

An introduction

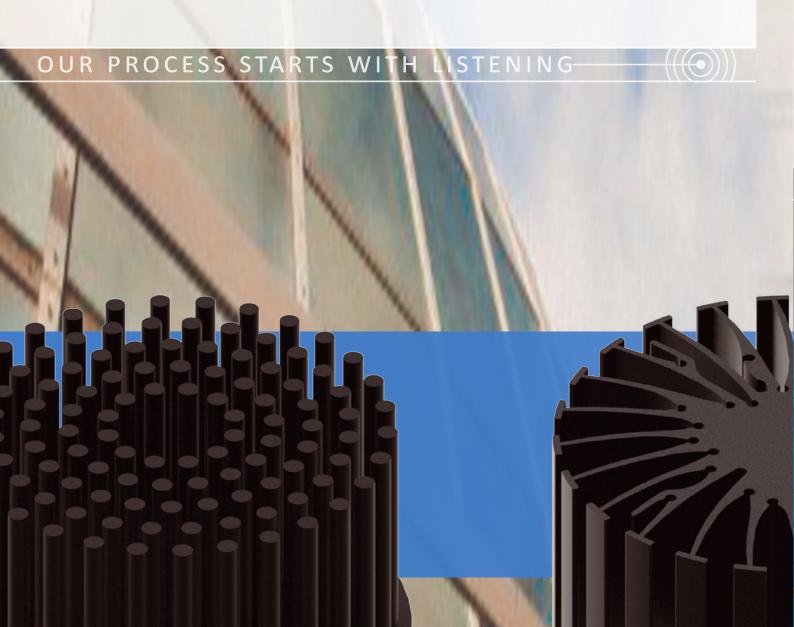
MechaTronix was formed in 2007, comprised of five already successful manufacturing companies, with each of them in excess of a decade of continuous operation. MechaTronix provides a wide variety of mechanical and electromechanical parts as well as assemblies for the international Original Equipment Manufacturers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



Mastering LED Cooling

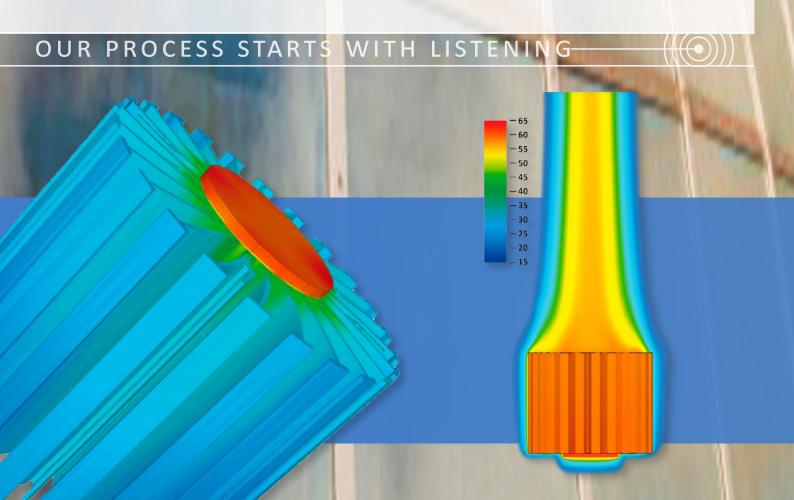
With the evolution of LED lighting over the last years, the demand for professional thermal solutions has grown exponentially. And now that we no longer remain in the realm of low power LED's, thermal management becomes a critical factor within LED fixtures. To that end, MechaTronix has developed several 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.



TRIDONIC LED COOLING

Module SLE Advance series COB LED modules GEN7 ADV - 09, 13, 15, 17, 21 mm

LPF3550-ZHC

Tridonic LED Pin Fin cooler ø35mm - h50mm - Rth 7.41°C/W Cooling performance 700 - 1,300 lm



		Module SLE Advance LED
V	✓	Gen7 ADV 09mm

LPF4768-ZHP

Tridonic LED Pin Fin cooler ø47mm - h68mm - Rth 3.9°C/W Cooling performance 1,300 - 2,500 lm



Direct mount		Module SLE Advance LED
	✓	Gen7 ADV 09mm / 13mm / 15mm Gen7 ADV 17mm
✓		Gen7 ADV 17mm
✓		Gen7 H ADV 13mm / 15mm / 17mm

LPF6050-ZHC

Direct | Zhaga | Module SLE Advance LED



Ø60mm - h50mm - Rth 4.0°C/W
Cooling performance 1,200 - 2,300 lm

Tridonic LED Pin Fin cooler

nount	holder	IVIOUUIE SEL AUVAITCE LED
✓	✓	Gen7 ADV 09mm
	✓	Gen7 ADV 13mm / 15mm
✓		Gen7 ADV 17mm
✓		Gen7 H ADV 13mm / 15mm /17mm

