



## TRIDONIC LED COOLING

TALEXxmodule SLE series COB LED modules

GEN4 Excite - Advanced - Essence (R SNC) 10/15/19/23 mm

GEN5 Excite - Advanced 06/10/15/19/23 mm

- Validated Thermal Designs
- Adaptable to your Needs
- Functional & Aesthetic

**TRIDONIC**

▼ enlightening your ideas

**MTx**  
**MechaTronix**



## An introduction

**MechaTronix was formed in 2007, comprised of five already successful manufacturing companies, with each of them in excess of a decade of continuous operation. MechaTronix provides a wide variety of mechanical and electromechanical parts as well as assemblies for the international Original Equipment Manufacturers market.**

Starting off with the production of metal and plastic enclosures for electronic applications and the assembly of half-products and elaborate cables, MechaTronix utilised several production processes, amongst which die casting, forging, extrusion and plastic injection.

The application of secondary processes such as CNC grinding and cutting and finishing such as anodising, painting and silk screen printing enable us to offer a very high degree of customisation and personalisation to our customers.

It was through the expertise in these processes that MechaTronix found its stride as a serious contender in the market of heat sinks and cooling engines. What started as a one-off venture into the extrusion of aluminium heat sinks resulted in a very comprehensive package of cooling solutions for the booming international LED market.

Nowadays, MechaTronix is the preferred cooling partner for world leading LED manufacturers like Tridonic, with an offering of heat sinks and cooling solutions for every conceivable LED application. To service the international markets and meet the exploding demand for its products, MechaTronix formed an international distribution group. Through these localised professional partners, MechaTronix' products are readily available all over the world.

OUR PROCESS STARTS WITH LISTENING





## Mastering LED Cooling

With the evolution of LED lighting over the last years, the demand for professional thermal solutions has grown exponentially. And now that we no longer remain in the realm of low power LED's, thermal management becomes a critical factor within LED fixtures. To that end, MechaTronix has developed several series of pin-fin and star heat sinks, manufactured through die casting, forging or extrusion. This has resulted in a comprehensive range of more than 400 off-the-shelf available LED coolers, for passive or active heat dissipation.

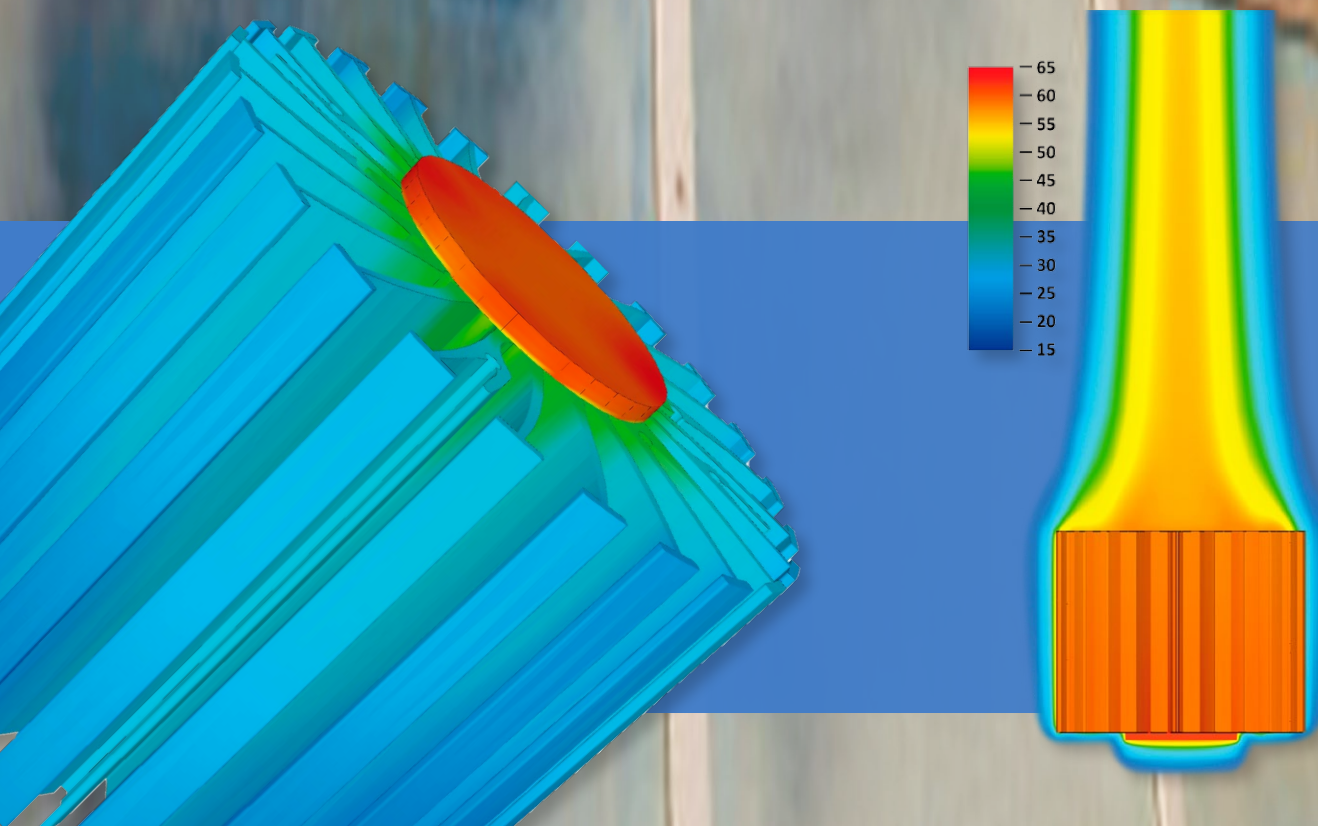
After initial reservations concerning active LED coolers, specialists have found that there really is no better option, when closing in on the 8000 lumen mark. Admittedly, the fan's lifespan becomes somewhat of a focal point in the application of an active LED cooler, but given that the lifespan of the LED engine itself dramatically decreases at high temperatures, the lifespan of the fan looks rather favourable all of a sudden.

