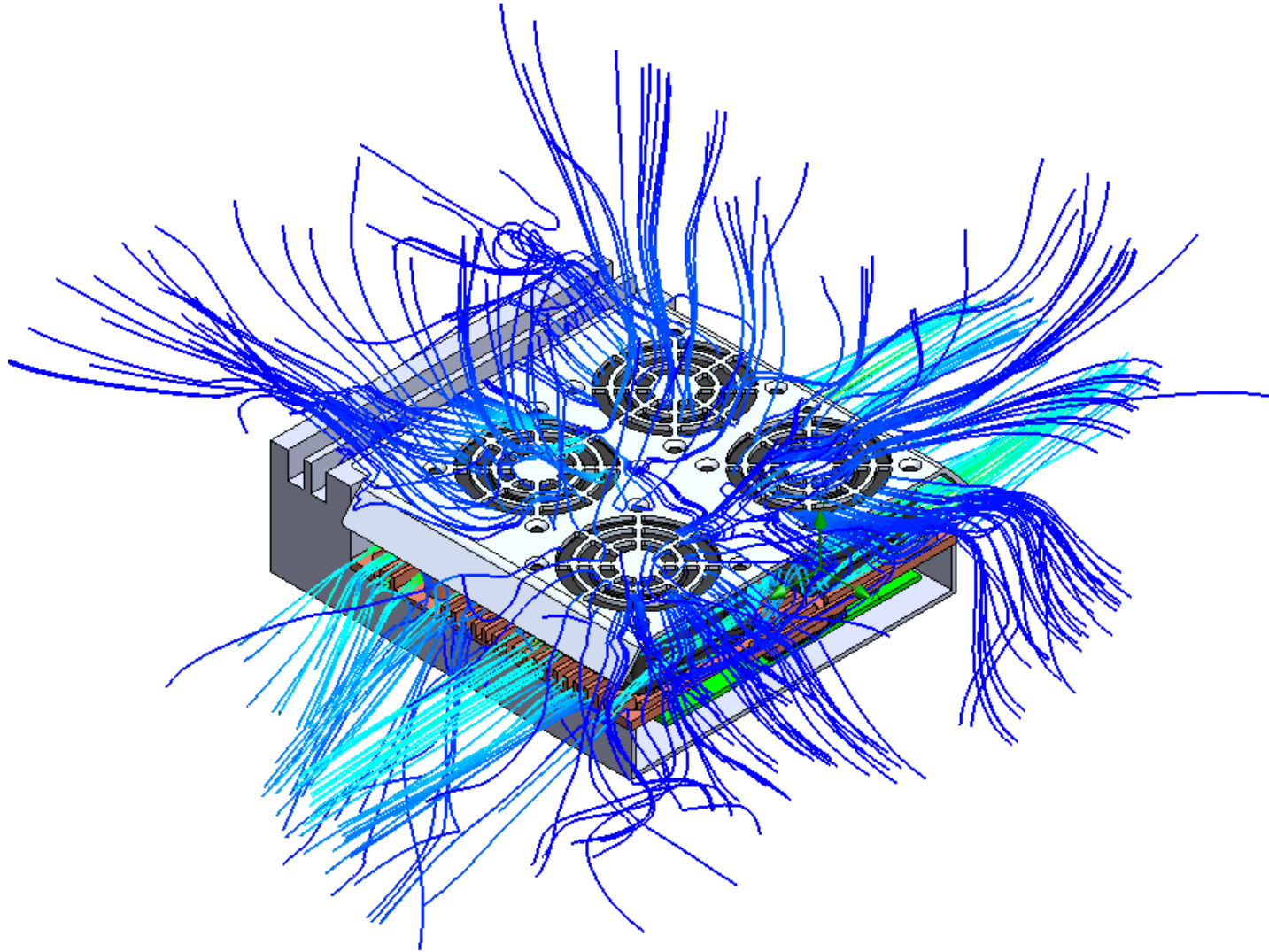


Entropy

COMPANY OVERVIEW



Overview

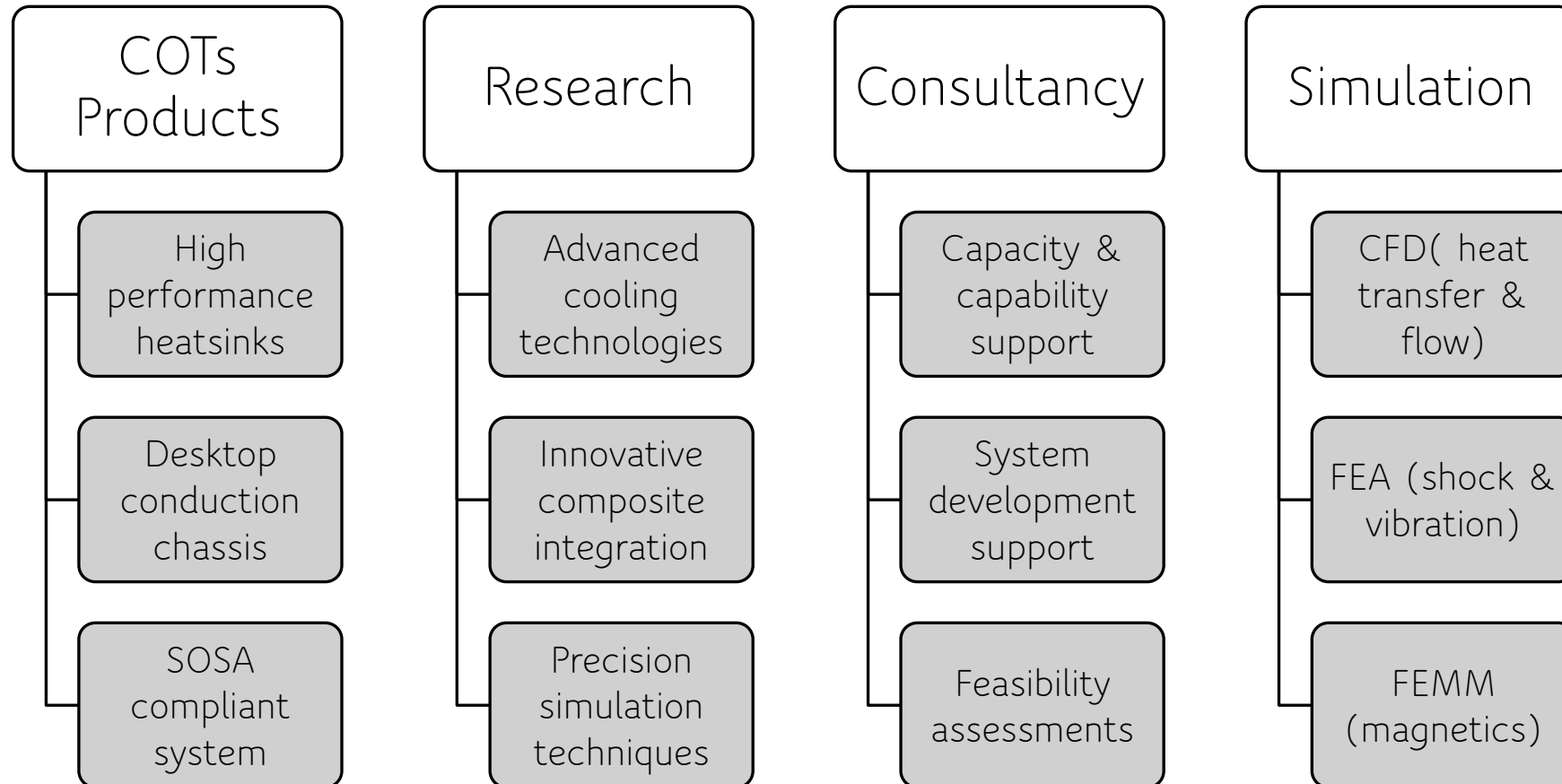
Engineering Entropy provides leading thermal & mechanical embedded electronics technologies and design.

Our products reduce the complexity and time to market of performance embedded thermal technologies.

We also support from packages from short term resource for detail drawings, to complex concept-to-manufacture designs for new products.

