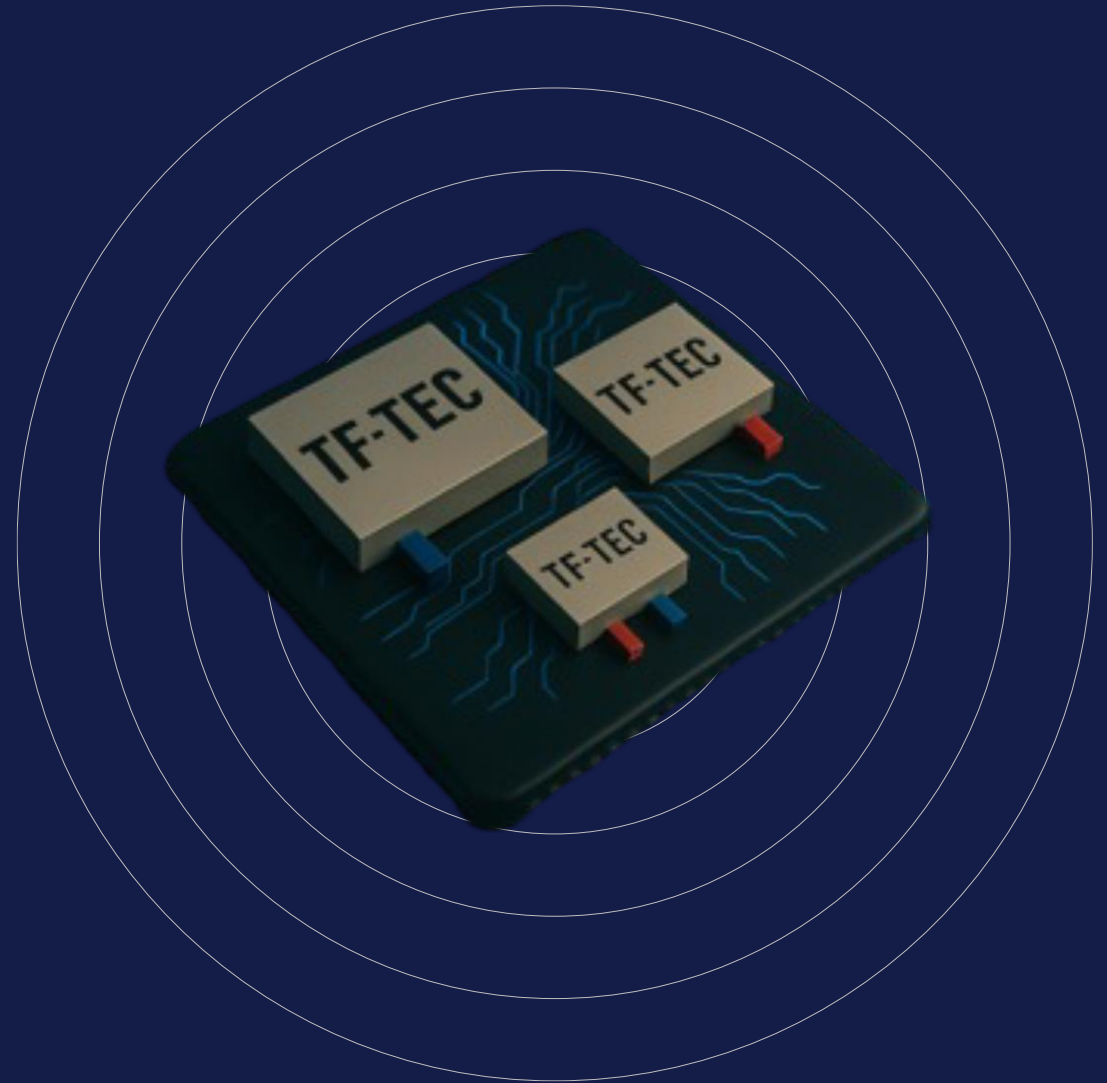


Solid^T TF-TEC Technology

Innovative thermal cooling solutions

www.solidt-tech.com



Challenges and key principles

Cooling technology needs a revolution. Complexity, inefficiency, and outdated solutions limit performance. SolidT introduces a new solid-state approach—simpler, smarter, and more efficient—unlocking the future of active cooling.

Technology



To provide precise temperature control without traditional compressors. To Simplify systems, reduce weight and complexity.