MechaTronix' ground breaking ModuLED coolers and its actively cooled sibling IceLED have garnered a lot of attention and positive reviews in the LED market. ModuLED and IceLED are just precursors of a complete range of dedicated and highly effective LED coolers for professional deployment in spotlights, downlights, high bays and a further score of architectural and utility LED applications.

Both ModuLED and IceLED, as well as their upcoming descendants are Zhaga-ready and have a matrix of mounting holes that allows for very easy attachment of a great number of various Tridonic LED modules. Simply apply a thermal interface of your choice, put the LED engine in place and fasten with self-tapping screws and you are good to go! No drilling, customisation or special mounting brackets are needed.

Thanks to an extremely thorough thermal verification of all heat sink lines, MechaTronix provides total thermal disclosure for each model, coupled with all Tridonic Talexx Stark LED COB's and engines. All thermal data is available in the product specifications, that come with every MechaTronix heat sink. In this way, engineers save time and effort during the design stage of their LED fixture and will significantly shorten their time to market.

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# TRIDONIC LED COOLING

## TALEXXmodule SLE series COB LED modules

GEN4 Excite - Advanced - Essence (R SNC) 10/15/19/23 mm

GEN5 Excite - Advanced 06/10/15/19/23 mm



### LPF3550-ZHC

Tridonic LED Pin Fin cooler  
ø35mm - h50mm - Rth 7.41°C/W  
Cooling performance 300 - 1,000 lm

Direct mount	Zhaga holder	TALEXXmodule SLE LED
✓	✓	Gen4 10mm R SNC
✓	✓	Gen5 06mm EXC/ADV
	✓	Gen5 15mm EXC/ADV



### LPF4768-ZHP

Tridonic LED Pin Fin cooler  
ø47mm - h68mm - Rth 3.9°C/W  
Cooling performance 600 - 2,200 lm

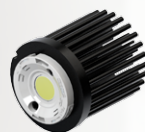
Direct mount	Zhaga holder	TALEXXmodule SLE LED
	✓	Gen4 10mm EXC/ADV/R SNC
	✓	Gen4 15mm EXC/ADV
✓		Gen4 15mm D50 EXC/ADV
	✓	Gen5 06mm, 11mm, 15mm EXC/ADV



### LPF6050-ZHC

Tridonic LED Pin Fin cooler  
ø60mm - h50mm - Rth 4.0°C/W  
Cooling performance 500 - 1,700 lm

Direct mount	Zhaga holder	TALEXXmodule SLE LED
✓	✓	Gen4 10mm EXC/ADV/R SNC
	✓	Gen4 15mm EXC/ADV
✓		Gen4 15mm D50 EXC/ADV
✓	✓	Gen5 06mm, 11mm EXC/ADV
	✓	Gen5 15mm EXC/ADV



