

CPS Technologies Corporation

Investor Summit Microcap Virtual Conference

November 21, 2024

Brian Mackey

President and Chief Executive Officer

Chuck Griffith

Chief Financial Officer

Forward-Looking Statements



Statements made in this document that are not historical facts or which apply prospectively, including those relating to 2024 financial results, are forward-looking statements that involve risks and uncertainties. These forward-looking statements are identified by the use of terms and phrases such as "will," "intends," "believes," "expects," "plans," "anticipates" and similar expressions. Investors should not rely on forward looking statements because they are subject to a variety of risks and uncertainties and other factors that could cause actual results to differ materially from the company's expectation. Additional information concerning risk factors is contained from time to time in the company's SEC filings, including its Annual Report on Form 10-K and other periodic reports filed with the SEC. Forward-looking statements contained in this press release speak only as of the date of this release. Subsequent events or circumstances occurring after such date may render these statements incomplete or out of date. The company expressly disclaims any obligation to update the information contained in this presentation.

Management





Brian Mackey, President and CEO

- Joined CPS in August 2023
- Previously: CEO of Engi-Mat Co. Manufacturer of ceramic and metal oxide nanomaterials, supplier to a Navy POR, also active in DoD/DOE funded R&D
- General Manager, Synchrony Business Unit of Dresser-Rand (Siemens) – active magnetic bearing systems for large OEMs
- MBA, Wharton; BS Engineering, West Point



Chuck Griffith, Chief Financial Officer

- Joined CPS in April 2019
- Previously: CFO of SPRI Clinical Trials Global, a contract research organization conducting clinical trials worldwide
- Also: VP Finance, Vertex Distribution, a manufacturer and distributor of corrosion resistant fasteners
- MBA Finance, Bryant University; BBA Accounting, The College of William and Mary



CPS operates a 38,500 SF (3,580 m²) facility on a 9-acre site in Norton, MA.

Synopsis of CPS



- Premier provider of high-performance material solutions for mission-critical applications
- Domestic micro-cap with increased financial flexibility to pursue growth opportunities
- Balanced revenue:
 - Domestic and international sales
 - U.S. 53%, Europe 30%, Asia 17%
 - Markets served:
 - 49% aerospace and defense
 - 51% commercial, traction, energy, etc.

Market Cap.	\$20.5 Million				
2023 Revenue	\$27.6 Million*				
Shares Outstanding	14.53 Million				
Recent Closing Price (CPSH)	\$1.41				
52 Week Range	\$1.27 - \$2.59				
Institutional Ownership	11%				
Insider Ownership	16%				
Location	Norton, MA (~40k SF)				
Headcount	95 employees, plus ~50 temps				

^{*} In 2023 CPS achieved the highest revenue (\$27.6M) in the company's 39-year history.





Company Background



Focus Areas

- Metal Matrix Composites
- Hermetic Packaging
- Composite Armor
- Product Development

Diverse and Growing Markets

- Aerospace & Defense
- Clean Energy
- Transportation & Infrastructure
- Automotive
- Defense Survivability
- Telecom & Computing

Proprietary Technology

- Advanced processes for MMC manufacturing
- Novel light-weight ballistic protection
- Expertise in advanced materials for thermal, mechanical, and ballistic development
- Global license to deliver product solutions using a novel composite material
- Renewed emphasis on product development that better serves our customers by building on current capabilities



Corporate Vision



VISION

Deliver high-performance solutions that address the material science challenges of mission-critical applications.