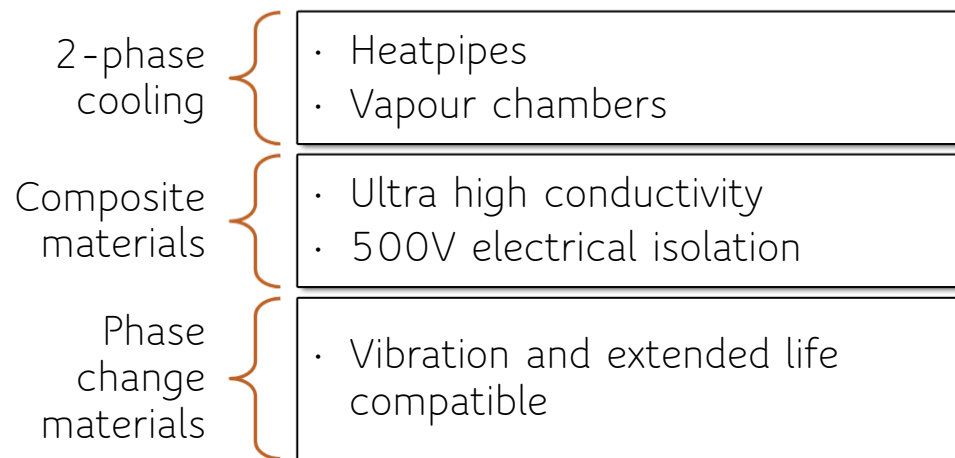
Areas of Operation

THE ADVANTAGES YOU GAIN FROM ENTROPY

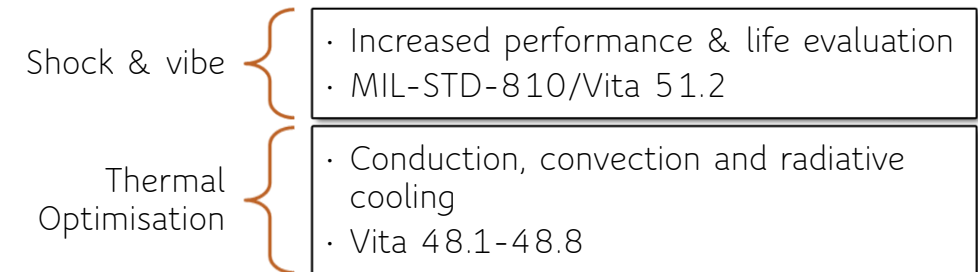


Embedded Technology Solutions

ADVANCED TECHNOLOGIES



SIMULATION SOLUTIONS



George Dickey - CTO Concurrent Technologies

"We have partnered with Entropy on several projects to deliver solutions to complex thermal challenges. Entropy have delivered on time, are flexible to customer requirements and maintain a strong line of open communication throughout the projects. I would highly recommend Entropy to anyone who wants to push the boundary on thermal performance!"

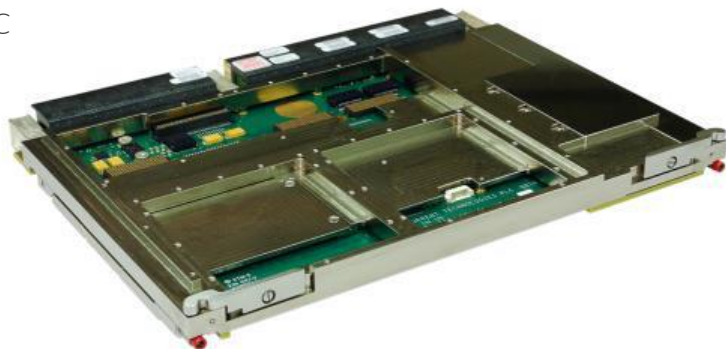
Product Delivery Examples

DELIVERED BY ENTROPY

SBC Heatsink Products

VR E7X/MSD-RCX – INTEL XEON E-2176M

- 3U VPX
- 35W Intel Xeon E @ 2.7- 4.4 GHz & 25W XMC
- 85° card edge conduction cooled - VITA 47 ECC4
- 500V isolation
- 0.1g2/Hz random -vibration & 40g 11ms shock - VITA 47 ECC4
- SWAP-C



TRE8X – INTEL XEON E-2176M

- 3U VPX, XMC
- 45W Intel Xeon E @ 2.7- 4.4 GHz & 25W XMC
- 85° card edge conduction cooled - VITA 47 ECC4
- 500V isolation
- 0.1g2/Hz random -vibration & 40g 11ms shock - VITA 47 ECC4
- SWAP-C



FPGA Heatsink Products

TRAEX – INTEL ARRIA 10 ACCELERATOR ENGINE

- 3U VPX
- 100W Intel Arria 10
- 85° card edge conduction cooled - VITA 47 ECC4
- 500V isolation
- 0.1g²/Hz random -vibration & 40g 11ms shock - VITA 47 ECC4
- SWAP-C