### LPF6768-ZHP

Tridonic LED Pin Fin cooler  
ø67mm - h68mm - Rth 2.1°C/W  
Cooling performance 1,100 - 3,300 lm

Direct mount	Zhaga holder	TALEXXmodule SLE LED
	✓	Gen4 10mm, 15mm EXC/ADV/R SNC
✓		Gen4 15mm D50, 19mm, 23mm EXC/ADV
	✓	Gen5 06mm, 11mm, 15mm EXC/ADV
✓		Gen5 19mm, 23mm EXC/ADV



### LPF8050-ZHC

Tridonic LED Pin Fin cooler  
ø80mm - h50mm - Rth 2.34°C/W  
Cooling performance 1,000 - 3,000 lm

Direct mount	Zhaga holder	TALEXXmodule SLE LED
	✓	Gen4 15mm EXC/ADV
✓		Gen4 15mm D50, 19mm, 23mm EXC/ADV
	✓	Gen5 15mm EXC/ADV
✓		Gen5 19mm, 23mm EXC/ADV



### LPF8668-ZHC

Tridonic LED Pin Fin cooler  
ø86mm - h68mm - Rth 1.46°C/W  
Cooling performance 1,500 - 4,600 lm

Direct mount	Zhaga holder	TALEXXmodule SLE LED
	✓	Gen4 15mm EXC/ADV
✓		Gen4 15mm D50, 19mm, 23mm EXC/ADV
	✓	Gen5 15mm EXC/ADV
✓		Gen5 19mm, 23mm EXC/ADV



### LPF11180-ZHE

Tridonic LED Pin Fin cooler  
ø111mm - h80mm - Rth 1.07°C/W  
Cooling performance 2,000 - 6,000 lm

Direct mount	Zhaga holder	TALEXXmodule SLE LED
	✓	Gen4 15mm EXC/ADV
✓		Gen4 15mm D50, 19mm, 23mm EXC/ADV
✓		Gen5 19mm, 23mm EXC/ADV



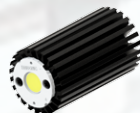
### ModuLED Pico 4750



Tridonic Modular LED Star cooler  
 $\varnothing 47\text{mm}$  - h50mm - Rth 5.3°C/W  
 Cooling performance 400 - 1,400 lm

Direct mount	Zhaga holder	TALEXxmodule SLE LED
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen4 10mm R SNC
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen5 06mm EXC/ADV

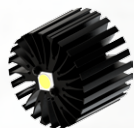
### ModuLED Pico 4780



Tridonic Modular LED Star cooler  
 $\varnothing 47\text{mm}$  - h80mm - Rth 4.2°C/W  
 Cooling performance 600 - 1,800 lm

Direct mount	Zhaga holder	TALEXxmodule SLE LED
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen4 10mm EXC/ADV/R SNC
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen4 15mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen4 15mm D50 EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen5 06mm, 11mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen5 15mm EXC/ADV

### ModuLED Nano 7050



Tridonic Modular LED Star cooler  
 $\varnothing 70\text{mm}$  - h50mm - Rth 2.2°C/W  
 Cooling performance 1,000 - 3,100 lm

Direct mount	Zhaga holder	TALEXxmodule SLE LED
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen4 10mm EXC/ADV/R SNC
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen4 15mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen4 15mm D50, 19mm, 23mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen5 06mm, 11mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen5 15mm EXC/ADV

### ModuLED Nano 7080



Tridonic Modular LED Star cooler  
 $\varnothing 70\text{mm}$  - h80mm - Rth 1.8°C/W  
 Cooling performance 1,200 - 3,800 lm

Direct mount	Zhaga holder	TALEXxmodule SLE LED
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen4 10mm EXC/ADV/R SNC
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen4 15mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen4 15mm D50, 19mm, 23mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen5 06mm, 11mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen5 15mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen5 19mm, 23mm EXC/ADV

### ModuLED Micro 8650



Tridonic Modular LED Star cooler  
 $\varnothing 86\text{mm}$  - h50mm - Rth 1.5°C/W  
 Cooling performance 1,500 - 4,500 lm

Direct mount	Zhaga holder	TALEXxmodule SLE LED
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen4 10mm EXC/ADV/R SNC
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen4 15mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen4 15mm D50, 19mm, 23mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen5 06mm, 11mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen5 15mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen5 19mm, 23mm EXC/ADV

