ENSURGE™

Ensurge Micropower Inc.

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Forward-looking Statements

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Ensurge in brief

1. Ensurge is an **expert in making ultrathin micro electronic batteries** on **flexible stainless steel substrates**
2. State-of-the-art flexible electronics manufacturing facility **located in the heart of Silicon Valley** with **«Roll to Roll» production** methods
3. **Experienced organization** with 32 development and production process engineers
4. Ensurge is targeting **increasingly growing market** of **space constrained devices** within IoT
5. **About to launch 1st generation new game changing micro battery for the IoT device market**
6. **Multiple technology partner agreements signed** and **first volume order received** for start delivery this year

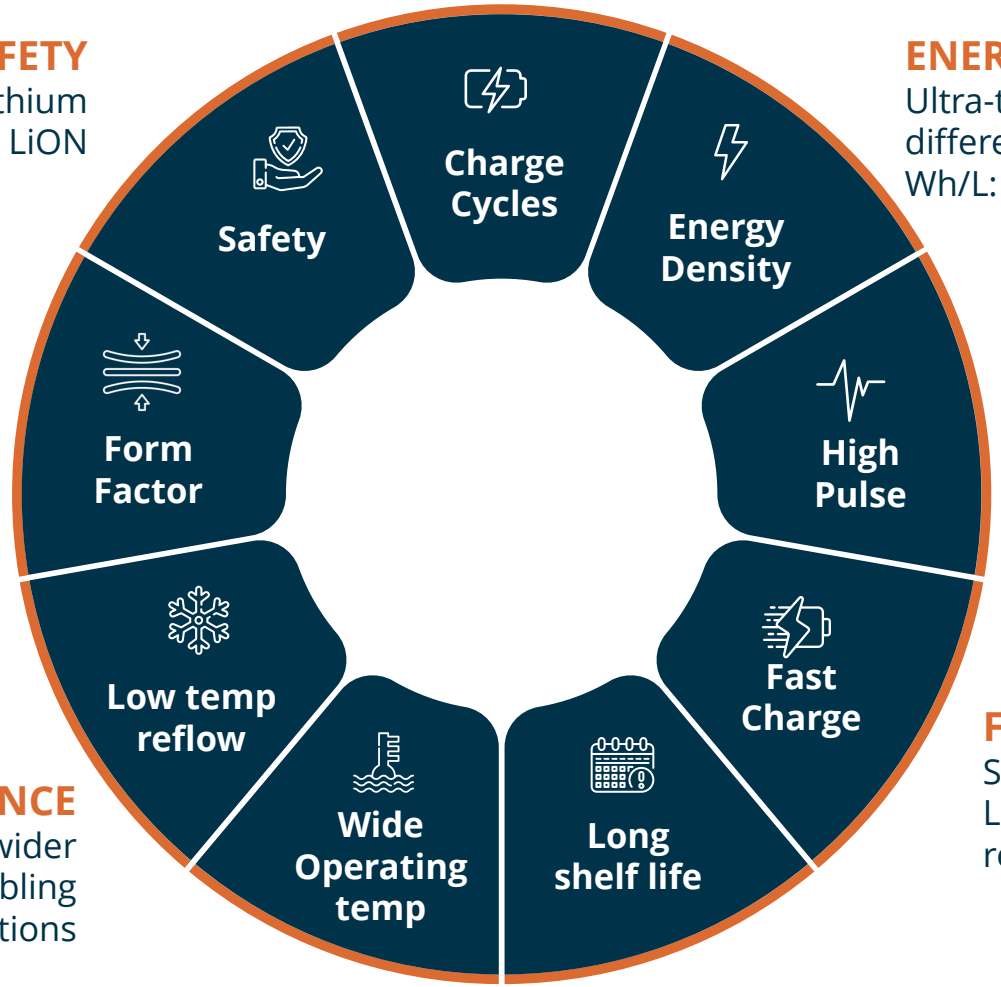
Value Propositions Driving BOTH Strategic and Customer Engagements

SAFETY
Solid state lithium safer than LiON

ENERGY DENSITY
Ultra-thin steel enables differentiated energy densities
Wh/L: energy per unit of volume

FORM FACTOR FLEXIBILITY
Ultra-thin steel enables many innovative shapes and forms ideal for wearables and hearables

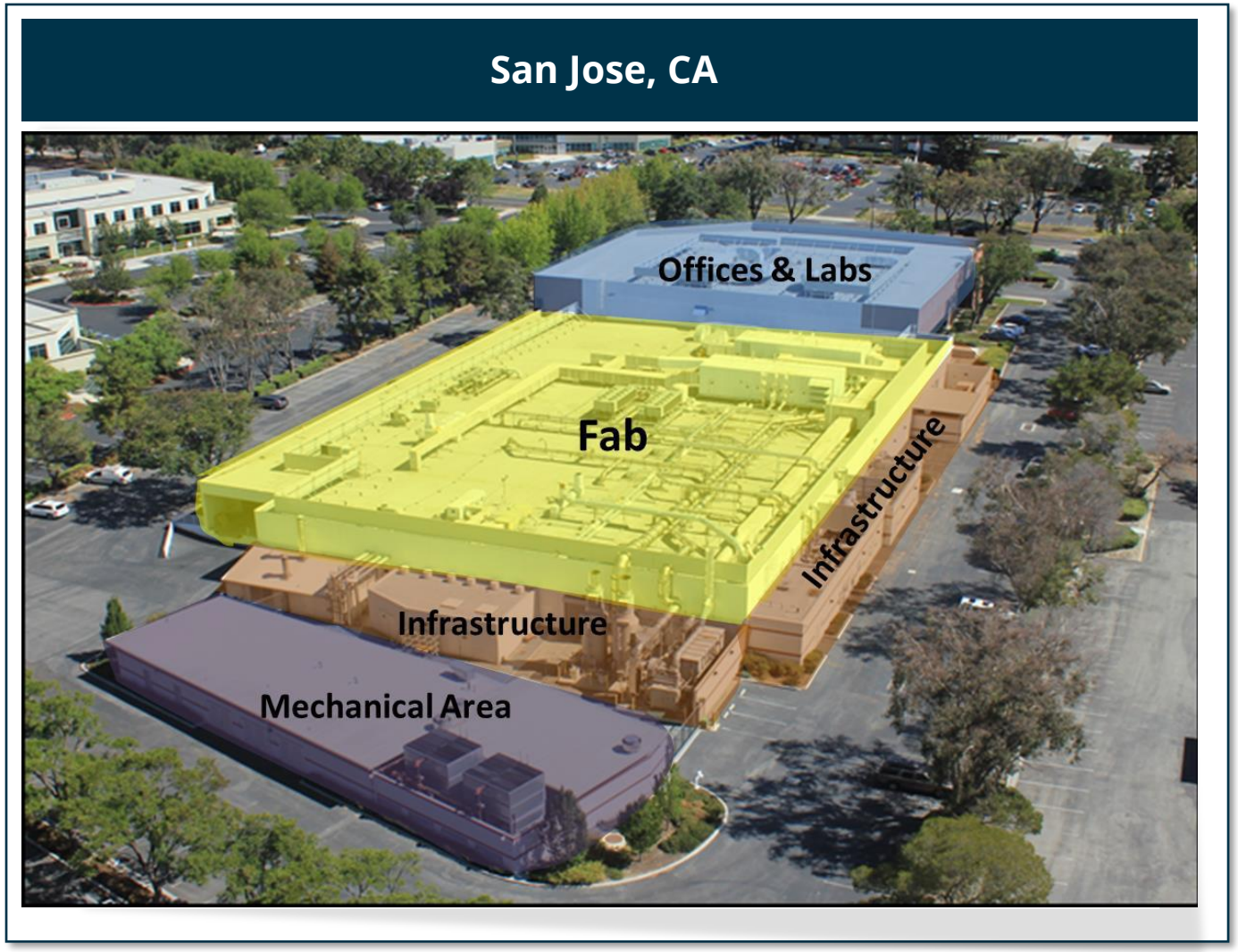
HIGH DISCHARGE RATES
Enables large amounts of current for short intervals of time



TEMPERATURE TOLERANCE
Solid state lithium can tolerate wider temperature ranges enabling implementation in molded applications

FAST CHARGE
Solid state is three times faster than Lithium Ion reducing time to recharge battery

