



endpoint intelligence

# Key to the Future of Electronics

Fumihide Esaka  
Chairman and CEO



# Today's IoT Endpoints

Plugged into the wall

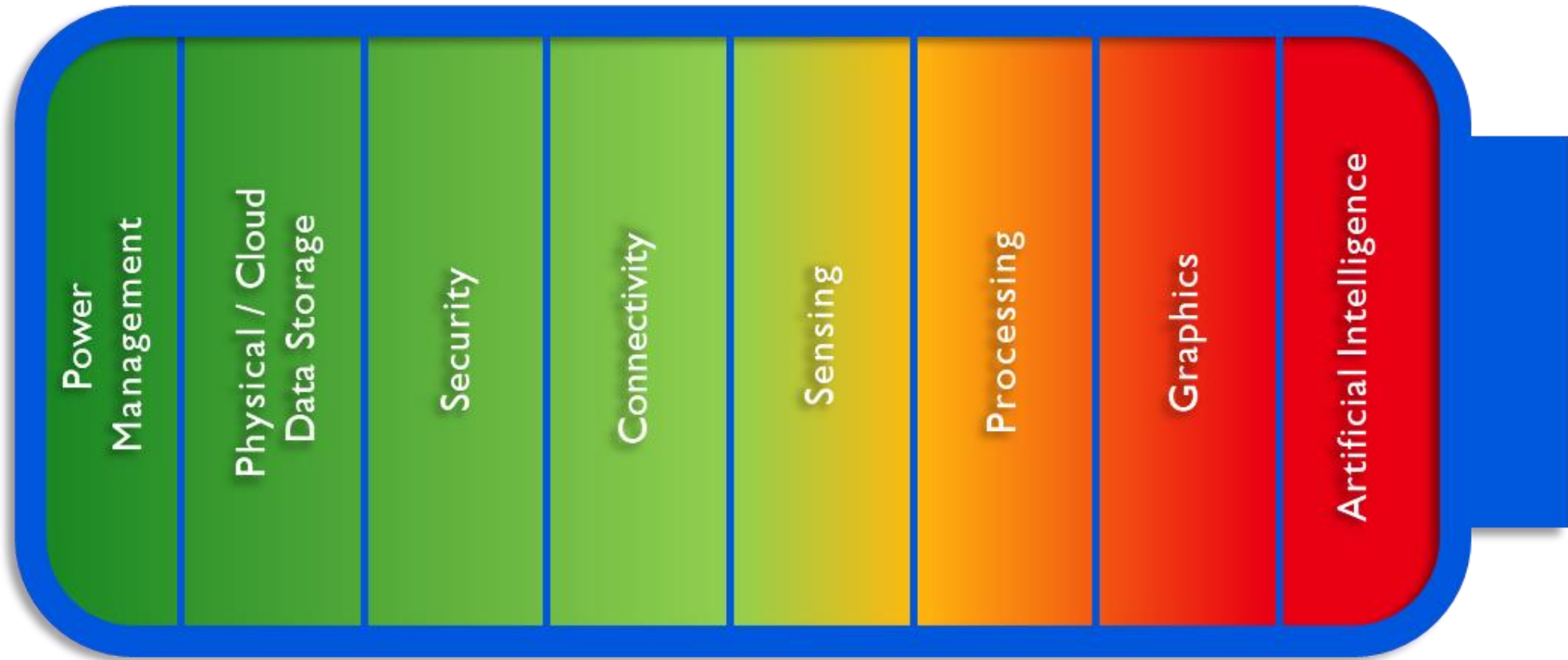
Constant or frequent charging

.....