### ModuLED Micro 8680



Tridonic Modular LED Star cooler  
 $\varnothing 86\text{mm}$  - h80mm - Rth 1.2°C/W  
 Cooling performance 1,800 - 5,500 lm

Direct mount	Zhaga holder	TALEXxmodule SLE LED
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen4 15mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen4 15mm D50, 19mm, 23mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen5 11mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen5 15mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen5 19mm, 23mm EXC/ADV

### ModuLED 9950



Tridonic Modular LED Star cooler  
 $\varnothing 99\text{mm}$  - h50mm - Rth 1.34°C/W  
 Cooling performance 1,600 - 5,000 lm

Direct mount	Zhaga holder	TALEXxmodule SLE LED
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen4 15mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen4 15mm D50, 19mm, 23mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen5 15mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen5 19mm, 23mm EXC/ADV

### ModuLED 9980



Tridonic Modular LED Star cooler  
 $\varnothing 99\text{mm}$  - h80mm - Rth 1.02°C/W  
 Cooling performance 2,100 - 6,400 lm

Direct mount	Zhaga holder	TALEXxmodule SLE LED
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen4 15mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen4 15mm D50, 19mm, 23mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen5 15mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen5 19mm, 23mm EXC/ADV





### ModuLED Mega 13420

Tridonic Modular LED Star cooler  
ø134mm - h20mm - Rth 1.32°C/W  
Cooling performance 1,600 - 5,000 lm

Direct mount	Zhaga holder	TALEX module SLE LED
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen4 15mm EXC/ADV Gen4 15mm D50, 19mm, 23mm EXC/ADV Gen5 15mm EXC/ADV Gen5 19mm, 23mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	



### ModuLED Mega 13450

Tridonic Modular LED Star cooler  
ø134mm - h50mm - Rth 0.88°C/W  
Cooling performance 2,400 - 7,300 lm

Direct mount	Zhaga holder	TALEX module SLE LED
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen4 19mm, 23mm EXC/ADV/R SNC Gen5 15mm EXC/ADV Gen5 19mm, 23mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	



### ModuLED Mega 134100

Tridonic Modular LED Star cooler  
ø134mm - h100mm - Rth 0.67°C/W  
Cooling performance 3,300 - 10,000 lm

Direct mount	Zhaga holder	TALEX module SLE LED
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen4 19mm, 23mm EXC/ADV/R SNC Gen5 15mm EXC/ADV Gen5 19mm, 23mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	



### ModuLED Giga 15220

Tridonic Modular LED Star cooler  
ø152mm - h20mm - Rth 1.17°C/W  
Cooling performance 1,900 - 5,700 lm

Direct mount	Zhaga holder	TALEX module SLE LED
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen4 15mm EXC/ADV Gen4 19mm, 23mm EXC/ADV/R SNC Gen5 15mm EXC/ADV Gen5 19mm, 23mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	



### ModuLED Giga 15250

Tridonic Modular LED Star cooler  
ø152mm - h50mm - Rth 0.7°C/W  
Cooling performance 3,000 - 9,000 lm

Direct mount	Zhaga holder	TALEX module SLE LED
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen4 19mm, 23mm EXC/ADV/R SNC Gen5 15mm EXC/ADV Gen5 19mm, 23mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	



### ModuLED Giga 152100

Tridonic Modular LED Star cooler  
ø152mm - h100mm - Rth 0.53°C/W  
Cooling performance 4,000 - 12,000 lm

Direct mount	Zhaga holder	TALEX module SLE LED
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen4 19mm, 23mm EXC/ADV/R SNC Gen5 15mm EXC/ADV Gen5 19mm, 23mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	



### IceLED 550

Tridonic Modular Active LED cooler  
ø99mm - h55mm - Rth 0.46°C/W  
Cooling performance 4,200 - 12,800 lm

Direct mount	Zhaga holder	TALEX module SLE LED
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen4 19mm, 23mm EXC/ADV/R SNC Gen5 15mm EXC/ADV Gen5 23mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	



### IceLED Ultra

Tridonic Modular Active LED cooler  
ø99mm - h75mm - Rth 0.25°C/W  
Cooling performance 5,000 - 20,000 lm

Direct mount	Zhaga holder	TALEX module SLE LED
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Gen4 19mm, 23mm EXC/ADV/R SNC Gen5 23mm EXC/ADV
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	



Your local distributor:

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