MATERIAL PROPERTIES

- INFILTRATION OF PREFORMS
- High thermal conductivity
- Thermal expansion matching
- Ballistic strength (armor)
- Stiffness
- Tensile strength
- Lightweight
- Resistance to wear

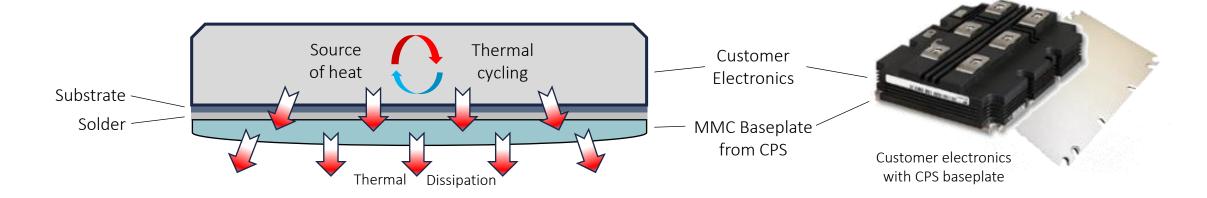
PRODUCT PERFORMANCE

- MMC products (e.g., baseplates) enable long life for customers' high-power electronics
- Certain hermetic packaging products benefit from unique MMC material properties
- Lightweight and environmentally durable armor products satisfy demanding ballistic requirements
- Product development including Fiber
 Reinforced Aluminum products, which enable
 adoption into aircraft and related applications
 where high strength-to-weight ratio is valued

Metal Matrix Composites (MMCs) for Thermal Management



Using a proprietary process, CPS combines Aluminum and Silicon Carbide materials to form "AlSiC", a metal
matrix composite (MMC). This material provides a unique and ideal set of properties for thermal management,
which enhance the performance and reliability of our customers' electronics systems.



- Key performance characteristics:
 - Thermal conductivity to dissipate heat from the electronic device, avoiding damage during repeated thermal cycles.
 - Compatible thermal expansion values between materials which reduce mechanical stresses that could lead to power electronics failure.

- Physical design properties (SWaP) enabling efficient design and value-added tradeoffs
 - Lightweight
 - High strength and stiffness
 - Fabrication (casting) process yields net shape product with functional geometrical attributes
- Applications include automotive, traction, and green energy

Recent news:

 CPS actively fulfilling a \$12.0M order for power module components over a 12-month period

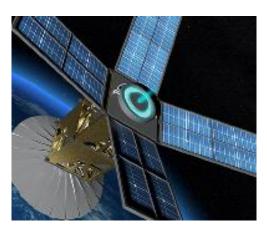
Hermetic Packaging for Microelectronics

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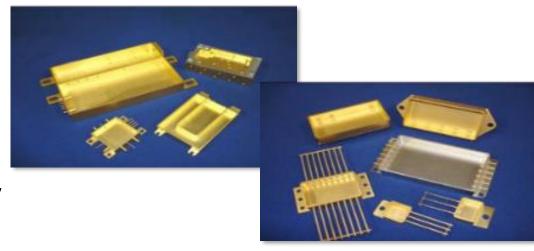
- CPS' Hermetic Package (HP) solutions offer ceramic to metal seals (CTMS) or glass to metal seals (GTMS) for reliable microelectronics packaging in challenging environments.
- We offer custom HP solutions which **enable optimal performance** and are designed to meet our customers' specifications, format, and size.
- Each HP product provides the most robust hermetic seal for improved reliability in applications with high cost of failure, including military, aerospace and telecommunications.



Reliable avionic control and electrical systems



Durable satellite control systems



CPS also offers HP products that *incorporate MMCs*:

- Increased thermal conductivity
- 40-60% weight reduction
- High strength for harsh applications
- Thermal expansion matching for direct attachment substrates

Recent news:

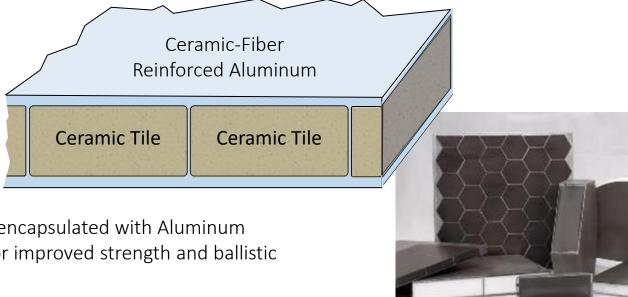
- In response to customer demand, CPS has added 5-axis machining capability to expand product offerings
- \$200k matching award from Massachusetts
 Manufacturing Accelerate Program (MMAP) in 2024