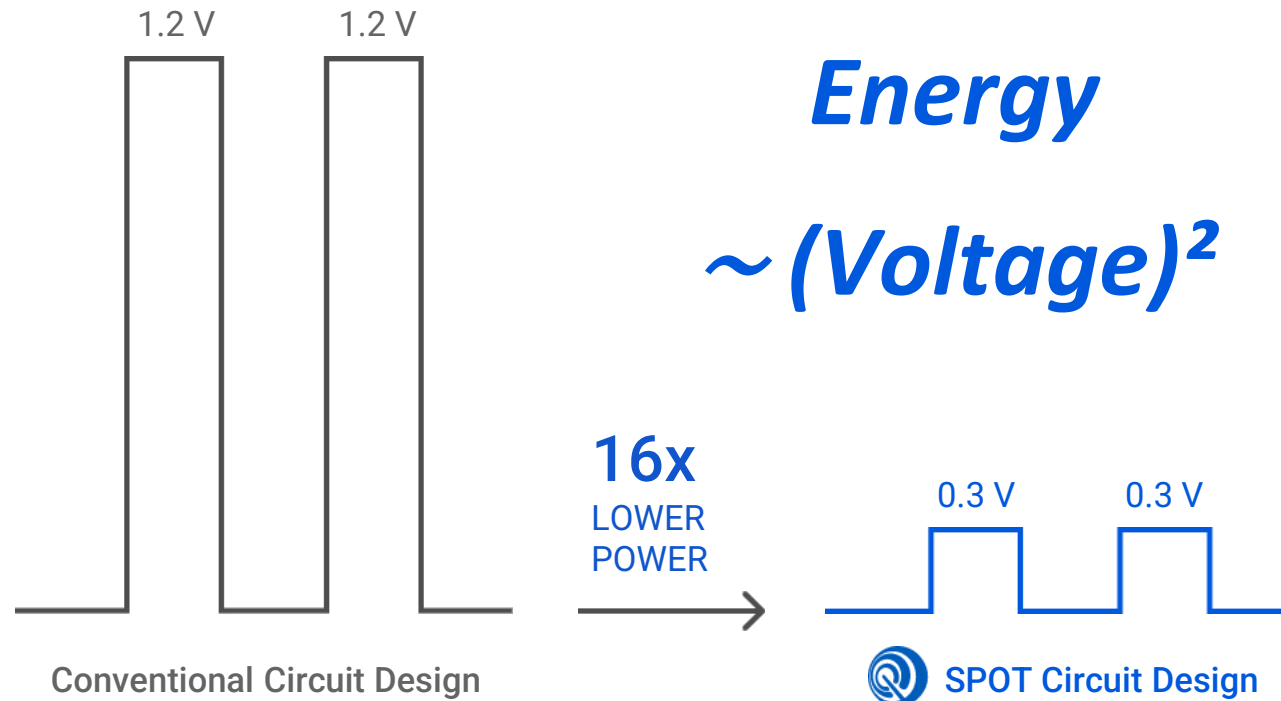
# Power!

# Power Usage is a Key Consideration in Today's Increasingly Complex Electronic Systems



# SPOT<sup>®</sup>

## Subthreshold Power-Optimized Technology Enables Subthreshold Design



Subthreshold design requires  
overcoming complex  
challenges...



Process  
Variations



Voltage  
Fluctuations



Temperature  
Fluctuations

...Which SPOT has  
overcome and mastered



Launched Versa 4, Sense 2 and Inspire 3 in August 2022

Apollo4 powers Inspire, Versa and Sense product lines Fitbit

**Multi-day battery life, even when on "always on" display"**

Supports next-gen features such as Afib detection, stress, GPS, blood oxygen and heart-rate



Launched Fenix Watch 7 Series in January 2022

Apollo3 powers Garmin's Fenix series, which competes with the Apple Watch Ultra

**Fenix series has a battery life of almost two weeks under normal use**

Ambiq performs complex algorithmic & AI-based sensor processing locally while using little power