LPF6768-ZHP

Tridonic LED Pin Fin cooler ø67mm - h68mm - Rth 2.1°C/W Cooling performance 2,300 - 4,600 lm



Direct mount	Zhaga holder	Module SLE Advance LED
✓ ✓ ✓	V	Gen7 ADV 09mm / 13mm / 15mm Gen7 ADV 17mm / 21mm Gen7 H ADV 13mm / 15mm Gen7 H ADV 17mm / 21mm

LPF8050-ZHC



Tridonic LED Pin Fin cooler ø80mm - h50mm - Rth 2.34°C/W Cooling performance 2,000 - 4,000 lm

Direct mount	Zhaga holder	Module SLE Advance LED
V V	▽	Gen7 ADV 09mm Gen7 ADV 13mm / 15mm Gen7 ADV 17mm / 21mm Gen7 H ADV 13mm / 15mm Gen7 H ADV 17mm / 21mm

LPF8668-ZHC



Tridonic LED Pin Fin cooler ø86mm - h68mm - Rth 1.46°C/W Cooling performance 3,300 - 6,500 lm

Direct mount	Zhaga holder	Module SLE Advance LED
V V V	V	Gen7 ADV 13mm / 15mm Gen7 ADV 17mm / 21mm Gen7 H ADV 13mm / 15mm Gen7 H ADV 17mm / 21mm

LPF11180-ZHE



Tridonic LED Pin Fin cooler ø111mm - h80mm - Rth 1.07°C/W

Cooling performance 4,800 - 9,600 lm		
Direct mount	Zhaga holder	Module SLE Advance LED
▽		Gen7 ADV 21mm Gen7 H ADV 21mm

TRIDONIC LED COOLING

Module SLE Advance series COB LED modules GEN7 ADV - 09, 13, 15, 17, 21 mm

CoolStar® White 4740

Tridonic Designer LED Star cooler ø47mm - h40mm - Rth 5°C/W Cooling performance 1,000 - 2,000 lm



Module SLE Advance LED

✓ V Gen7 ADV 09mm Gen7 ADV 13mm Gen7 H ADV 13mm



CoolStar® White 4760

Tridonic Designer LED Star cooler ø47mm - h60mm - Rth 4.17°C/W Cooling performance 1,200 - 2,400 lm

Direct mount
▼

TALEXXmodule SLE LED

Gen7 ADV 09mm Gen7 ADV 13mm Gen7 H ADV 13mm

CoolStar® White 6730

Tridonic Designer LED Star cooler ø67mm - h30mm - Rth 3.13°C/W Cooling performance 1,600 - 3,100 lm



Direct	Zhaga	Module SLE Advance I	FD

V V

Gen7 ADV 09mm / 13mm / 15mm Gen7 ADV 17mm

Gen7 H ADV 13mm / 15mm / 17mm



CoolStar® White 6760

Tridonic Designer LED Star cooler ø67mm - h60mm - Rth 2.27°C/W Cooling performance 2,100 - 4,200 lm



TALEXXmodule SLE LED

Gen7 ADV 09mm / 13mm / 15mm Gen7 ADV 17mm / 21mm Gen7 H ADV 13mm / 15mm Gen7 H ADV 17mm / 21mm



CoolStar® White 8630

Tridonic Designer LED Star cooler ø86mm - h30mm - Rth 2.08°C/W Cooling performance 2,300 - 4,600 lm



Module SLE Advance LED

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Gen7 ADV 09mm / 13mm / 15mm Gen7 ADV 17mm / 21mm Gen7 H ADV 13mm / 15mm Gen7 H ADV 17mm / 21mm



CoolStar® White 8660

Tridonic Designer LED Star cooler ø86mm - h60mm - Rth 1.56°C/W Cooling performance 3,100 - 6,100 lm



Direct Zhaga mount holder Module SLE Advance LED

✓

Gen7 ADV 13mm / 15mm Gen7 ADV 17mm / 21mm Gen7 H ADV 13mm / 15mm Gen7 H ADV 17mm / 21mm



Tridonic Modular LED Star cooler ø47mm - h50mm - Rth 5.3°C/W Cooling performance 900 - 1,800 lm



Module SLE Advance LED

Gen7 ADV 09mm / 13mm Gen7 H ADV 13mm



ModuLED Pico 4780

Tridonic Modular LED Star cooler ø47mm - h80mm - Rth 4.2°C/W Cooling performance 1,200 - 2,300 lm



ect	Zhaga	Module SLE Advance LED	
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Gen7 ADV 09mm / 13mm Gen7 H ADV 13mm