Reliability



To enhances longevity for critical components and for the cooling system itself.

Cost



To cut manufacturing and operational expenses..

Environment



To reduces energy consumption and emissions. To provide eco friendly solution.

Versatility



To be applicable across variable industries and applications

SolidT TEC Revolution

Standard TEC



TEC Microsystems



BTS Europe
Thermal solutions



CUSTOM CHILL
INNOVATIVE COOLING SOLUTIONS

- ~1.5 MM thickness
- ~0.5 Coefficient of performance
- ~ 5W High Cooling power density
- Limited working range
- Non-flexible

SolidT TF-TEC



SolidT

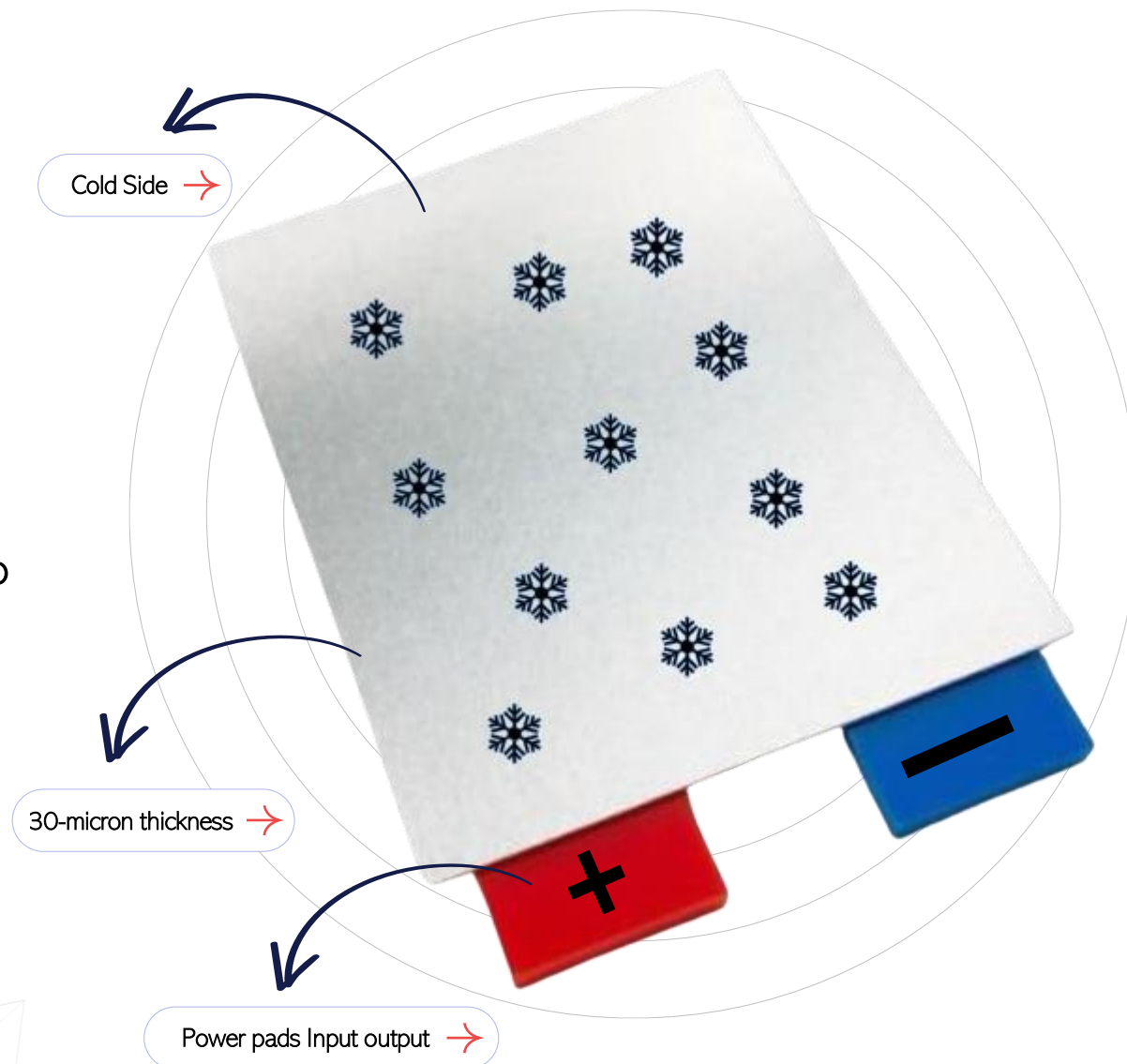
- ~30-100 micron thickness
- ~ 3 Coefficient of performance
- ~ 300 W and more cooling power density
- Extended Working Range
- Flexible