Launched Watch 2 Series in July 2021

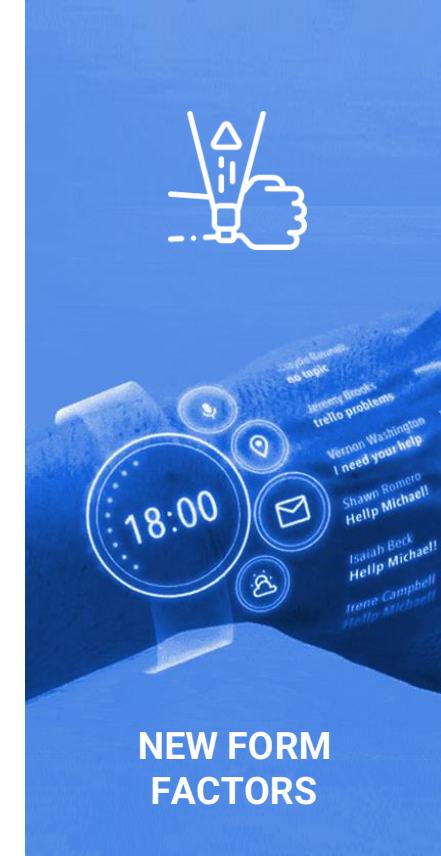
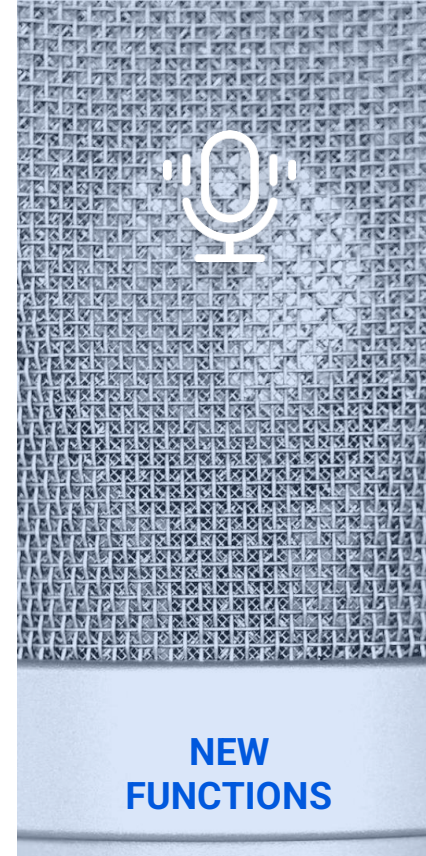
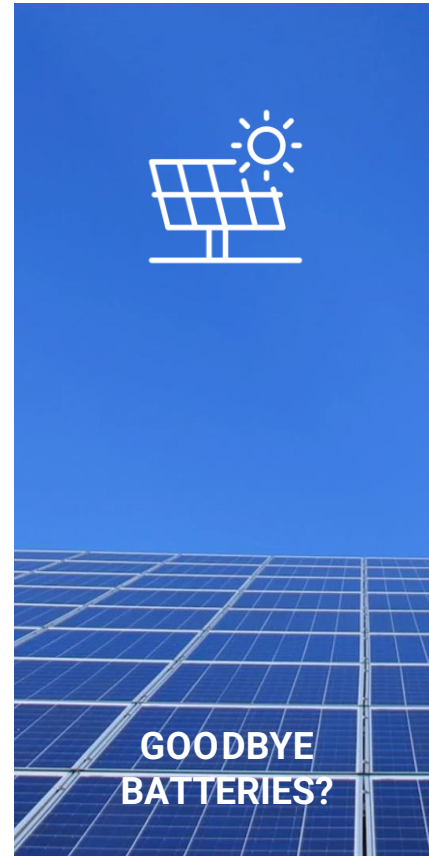
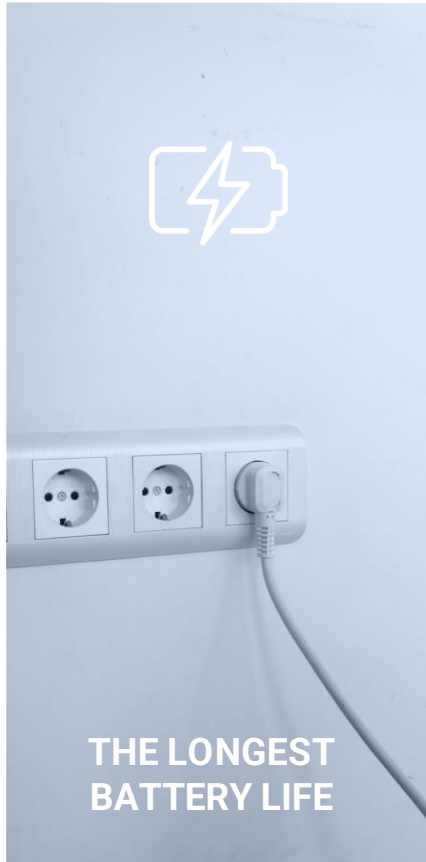
Custom Apollo4 chip developed in partnership with Oppo

Apollo4 sits next to Qualcomm Snapdragon for compute offload

**Enhanced battery life to 4 days; 16 days on power save mode**

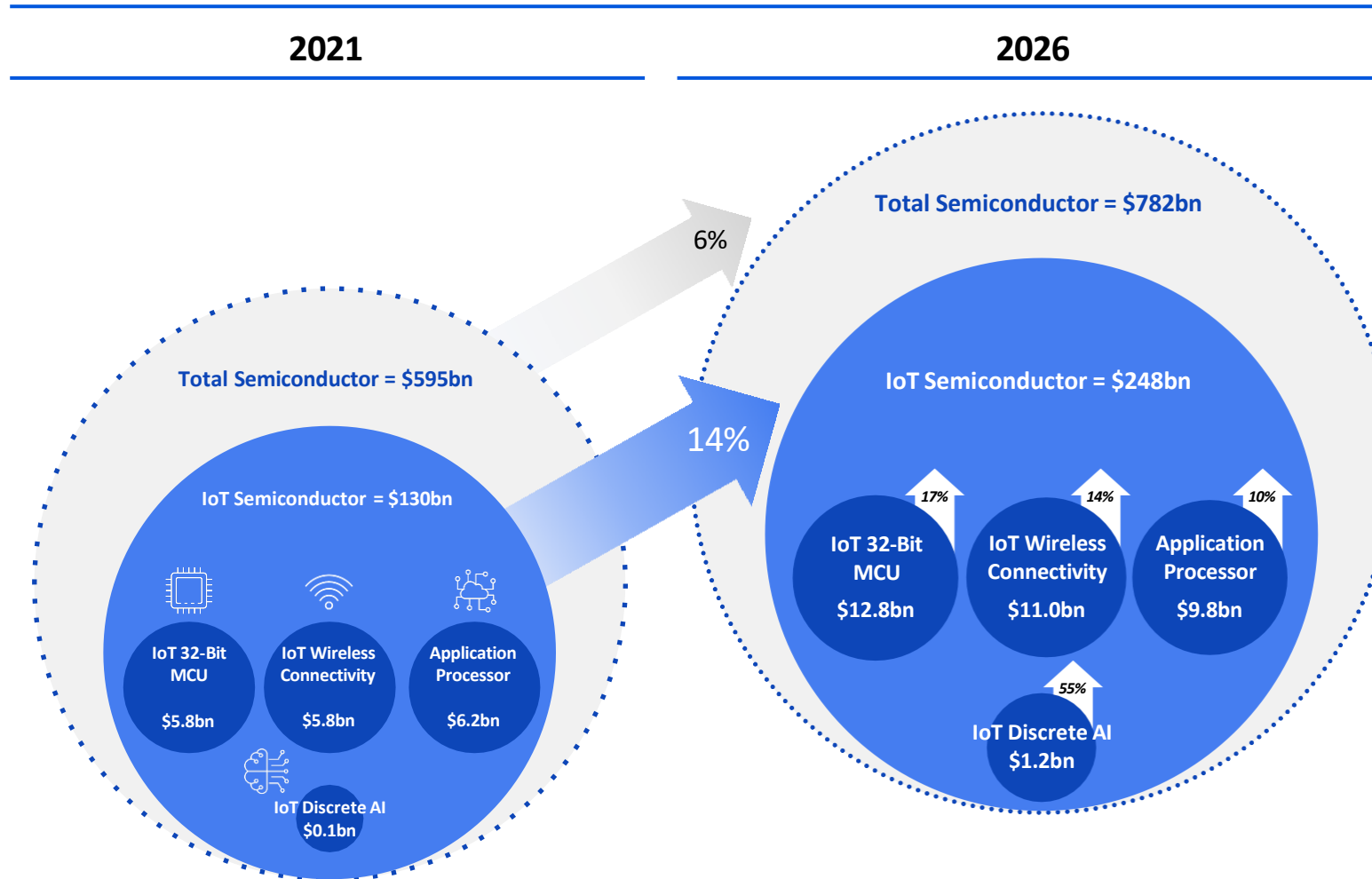


# The Possibilities of Energy Efficiency for IoT Endpoints



# Large and Growing TAM

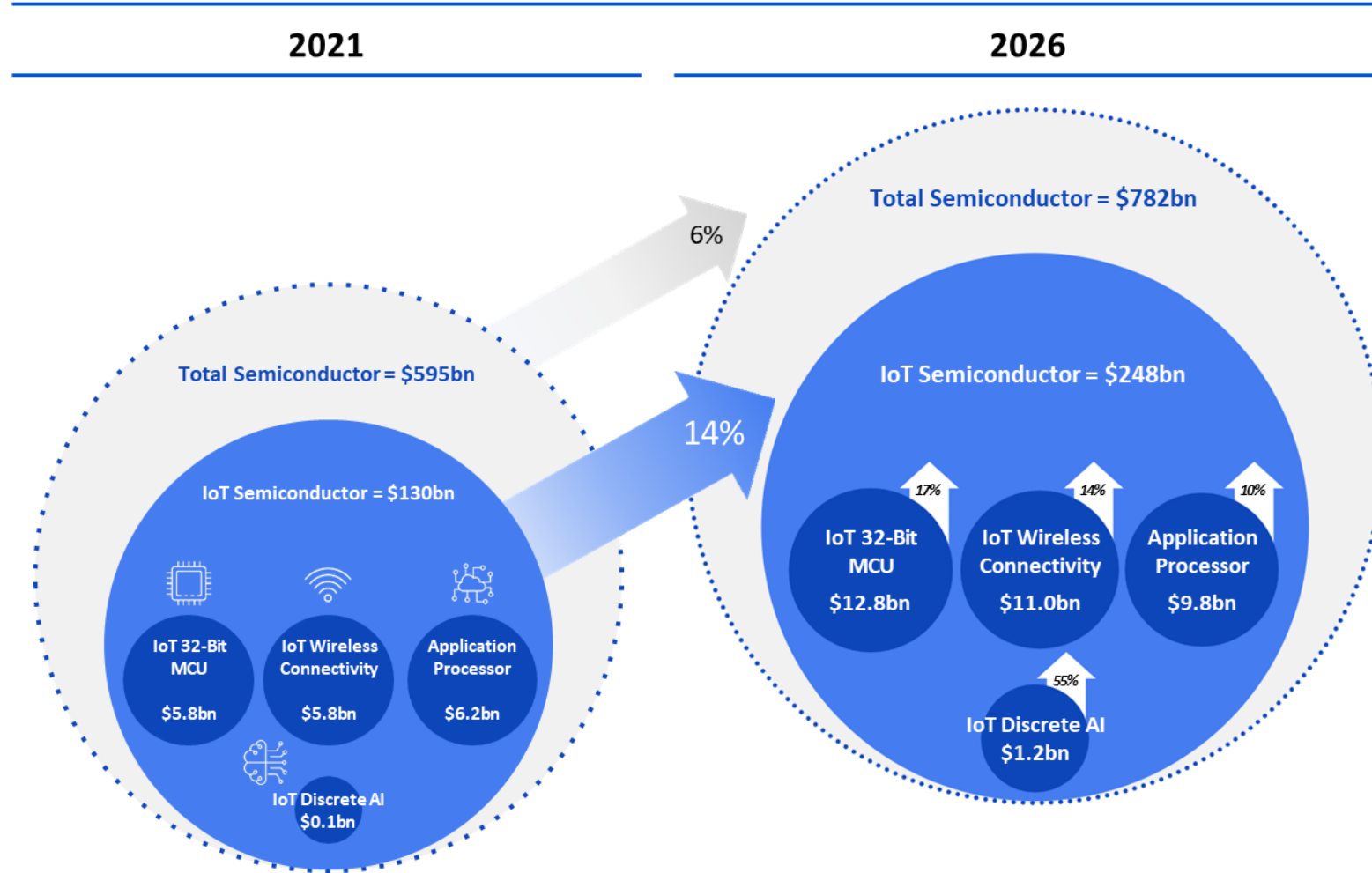
## IoT Semiconductor Market



Sources: Gartner's Forecast: AI Semiconductors, Worldwide, 2020-2026; Forecast: IoT Semiconductors, Worldwide, 3Q22 Update; Semiconductor and Electronics Forecast Database, Worldwide, 3Q22 Update. Calculations performed by Ambiq Micro, Inc.



## IoT Semiconductor Market



Today

2023 – 2025

Future



### Wearables & Hearables



Wrist Worn



Ear Worn



Clothing



AR / VR



Other

### Smart Home & Buildings



Security & Safety



Entertainment