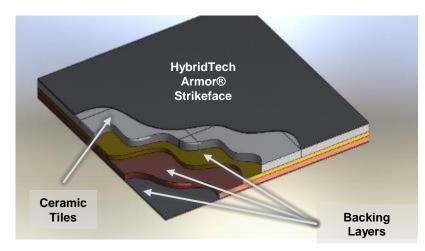
Ideal for weight sensitive systems subject to vibration and shock

HybridTech Armor®

A novel approach to advanced ballistic protection

- HybridTech Armor® utilizes CPS' proprietary Metal Matrix Composite (MMC) infiltration technology to offer protection that rivals any steel alternative at <u>HALF</u> the weight
- Strikefaces employing CPS' HybridTech Armor® are now being installed on the U.S. Navy's fleet of aircraft carriers





Layered construction for design flexibility to support any application or ballistic threat

- Ceramic tiles encapsulated with Aluminum composites for improved strength and ballistic performance
- Reduced weight and environmental durability for improved safety and reliability
- A patented advanced material approach providing an alternative to High Hard Steel (HHS) at half the weight, with validated multi-hit performance to U.S. DoD standards
- Capable of defeating heavy kinetic threats (>14.5) mm) for protection in austere environments

Recent news:

■ In 2024 the first set of CPS HybridTech Amor® was installed on the US Navy aircraft carrier CVN-72, the USS Abraham Lincoln

Advanced material science for *superior* protection and *enhanced* performance

Advanced Research

5

<u>Dedicated to satisfying challenging customer requirements:</u>

- Applying and expanding CPS' core capabilities (metal matrix composites, thermal management, and materials utilizing unique ceramic and metal forming processes)
- ➤ Wide range of metal, ceramic, and composite processing and testing capabilities for rapid prototyping and scale-up

200 um

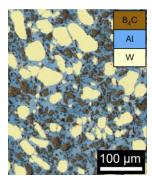
SEM image of nitinol wires within an aluminum matrix, for thermal energy storage

Recent efforts to address the needs of the DoD and DOE:

Agency	Research Area	Funding Vehicle	Funding Period	
DoD (Army)	Advanced thermal management with additively manufactured components	SBIR	2021	
DoD (Army)	Armor flooring for UH-60 helicopters using metal matrix composites (MMCs)	SBIR	2023	
DoD (Army)	Fabrication of tungsten fragmentation warheads via metal injection molding	STTR	2022 (Phase I) Phase II pending	
DoD (Navy)	Thermal energy storage enabled by metal matrix composites (MMCs)	SBIR	2022, 2024-2026 Phase II underway	
DOE	Radiation shielding for nuclear microreactors enabled by metal matrix composites (MMCs)	SBIR	2023-2026 Phase II underway	
DoD (Navy)	Rocket motor cases with improved performance enabled by metal matrix composites (MMCs)	Contract	2024-2025 Project underway	



Tungsten warhead enabling controlled fragmentation



Radiation shielding composite comprised of boron carbide, aluminum and tungsten

Recent news:

 Three new research contracts in the last several months, totaling \$2.3M of external funding.

Advanced Research: SBIR Data Rights





15 U.S. Code § 638 - Research and development

Competitive procedures and justification for awards

<u>To the greatest extent practicable</u>, Federal agencies and Federal prime contractors shall—

- (A) consider an award under the SBIR program or the STTR program to satisfy the requirements under sections 3201 through 3205 of title 10 and any other applicable competition requirements; and
- (B) issue, without further justification, Phase III awards relating to technology, including sole source awards, to the SBIR and STTR award recipients that developed the technology.

Source: https://www.law.cornell.edu/uscode/text/15/638

In its May 2, 2019 SBIR/STTR Policy Directive, SBA changed the Data Rights protection period for both SBIR and STTR funding agreements to a uniform <u>20-year period</u> that begins on the date of award.