Manufacturing facility in San Jose, California



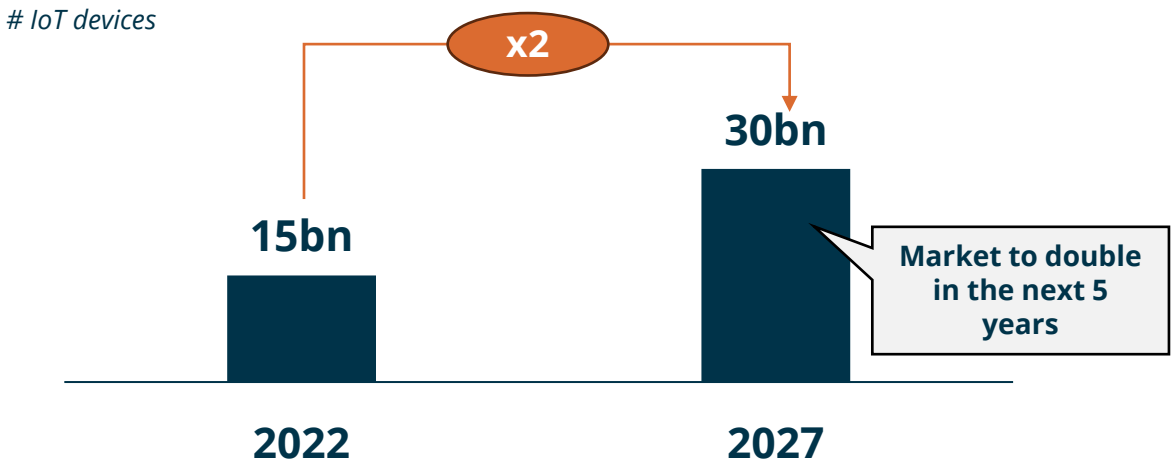
20,000 ft^2 (2,000m^2) cleanroom

70,000 ft^2 (6,500 m^2) office and labs

Class H5 manufacturing facility

Market opportunity

Growing market for IoT



- IoT devices, e.g. hearing aid, sport and wearables, medical and connected devices for home and industrial purposes
- Typical device architecture is a system on a chip, radio, sensor/speaker, battery/energy harvesting solution
- Ubiquitous addressable market necessary for the future of machine learning (ML) and artificial intelligence (AI)

Today's battery technology is a weak link

- **Charge frequency and charging time**
- **Degradation and lifespan**
- **Flexible form factor**
- **Fire hazard**

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

Targeting Wearables, Hearables and Connected Sensors (IOT) markets

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. current players

- **Fast charge → 3x**
- **High pulse discharge → 5x**
- **Charge cycles → 2x**

billion+ units market opportunity

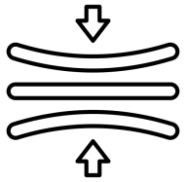
** mAh and microbattery refer to 1-100 mAh capacity required by a range of personal electronics, medical devices and IoT connected sensors*

The evolution of battery technology

Doubling of energy density as the driver

- Lead acid batteries until the 1900s
- Nickel based batteries for the next 90 years
- Sony camcorders and cameras with rechargeable liquid lithium batteries in 1992
- Tesla and the EV market industrializes liquid lithium technology

Solid state lithium is the most promising of five new coming battery technologies

- 2-3x increased energy density
- 
- 3x faster charge time (80% within less than 20 minutes)
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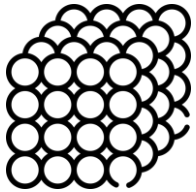
- 3x charge cycle
- 
- No flammable electrolytes
- 
- Flexible form factor
- 
- 5x higher pulse discharge rate
- 
- Higher operating temperature range
- 

Innovative microbattery architecture

Ultra-thin 10µm 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

Go To Market

- Started working with flexible stainless ultra this steel – 2005
- Advanced the competence with a USD 100m state of the art manufacturing process plant
- Merged superior ultra this stainless-steel competence with batter technology know how
- First out with single layer solid state micro battery 2021
- Shipped 11- layer batteries to customers
- 1st of more to come patents on solid state micro batteries
- On schedule to start volume deliveries this year to supplier of health rings for women

Ensurge in the competitive landscape

Direct quotes from the Head engineer of a US tier 1 consumer electronics company at the last update meeting in July 2023 on Ensurge's battery technology

"Having worked in (and followed) the battery space over the last 20 years, you must have seen it all. It would be great to get your take on where we are. "

"I have been responsible for the research and evaluation of about 150 battery technology companies, and we have ended up "investing" in only ten of them. Of those ten I would say five are long shots, and five have a reasonable degree of success."

"Ensurge falls into the latter category. What sets you apart is your reasonable and practical technology roadmap, devoid of any reliance on mystical or unattainable concepts. By steadfastly adhering to the use of stainless steel and employing a meticulous architecture and stacking process, Ensurge has significantly increased the likelihood of meeting our performance and timing requirements"

"Provided a continuous progress as scheduled it will open up an opportunity for us to establish a mutually beneficial financial partnership."

Ensurge going forward

Phase 1 : Establish the proper financial foundation

- Make multi-layer batteries available for customer and technology partner testing
- Obtain governmental grants and put the company on track for increased funding support
- Sub-lease use of machine-park and offices not in use
- Secure funding well into 2024
- Start delivery to production order
- License out battery technology to technology partners

Phase 2: Streamline the company to be a battery technology incubator

- Optimize current technology for much greater energy density (2-3x)
- Add new substrates to product portfolio with leapfrogging performance
- Expand licensing business model

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	2x	2-3x	2x	⊘	Rectangle ultra thin
vs.					
 Li-ion button cell	1x	1x	1x	⊗	Thick circle

Scale via roll-to-roll fabrication

precision stacking & encapsulation

Microbattery product platform

Summary

First Solid-State mAh & 10's mAh Microbattery

Roadmap fits the $B market needs

- Significant 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