Next Generation Of Cooling And Heating

SolidT TF-TEC

SolidT has developed a next-generation thermoelectric (TEC) thin-film heat pump capable of efficiently targeting and cooling various components, ranging from the chip and module level to the system level

- Thin films technology
- Flexible materials
- Uniform thermal expansion
- High fill factor
- Efficient cascading
- Requires no assembly



SolidT TF-TEC vs. Compressed-gas heat pumps

	SolidT	Compressed gas
Coefficient of performance (COP)	~3	~2.6
Heat/Cool	Heat and cool	Cool
Mechanics	No	Yes
Dimensions	Small	Big
Weight	<	Heavy
Delivery precision	Yes	No
Environment friendly	Yes	No
Reliability	Good	Bad
Cost	Inexpensive	Expensive
Cooling power density (Qc)	<300W/C ²	--
DT	+/-22	+/-10
Dynamic rang	-45 - +85	6-40

TF-TEC Benefits



Decentralized



Inexpensive



Precise



Without mechanics



Improved COP/QC



Combining hot & cold



Reliable



Lightweight

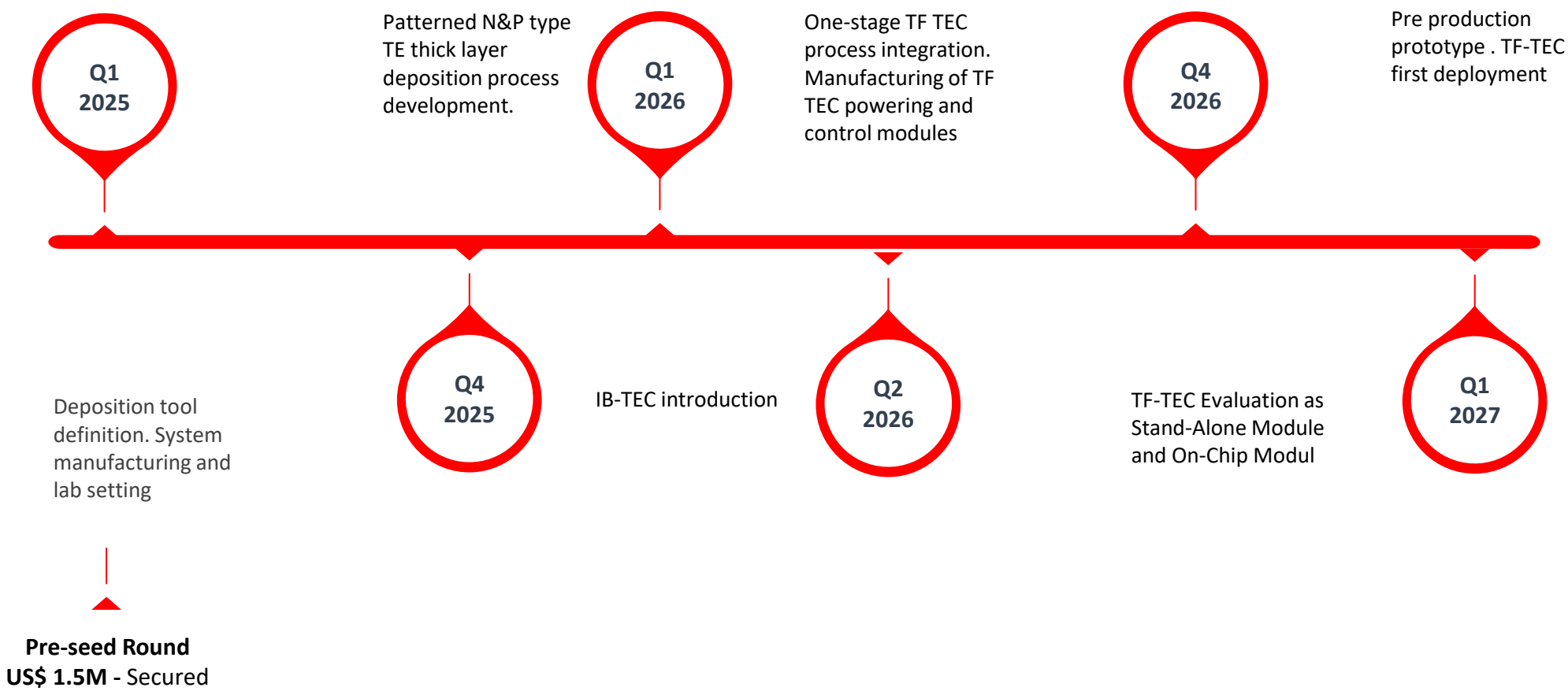


Environmentally friendly

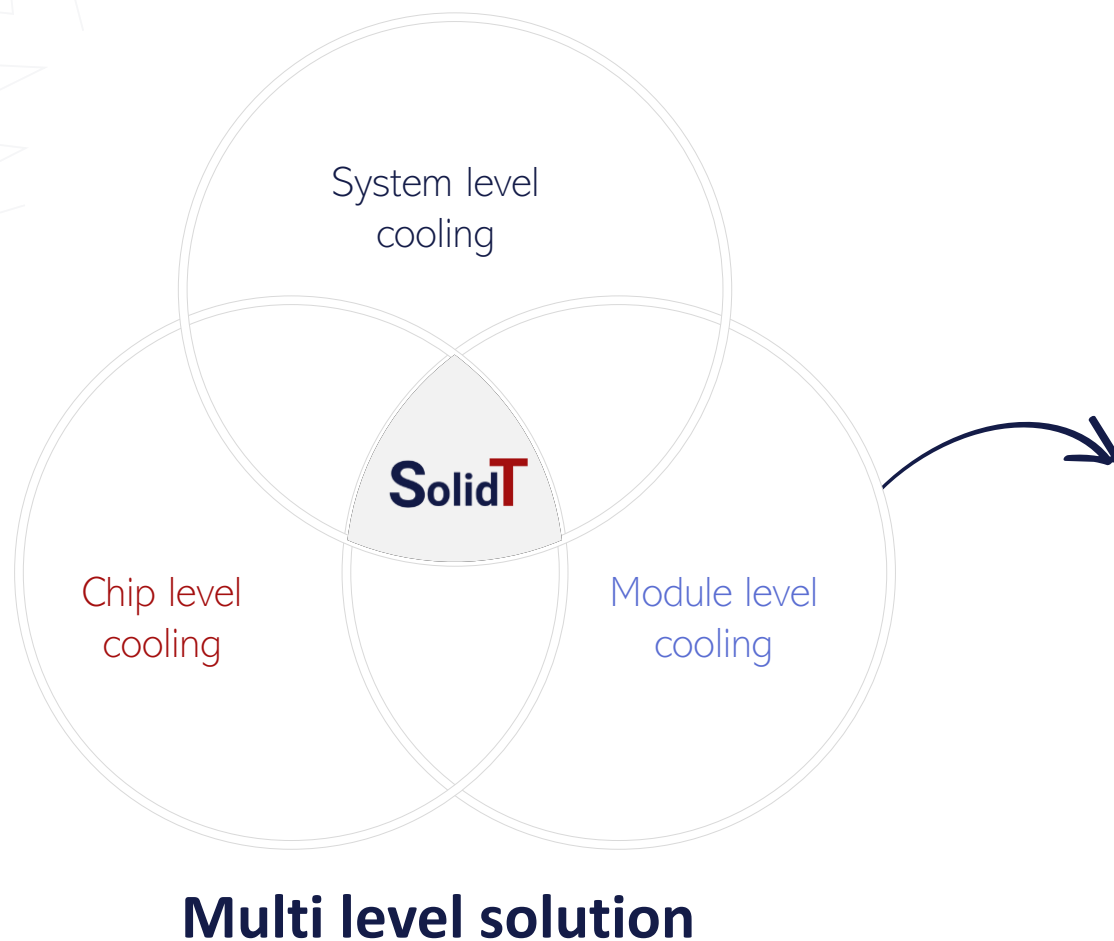


Flexible size and structure

Roadmap



SolidT Applications & Markets



Markets



SolidT is addressing the electronic industry



CPU, GPU, APU, LED, MMIC and electronic unit.