[T]he government cannot compete technologies containing SBIR Data. Any such competition would mean disclosing the SBIR Data in solicitations, which the government cannot do. This unique right also underlies and supports the sole source Phase III mandate—the requirement to award Phase III awards to the SBIR developing firm to the greatest extent practicable.

Source: https://www.sbir.gov/tutorials/data-rights/tutorial-2

In addition to SBIR Data Rights, Phase III status brings with it:

- 1. <u>the right to sole-source contracts;</u>
- 2. exemption from SBA size standards for a procurement;
- 3. no limits on the dollar size of a Phase III procurement;
- 4. a right to the Phase III mandate, by which the SBIR firm has a right to be awarded a future Phase III award to the greatest extent practicable;
- 5. the right to receive subcontracts for Phase III work on a sole-source basis; and
- 6. the ability to pursue research, research and development, services, products, production, or any combination of those under a Phase III.

Source: https://www.sbir.gov/tutorials/data-rights/tutorial-4

Phase IIIs are also exempt from SBA's size standards. <u>SBIR firms can grow to any</u> <u>size and still get Phase IIIs for their technologies</u>. Additionally, because of this exemption, a large firm can purchase the SBIR firm and still receive Phase IIIs for the SBIR firm's technologies because of this exemption from the size standards.

Source: https://www.sbir.gov/tutorials/data-rights/tutorial-4#

As a matter of US law:

- Federal agencies and prime contractors shall issue Phase III awards to SBIR award recipients, including sole source awards, without further requirements for competition.
- This benefit, as well as related SBIR Rights, vests with the company regardless of any future growth, whether organic or inorganic.

Potential for significant long-term value for CPS shareholders.

Advanced Research: Market-Driven Innovation



QuicksetTM Injection Molding * SiC preforms *

Fragmentation Warhead

Injection Molded Tungsten

- Army Phase I completed
- · Pending Phase 2 funding

Additive Manufacturing 3-dimensional SiC preforms

• CPS IRAD; working with commercial partner

Additive Manufacturing High-density/tungsten

 Pursuing Army SBIR funding

Innovation Strategy

- Guided by defined customer requirements
- Public funding when possible
- Building on existing intellectual property
- **Expanding commercial opportunities**

QuickcastTM Aluminum Infiltration AlSiC products *

Heavy Armor

Infiltration of ceramics

Light Armor

Infiltration of ceramics

Installation on US Navy

aircraft carriers

• U.S. Army SBIR Phase I completed

Thermal Energy Storage Infiltration of nitinol

High Temp. Barrier

Infiltration: ceramic fiber

U.S. Navy SBIR

CPS IRAD

Radiation Shielding

Infiltration of B₄C and W

• U.S. Dept. of Energy SBIR Phase 2 underway

Fiber Wound Cylinders Infiltration; large cavity

 U.S. Navy-funded project underway

Phase 2 underway

Fiber Reinforced Alum.