V3UFMCP – XLINX KINTEX ULTRASCALE + XCKU15P

- 3U VPX, FMC
- 45W XCKU15P & FMC
- 85° card edge conduction cooled - VITA 47 ECC4
- 500V isolation
- 0.1g²/Hz random -vibration & 40g 11ms shock - VITA 47 ECC4
- SWAP-C



Team Product Experience

DESIGNED BY ENTROPY ENGINEERS

Rugged SBC Heatsinks

SBC328 - INTEL XEON E3-1505M V5

- 3U VPX
- 45W @ 2.8 - 4.4GHz
- 85° card edge conduction cooled - VITA 47 ECC4
- 500V isolation
- 0.1g²/Hz random -vibration & 40g 11ms shock - VITA 47 ECC4
- SWAP-C



SBC3511 - INTEL XEON E-2276ME

- 3U VPX
- 45W @ 2.8 - 4.4GHz
- 85° card edge conduction cooled - VITA 47 ECC4
- 500V isolation
- 0.1g²/Hz random -vibration & 40g 11ms shock - VITA 47 ECC4
- SWAP-C



Rugged Computer Systems

MCS1001- COTS COMPUTER PLATFORM

- 3U VPX interoperability
- 200 W 71° Baseplate conduction cooled
- MIL-STD-461G, DO-160G, MIL-STD-704F and MIL-STD- 810G



GVC1001 - GPGPU/AI VISION COMPUTER

- NVIDIA Jetson AGX Xavier SoM
- 100W, 71° Baseplate conduction cooled
- MIL-STD-810G



Entropy

COMPANY BIO & CURRENT PARTNERSHIPS

Mission

- To consistently be at the forefront of electronics design capabilities
- To find & validate new technologies that push the boundaries of embedded electronic performance
- To provide an efficient, agile, cost-effective design capability
- To be a reliable and trusted resource for rugged thermal, vibration & shock design and simulation
- Provide the best possible product performance capabilities for our clients

Vision

- To become the 'go-to' entity for rugged system OEMs
- To continuously research & develop new technologies to enhance our client's capability
- To provide the leading thermal and mechanical solutions for global embedded products
- To reduce the lead time and complexity for critical thermal solutions to reduce OEMs time to market
- To significantly improve the accuracy of right first time design to eliminate the need for qualification test

The Benefits of Working with Entropy

- **Communication** – accessible engineering and support team willing to work with clients anywhere in the world from early requirements capture stage to design delivery
- **Agility** – ability to pick up small or large work packages that require capacity support
- **Network** – Entropy have an established and broad network in Tier 1 & 2 suppliers and high capability manufacturing plants
- **Reactive** – ability to take work with minimal notice and guarantee quality delivery
- **Performance** – Entropy use and apply industry best practise methods, corroborated by industry standard agencies, to achieve the best market performance for your system

Director Bio

Entropy was formed out of the Directors experience of the design and test of rugged embedded packages in the UK. We experienced how difficult it was to recruit quality thermal engineers to the embedded world, and the opportunity for much greater understand of the mechanical aspect in a hardware world.

Entropy is the culmination of entrepreneurial progression, as we started our successful first venture in 2018; with the specific intent to give us the flexibility and funds to provide our expertise to a global portfolio of clients. This partnership has functioned because of a mutual understanding of progress: from colleagues in the early stages of our engineering career, through accelerated product and aggressive personal development, to our first venture opening a cocktail bar.

MAX TAYLOR-SMITH



“Max has an intrinsic interest in future technologies and the progression towards electrification. He has gathered experience in Military Aerospace, High Performance Motorsport and Micro SME powertrain retrofitting which prospered a passion for developing high efficiency technology solutions. He always pushes for detail and maintains the highest standard for mechanical practise and product delivery.”

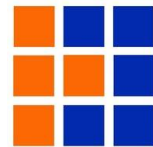
CILLIAN HICKEY



“Cillian has led critical design improvement and delivery of solutions under pressured timescales in a range of applications for many years. He is perpetually challenging the boundaries of accepted technological approaches, and would happily spend his time identifying the root cause of the most challenging engineering issues.”

Industry Partnerships

CURRENT CLIENT PORTFOLIO:



PARTNERSHIPS:

