



ENSURGE™

Ensurge Update

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CEO



Transforming the microbattery industry by delivering 1st mAh capacity solid-state microbattery*

Targeting Wearables, Hearables and Connected Sensors (IoT) markets

billion+ units market opportunity

Ensurge microbattery unique benefits

Higher energy density – 2X

More energy capacity in same space or smaller battery for same energy capacity

Customizable form factor

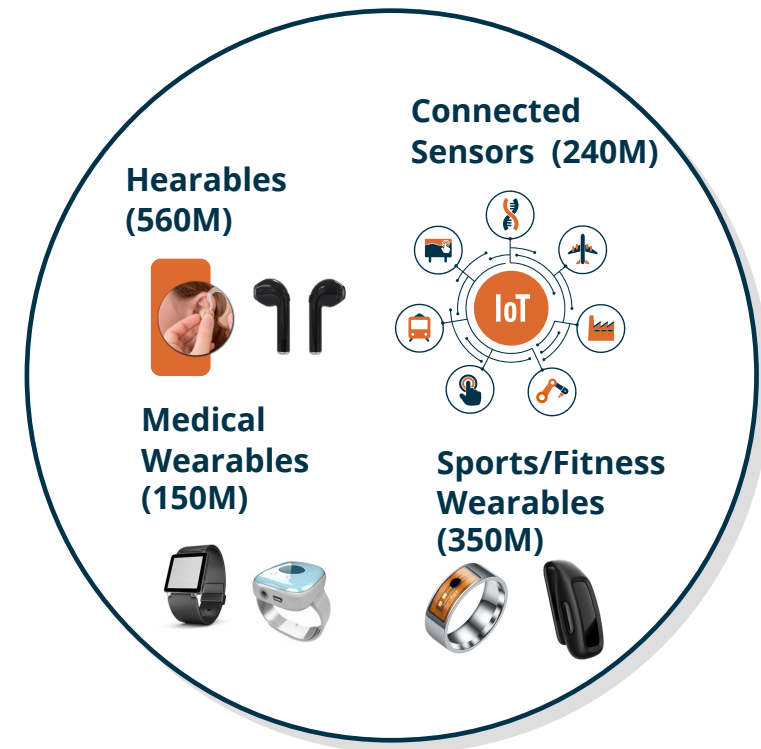
Optimized for customer device needs

Benefits of solid-state vs. existing Li-Ion

Fast charge – 3X

High pulse discharge - 5X+

Charge cycles – 2X+



* mAh and microbattery refer to 1-100 mAh capacity required by a range of personal electronics, medical devices and IoT connected sensors

Strong momentum last 3 months

- Shipped packaged battery samples to two consumer device companies with signed agreements
 - Leading hearing aid company
 - Innovative digital health company
- Shipped unit cell battery samples to three Strategic Partners
 - A world leading consumer electronic and communications company with a yearly revenue potential of USD \$500m
 - Two world leading battery manufacturers with revenue potential of USD \$500m
- Actively discussing strategic R&D agreement with global ICT company
 - Long term, funded, development further advancing Ensurge technologies
- In discussion with more than 20 new companies wanting our battery offering each representing significant revenue potential

Our Twin Go-to-Market Strategy

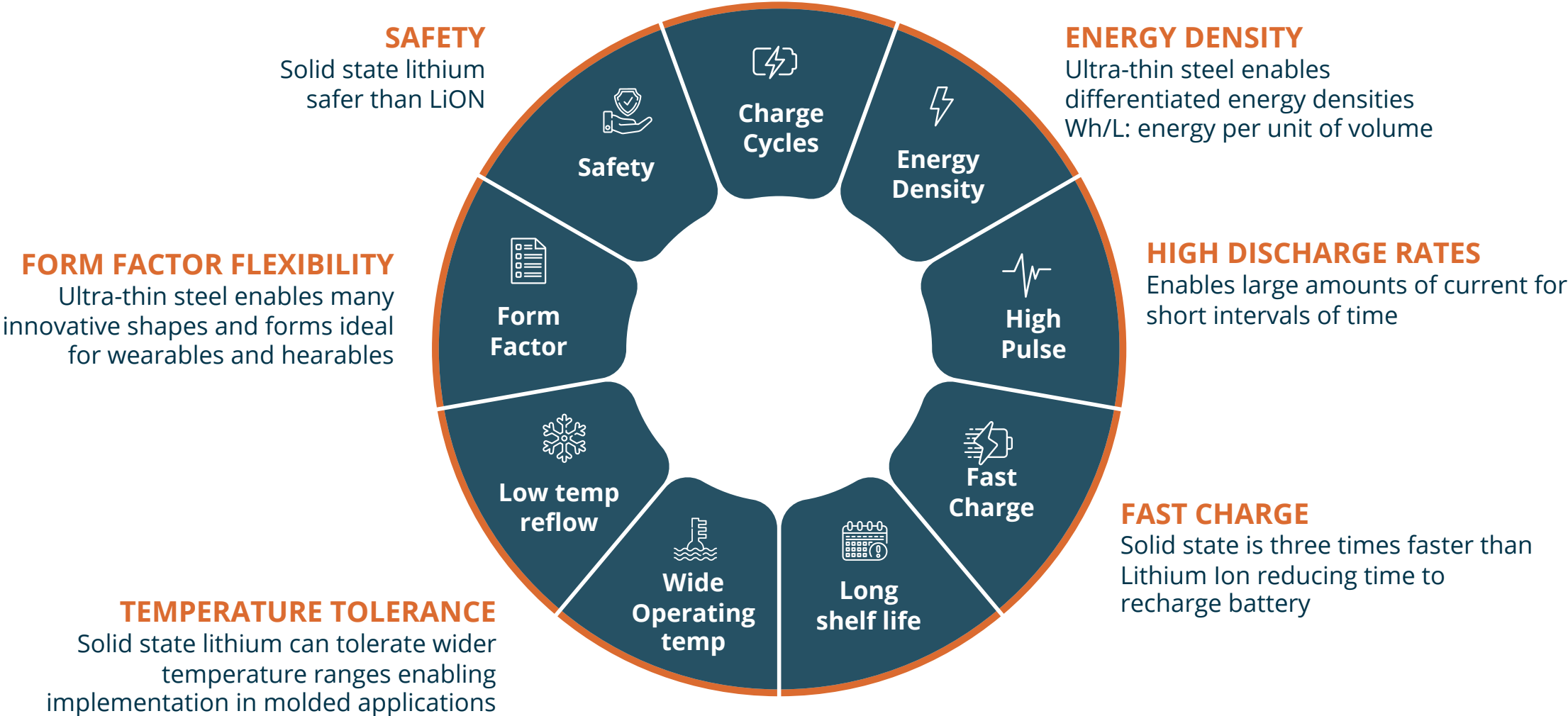
Strategic Partners

- Partner with major technology companies
 - Engaged with two major consumer device companies
 - Focus on signing funded development agreements
 - Wearables & hearables requiring unique and proprietary technology development for their own products
 - Leverage Ensurge high energy density core cells
 - Product revenue potential: > \$500M per year
 - Engaged with two major battery manufacturers
 - Focus on signing licensing agreements or funded development agreements
 - Use cases: wearables, hearables and IOT
 - Product revenue potential: > \$500M per year
- Technology commercialization
 - Up front and on-going NRE and/or equity investments
 - Licensing model
 - Manufacturing rights, thru royalty and/or investment

Commercial Customers

- Wearable, hearable and Industrial IOT markets focused on innovative solutions
 - Five signed agreements
 - Medical hearable (2), digital health, Fitness wearable, Industrial IOT
 - Product revenue potential: >\$50M per year
 - Two dozen more engaged
 - 16 wearables companies and 8 IOT companies
 - Product revenue potential: >\$200M per year
- Deliver customized complete batteries
 - Require performance or form factors not available
 - Fast charging, energy density, and form factor matter
- Product commercialization
 - Product sales of manufactured batteries
 - NRE development for product application support and customization