Infiltration of ceramic fibers

- CPS IRAD (global license)
- Commercialization in 2025

Single Piece Cooler

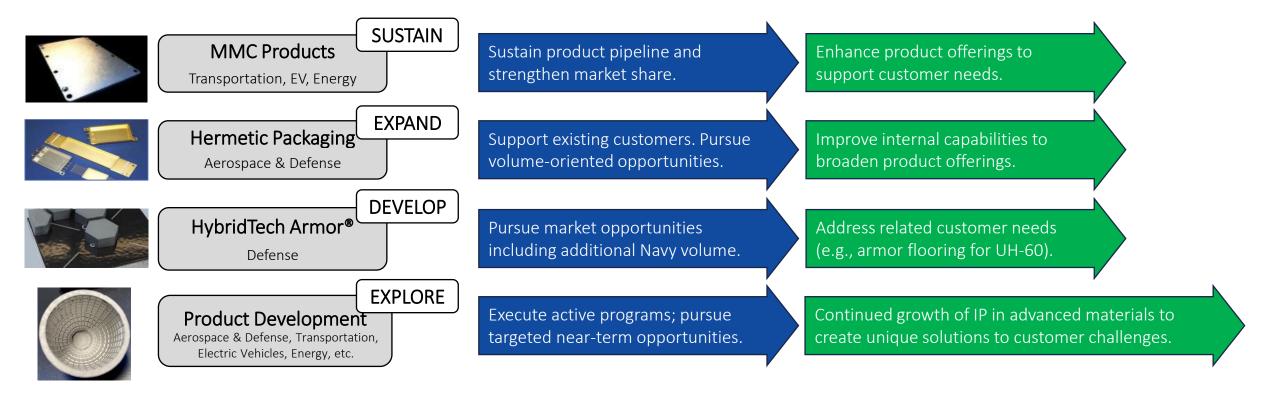
Infiltration; small cavity

CPS IRAD

IRAD = Internally-funded R&D

Strategic Snapshot





- Application of technical excellence to market challenges
- Leverage existing customer relationships
- Design innovation and mission relevance
- Operational discipline (cost, quality, timeliness)

MAINTAIN

DEVELOP

- Growing portfolio of fielded products
- Accelerate growth trajectory of CPS





	Three Months Ended			Nine Months Ended			
	Septe	mber 28,	Se	ptember 30,	September 28,		September 30,
	2	024		2023	2024		2023
Revenues:							
Total revenues		4,247,116		6,285,041	15,190,063		20,803,447
Cost of product sales		4,770,548		5,049,177	15,037,177		15,126,621
Gross profit (loss)		- 523,432		1,235,864	152,886		5,676,826
Selling, general, and administrative expense		963,064		1,105,227	3,214,831		4,121,099
Income (loss) from operations		-1,486,496		130,637	-3,061,945		1,555,727
Interest income (expense), net		71,650		78,181	241,686		176,325
Other income (expense), net		-676		-1,228	159		-4,130
Net income (loss) before income tax		-1,415,522		207,590	-2,820,100		1,727,922
Income tax provision (benefit)		-372,683		36,509	-679,803		497,137
Net income (loss)	\$ -	-1,042,839	\$	171,081	\$ -2,140,297	5	1,230,785

- 2024 production diverted to quality testing
 - Reduced product available for sale
 - Increased cost of product sales
- Cautiously optimistic about resolution of quality issues
- SG&A expenses solidly under control
- Announced receipt of \$12.0M order for Oct '24 – Sep '25





	:	September 28,		December 30,	
		2024		2023	
ASSETS					
Current assets:					
Cash and cash equivalents	\$	4,689,004	\$	8,813,626	
Marketable securities, at fair value		1,020,952		_	
Accounts receivable-trade, net		3,654,549		4,389,155	
Accounts receivable-other		362,312		83,191	
Inventories, net		4,433,412		4,581,930	
Prepaid expenses and other current assets		506,126		276,349	
Total current assets		14,666,355		18,144,251	
Net property and equipment		2,082,309		1,556,139	
Right-of-use lease asset		224,000		332,000	
Deferred taxes, net		2,249,985		1,569,726	
Total assets	\$	19,222,649	\$	21,602,116	
LIABILITIES AND STOCKHOLDERS` EQUITY					
Current liabilities:					
Note payable, current portion	\$	20,103	\$	46,797	
Accounts payable		2,497,055		2,535,086	
Accrued expenses		840,757		1,075,137	
Deferred revenue		160,412		251,755	
Lease liability, current portion		160,000		160,000	
Total current liabilities		3,678,327		4,068,775	
Note payable less current portion		_		8,090	
Deferred revenue – long term		31,277		31,277	
				172 000	
Long term lease liability		<u>64,000</u>		1/2,000	
Long term lease liability Total liabilities		64,000 3,773,604			
-				172,000 4,280,142 17,321,974	

- Strong cash position; minimal debt (\$20k)
- Note: Cash used to purchase \$1M of marketable securities (can be converted back to cash as needed)
- Current ratio of 4.0, compared to industry average of 2.3 (www.readyratios.com/sec/industry/36/ - 2022)
- Resources are available to take advantage of opportunities to further grow CPS



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