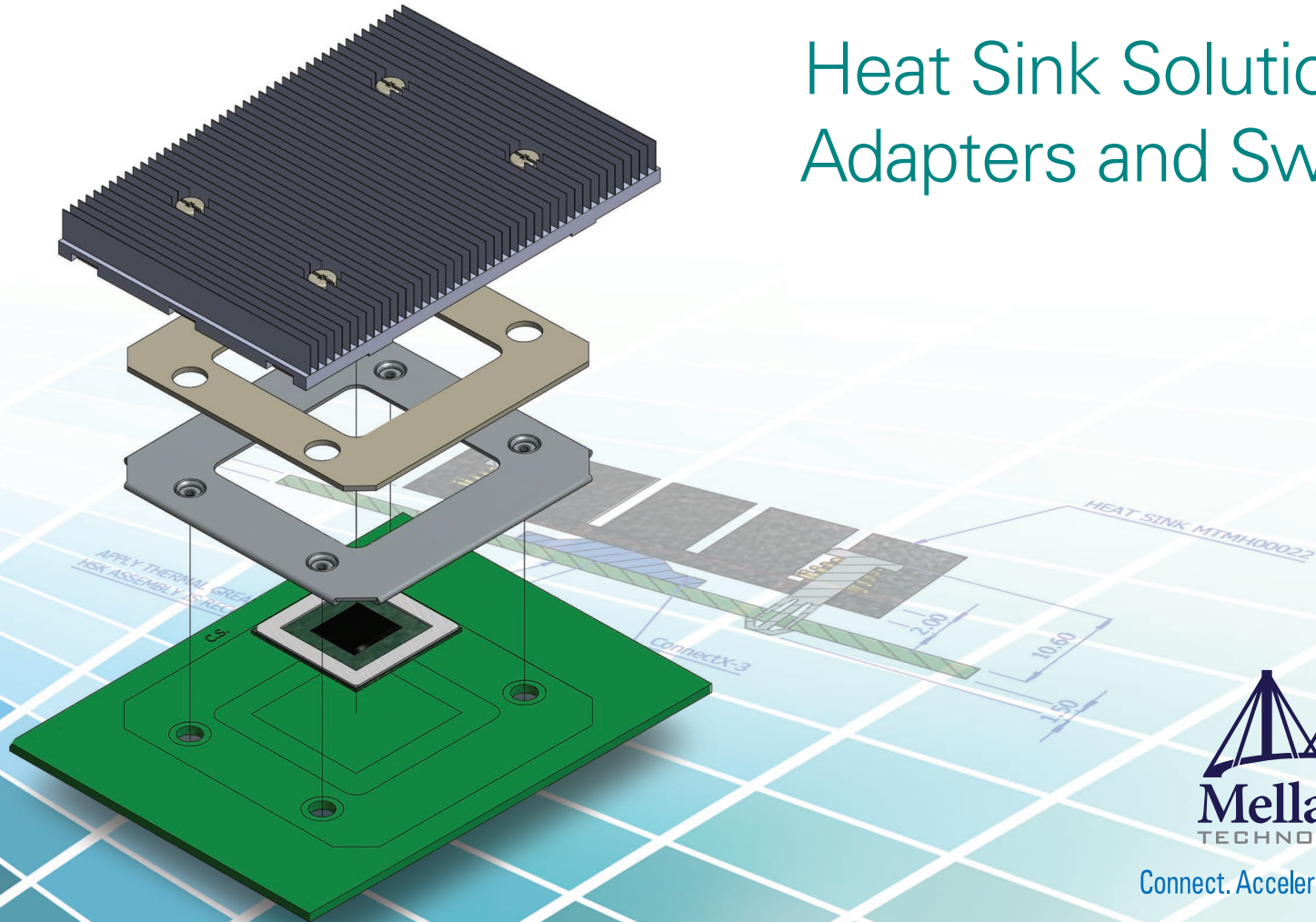


Heat Sink Solutions for Adapters and Switches



Connect. Accelerate. Outperform.™

HIGHLIGHTS

- *Optimized for Mellanox adapter and switch silicon devices*
- *Offered standalone or with Mellanox silicon devices*
- *Innovative push-pin design for adapter heat sinks*
- *Field proven (millions shipped)*
- *Guarantee best performance*
- *Mechanically robust and resilient*
- *Qualified by Mellanox for best quality*
- *Designed and verified for high-volume manufacture*
- *RoHS and REACH compliant*

Overview

Mellanox network products are designed for various markets and applications including hubs, switches, routers and adapters. Mellanox heat sinks are part and parcel of Mellanox's end-to-end solutions that have been successfully deployed in thousands of Data Center and HPC applications across the globe which use millions of Mellanox silicon devices and heat sinks.

Mellanox offers heat sinks that are especially designed for its adapter and switch silicon devices in order to guarantee the best thermal performance and product longevity. For adapter designs, Mellanox push pins allow for easy placement and for best contact pressure that yields higher heat-sink thermal efficiency. The springs of the push pins allow for resiliency in contact pressure that on the one hand holds the heat sink firmly onto the board, and on the other hand protects the underlying chip from excessive pressure that might damage it. The push-pins are also optimal for height-limited adapter boards.

Switch heat sinks provide a robust mechanical interface that is especially designed to meet the bare die requirements, and to successfully sustain shocks and vibrations with minimum pressure on the PCB. They are easily assembled on PCBs and require no special jigs or tools. Thermal wise, the heat sinks provide effective heat dissipation through heat pipes, yielding high thermal performance and best ROI.

The adapter and switch heat sinks can be used for Mellanox adapters and switch devices as well as for other silicon devices. They are offered standalone or with Mellanox silicon devices.

Build Reliable and High Performance Systems

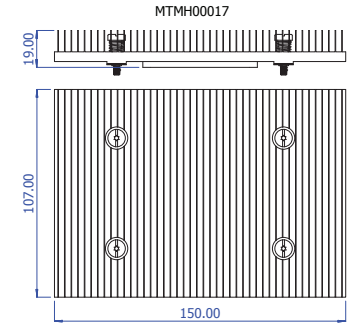
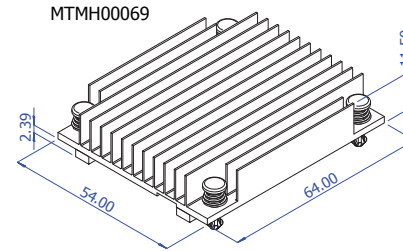
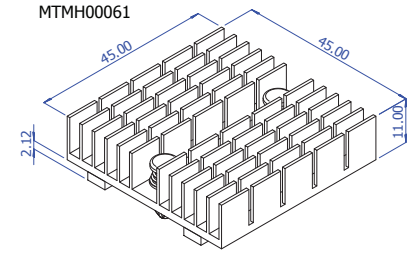
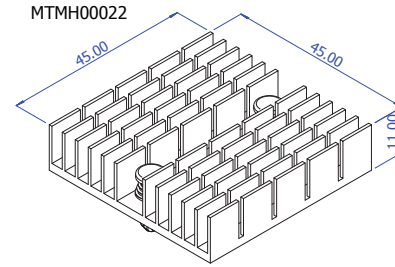
Mellanox heat sinks are the best fit for designs based on Mellanox adapter and switch silicon products, allowing the most cost/effective solutions in the market when purchased with Mellanox devices. Having been in mass production for years, these heat sinks offer high thermal performance, reliability, robustness, in-house and field-proven quality and enable the highest silicon device performance.

The Mellanox Advantage

Mellanox adapter and switch heat sink solutions offer many benefits and advantages over other industry heat sink products. Mellanox heat sinks have been designed to meet silicon device requirements of size, height, thermal dissipation and to meet high-volume manufacturing challenges, as field-proven by millions of heat sinks already shipped into production, high-performance clusters.