Value Propositions Driving **BOTH** Strategic and Customer Engagements



Innovative microbattery architecture

Ultra-thin 10 μ m steel substrate

- High energy density
- High mechanical strength

Roll-to-Roll manufacturing facility

- High throughput, low cost
- Conventional manufacturing environment







Innovative cell-stacking & packaging

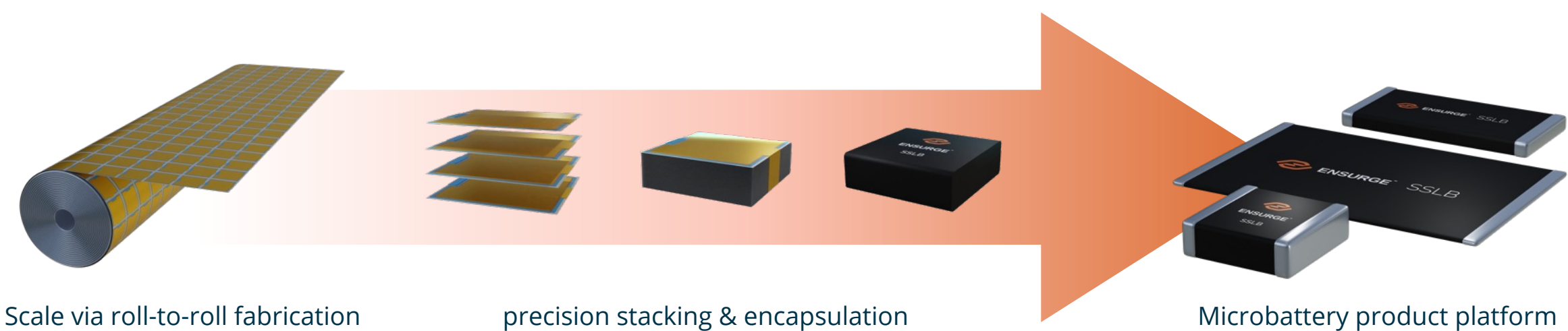
- Maximizes energy density
- Customizable
- Contacts for direct PCB connection

Established anode-less solid-state chemistry

- Lower cost
- 1000+ cycles
- Rapid charging and high pulse discharge

Ensurge: performance and customizability, at scale

	energy density more battery life per unit volume	recharge cycles longer lasting hearables, wearables, sensors	charging speed improved user experience	safety no fire, explosion, heat risk	form factor enabling unique end products
 Ensurge SSLB vs.  Li-ion button cell	2x	2-3x	2x		rectangle ultra thin
	1x	1x	1x		thick circle



Significant Recent Progress



Strategic Partners

Delivered Battery Cells to three major players

Currently in discussions with a major global ICT company

Established new path for technology commercialization

Announced two strategic partner agreements

Three strategic partner shipments delivered



Commercial Customers

Added 12 customers doubling our pipeline of engagements

USA FDA approved hearing aids can be sold “over-the-counter”; FDA estimates 30M underserved hearing impaired

Our customers continue to engage with us defining their products and solutions with Ensurge batteries



Technology Progress

Implemented interfacial engineering breakthroughs significantly lowering impedance improving consistency of cycling and energy capacity

Developed both battery cells and a packaged battery that has extraordinary performance



Q4'22 & 2023 Focus

Deliver first revenue product

Establish operational scale for production deliveries

Scale and broaden sales

Establish strategic partner agreement

Summary

First Solid-State mAh & 10's mAh Microbattery



Roadmap fits the \$B market needs

- \$100M EBITDA from existing roll-to-roll manufacturing facility
- Experienced leadership and management team



Targeting multiple BU, multiple \$B market

- Hearables, wearables, medical wearables, IoT
- Ensurge microbattery improves existing applications and enables new ones



Novel Architecture

- Delivers superior energy density, customizable form factors, 2X charge cycles, fast charge and high pulse discharge
- 10µm steel substrate & innovative stacking/packaging



Ready to deploy

- Significant progress achieved
- Production in Q4 2022





Thank You