Data centers and servers



Automotive, defense electronics

SolidT TAM

1.3

Billion CPU units produced 2024

CAGR 10.5%

251

Million GPU units produced 2024

CAGR 31.84%

13

Billion LED units produced 2024

CAGR 10.4%

1-6

TF-TEC per Unit

Founders



**Dr. Joseph
Kaplun
CTO**

PhD in material science and 40 years of experience in subtractive and additive solid states nanotechnologies in synthetic diamonds, semiconductor, & PCB industries.



**Mr.
Ziv Cohen
COO**

Bachelor's degree in Physics and Engineering and an MBA both from Ben-Gurion university. More than 27 years of experience in leading as Director of R&D groups



**Mr. Ariel
Popper
CEO**

More than 30 years of experience in mentoring, business management, and consulting in nanotechnology, trade, and finance.

Company and recognition



The company was established to develop innovative and efficient TEC-based cooling/heating technology.



Successfully submitted patents to secure global protection for its innovation.



The company is financially backed by innovation grants and VC investments.

Top 40 European Startups

One of the top 40 European startups in 2023 by HTVD  Germany.

Top 12 startups at Paris Motor Show

One of the top 12 startups in 2024 by Paris Motor Show. 

Int. membership

Member of the Sustainable Digital Infrastructure Alliance. 

Supported by the IIA

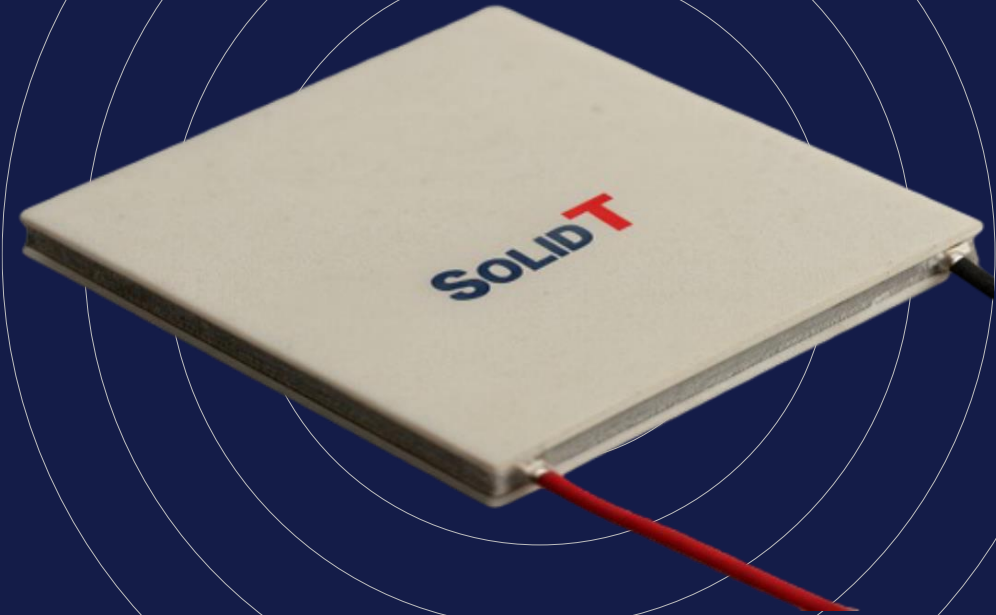
Awarded several grants by the Israeli Innovation Authority 

