



Monitoring

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Thermal Sensors

The adapter card incorporates the ConnectX IC, which operates in the range of temperatures between 0°C and 105°C.

Three thermal threshold definitions impact the overall system operation state:

- **Warning** – 105°C: On managed systems only: When the device crosses the 105°C threshold, a Warning Threshold message is issued by the management SW, indicating to system administration that the card has crossed the warning threshold. Note that this temperature threshold does not require nor lead to any action by hardware (such as adapter card shutdown).
- **Critical** – 115°C: When the device crosses this temperature, the firmware automatically shuts down the device.
- **Emergency** – 130°C: If the firmware fails to shut down the device upon crossing the critical threshold, the device automatically shuts down upon crossing the emergency (130°C) threshold.

The card's thermal sensors can be read through the system's SMBus. The user can read these thermal sensors and adapt the system airflow following the readouts and the needs of the above-mentioned IC thermal requirements.

Adapter Card Heatsink

The heatsink is attached to the ConnectX-6 Dx IC in order to dissipate the heat. It is attached either by using four spring-loaded push pins that insert into four mounting holes, or by screws. ConnectX-6 Dx IC has a thermal shutdown safety mechanism that automatically shuts down the ConnectX-6 Dx card in cases of high-temperature event, improper thermal coupling or heatsink removal.

For the required airflow (LFM) per OPN, please refer to the [Specifications](#) chapter.

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