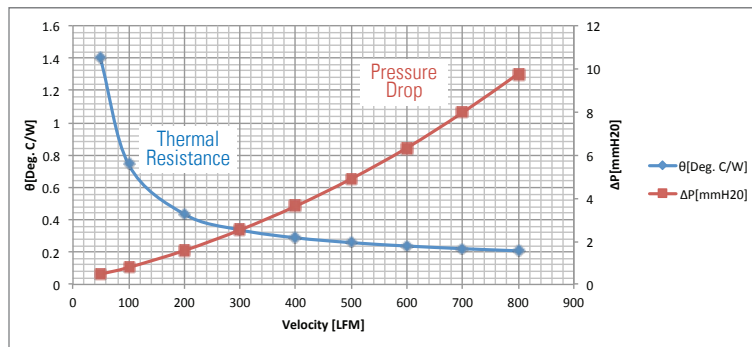
The advanced technology used for designing the heat sinks, together with advanced thermal and assembly solutions, allow these heat sinks to continuously demonstrate high performance and longevity in thousands of deployments across the world.

Finally, these heat sink solutions are perfectly integrated and sized to meet Mellanox silicon thermal and speed performance requirements. They are tested in-house on Mellanox boards and systems and over end-to-end fabric connectivity to guarantee the highest quality design.

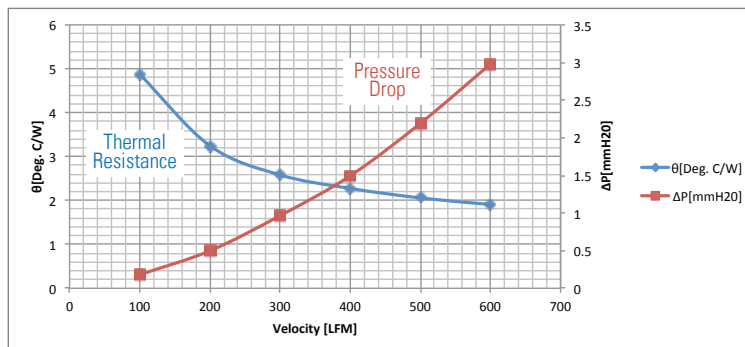


| Ordering Part Number | Description |
|----------------------|--|
| MTMH00017 | Heat sink bracket kit for switch IC with heat-pipe with thermal grease with screws |
| MTMH00069 | Heat sink for Connect-IB™ with thermal grease with 4 push-pins |
| MTMH00022 | Heat sink for ConnectX®-3 without grease with 2 push-pins |
| MTMH00061 | Heat sink for ConnectX®-3 Pro with thermal grease with 2 push-pins |

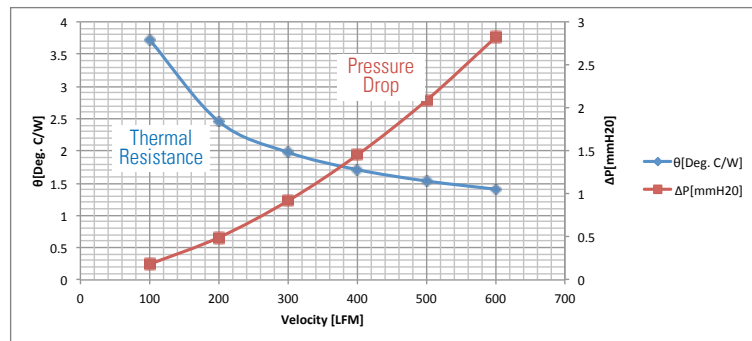
Thermal Performance



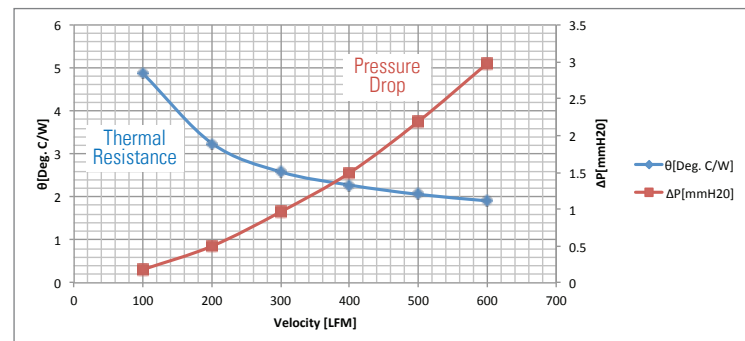
Thermal Resistance and Pressure Drop for MTMH000017



Thermal Resistance and Pressure Drop for MTMH000022



Thermal Resistance and Pressure Drop for MTMH000069



Thermal Resistance and Pressure Drop for MTMH000061



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