DeepTech pioneer

Awarded as deeptech pioneer by Hello Tomorrow organization 

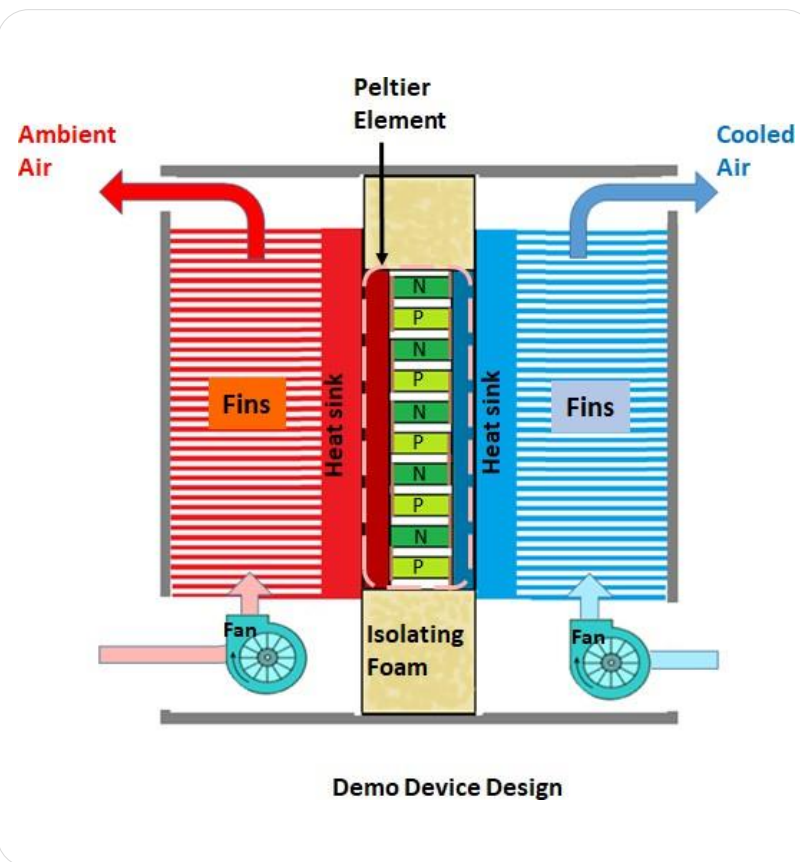
SolidT Past Projects

www.solidt-tech.com



SolidT Air to Air A/C Project

- Self financed
- OOS components
- Improved performance
- Solid state air condition
- Smart engineering
- Delivery 10/23



SolidT TEC.HP Project

רשות החדשנות
Israel Innovation
Authority

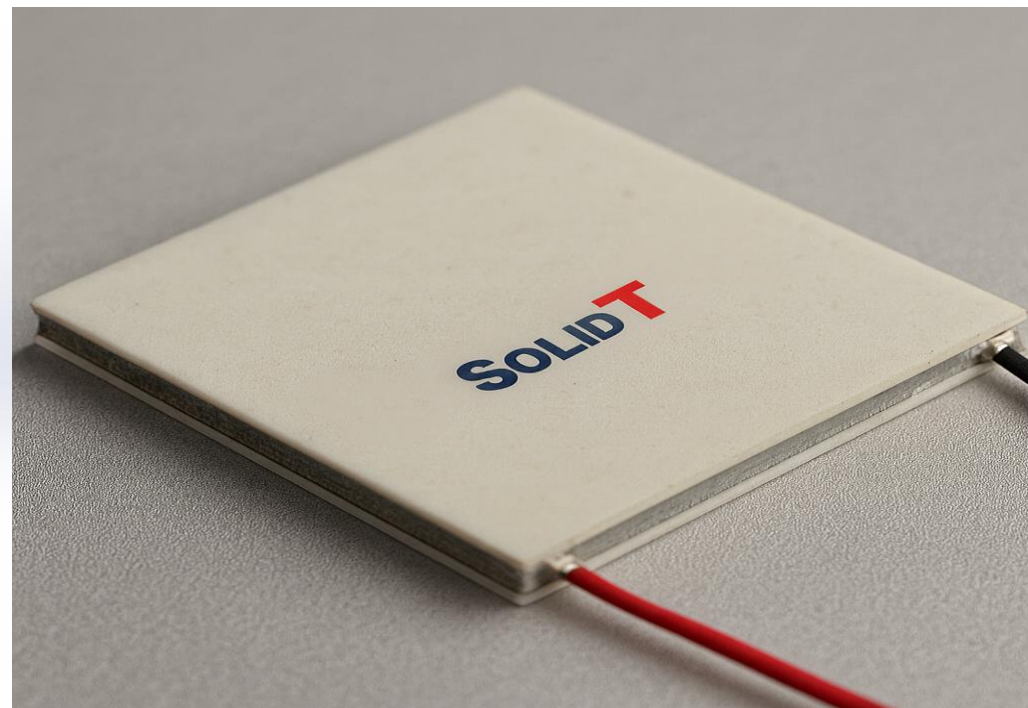


- Backed by a grant from Hyundai Corp. & the Israeli Innovation Authority
- IC/LED cooling
- Smart engineering
- Improved performance
- OOS components
- Improved MTTF
- Delivery 7/25



SolidT IB-TEC

- Self designed
- Discrete assembly
- Smart engineering
- COP >1
- QC >25W/Cm2
- Improved performance
- Delivery 12/25



SolidT



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