TRIDONIC LED COOLING

Module SLE Advance series COB LED modules GEN7 ADV - 09, 13, 15, 17, 21 mm

ModuLED Nano 7050

Tridonic Modular LED Star cooler ø70mm - h50mm - Rth 2.2°C/W Cooling performance 2,200 - 4,300 lm



irect nount	Zhaga holder	Module SLE Advance LED
✓	✓	Gen7 ADV 09mm / 13mm / 15mm

✓

Gen7 ADV 17mm / 21mm Gen7 H ADV 13mm / 15mm Gen7 H ADV 17mm / 21mm

ModuLED Nano 7080

Tridonic Modular LED Star cooler ø70mm - h80mm - Rth 1.8°C/W Cooling performance 2,700 - 5,300 lm



ect	holder	Module SLE Advance L
7	✓	Gen7 ADV 13mm / 15mm
✓		Gen7 ADV 17mm / 21mm
✓		Gen7 H ADV 13mm / 15mm
7		Gen7 H ADV 17mm / 21mm

ModuLED Micro 8630

Tridonic Modular LED Star cooler ø86mm - h30mm - Rth 1.8°C/W Cooling performance 2,700 - 5,300 lm



Direct	Zhaga	Module SLE Advance LED	
mount	holder	IVIOLUIE SEE AUVAITCE LED	

✓ \ \ \ \ Gen7 ADV 13mm / 15mm Gen7 ADV 17mm / 21mm Gen7 H ADV 13mm / 15mm Gen7 H ADV 17mm / 21mm

ModuLED Micro 8650

Tridonic Modular LED Star cooler ø86mm - h50mm - Rth 1.5°C/W Cooling performance 3,200 - 6,400 lm



Direct mount	Zhaga holder	Module SLE Advance LE
✓	✓	Gen7 ADV 13mm / 15mm
✓		Gen7 ADV 13mm / 15mm Gen7 ADV 17mm / 21mm
✓		Gen7 H ADV 13mm / 15mm Gen7 H ADV 17mm / 21mm
✓		Gen7 H ADV 17mm / 21mm

ModuLED Micro 8680

Tridonic Modular LED Star cooler ø86mm - h80mm - Rth 1.2°C/W Cooling performance 4,000 - 8,000 lm



Direct	Zhaga	Modu	اک مار	F Adva	nce I FF

✓ ✓ Gen7 ADV 15mm Gen7 ADV 17mm / 21mm Gen7 H ADV 15mm / 17mm / 21mm

ModuLED 9950

Tridonic Modular LED Star cooler ø99mm - h50mm - Rth 1.34°C/W Cooling performance 3,600 - 7,200 lm



Direct nount	Zhaga holder	Module SLE Advance LED
✓	V	Gen7 ADV 15mm Gen7 ADV 17mm / 21mm Gen7 H ADV 15mm / 17mm / 21mm

ModuLED 9980

Tridonic Modular LED Star cooler ø99mm - h80mm - Rth 1.02°C/W Cooling performance 4,700 - 9,400 lm



Module SLE Advance LED

Gen7 ADV 21mm Gen7 H ADV 21mm

ModuLED Xtra 9950

Tridonic Modular LED Star cooler ø99mm - h50mm - Rth 1.34°C/W Cooling performance 3,600 - 7,200 lm



ount	holder	Module SLE Advance LED
	✓	Gen7 ADV 15mm
✓ 🗌		Gen7 ADV 17mm / 21mm
√ □		Gen7 H ADV 15mm / 17mm / 21mm

TRIDONIC LED COOLING Module SLE Advance series COB LED modules

GEN7 ADV - 09, 13, 15, 17, 21 mm

ModuLED Xtra 9980

Tridonic Modular LED Star cooler ø99mm - h80mm - Rth 1.02°C/W Cooling performance 4,700 - 9,400 lm

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Direct mount	Zhaga holder	Module SLE Advance LED
✓		Gen7 ADV 21mm Gen7 H ADV 21mm

ModuLED Mega 13420

Tridonic Modular LED Star cooler ø134mm - h20mm - Rth 1.32°C/W Cooling performance 3,700 - 7,300 lm

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Direct mount	Zhaga holder	Module SLE Advance LED
▼ ▼	V	Gen7 ADV 15mm Gen7 ADV 17mm / 21mm Gen7 H ADV 15mm / 17mm / 21mm

ModuLED Mega 13450

Tridonic Modular LED Star cooler ø134mm - h50mm - Rth 0.88°C/W Cooling performance 5,500 - 11,000 lm



Direct mount	Zhaga holder	Module SLE Advance LED
		6 7 4 5 1 2 4

Gen7 ADV 21mm Gen7 H ADV 21mm



ModuLED Mega 13450-HBG

Tridonic High Bay LED cooler with driver connection system ø134mm - h50mm - Rth 0.88°C/W Cooling performance 5,500 - 11,000 lm

Direct mount	Zhaga holder	Module SLE Advance LED
✓		Gen7 ADV 21mm Gen7 H ADV 21mm



ModuLED Giga 15220

Tridonic Modular LED Star cooler ø152mm - h20mm - Rth 1.13°C/W Cooling performance 4,300 - 8,500 lm

Direct mount	Zhaga holder	TALEXXmodule SLE LED
▽		Gen7 ADV 17mm / 21mm Gen7 H ADV 17mm / 21mm