Energy Management



Comfort & Lighting



Speakers



Voice Gateways

### Industrial IoT



AR / VR



Agriculture



Healthcare



Retail



Automation



Utilities



Oil and Gas



Smart Cities

### Automotive



In-Cabin



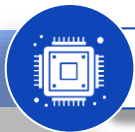
Sensors



Infotainment



Other



**Pioneer of Ultra-low Power Semiconductor Products**



**Leading Provider of Wearable and Hearable Technology**



**Technology Extensible to Other High-growth End Markets**



**Large and Growing Market Opportunity in IoT Semiconductors**



**Scalable Design and Strategic Relationships with Foundry Partners and ODMs**



**Experienced Management Team Backed by Leading Investors**

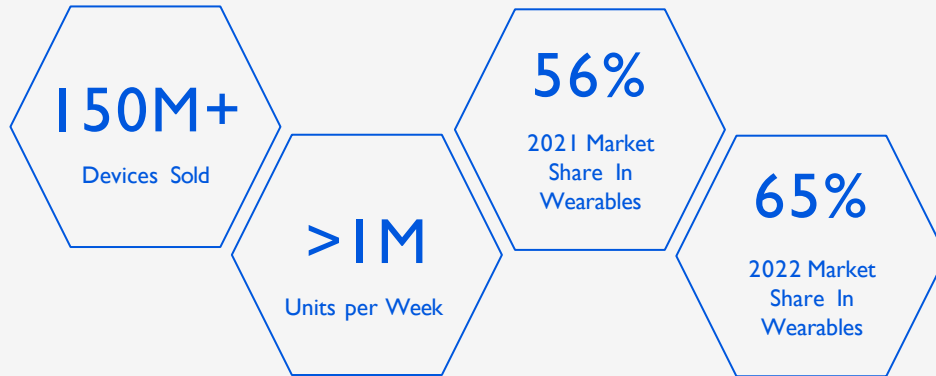


**Proven Track Record of Strong Growth with inflecting Margin Profile**

To enable intelligent devices  
everywhere by developing  
**the lowest-power  
semiconductor solutions**  
to drive a more energy-  
efficient, sustainable, and  
data-driven world



# Supporting Category Leaders



## Wearables & Hearables



## Emerging Verticals







**BIG INNOVATION**  
2021 & 2022



**AI**  
Excellence  
Award 2021



**IOT SEMICONDUCTOR**  
of the Year, 2021



**ASIA-PACIFIC STEVIE 2022**  
for Innovation in  
Technology and for Most  
Valuable Innovation Award



**AMERICAN BUSINESS Silver  
and Bronze 2022**  
for Achievement in Product  
Innovation



**INTERNATIONAL Silver and Bronze  
2022** for Most Valuable Technical  
Innovation and for Achievement in  
Product Innovation



**2022 BUSINESS  
INTELLIGENCE GROUP**  
Executive of the Year



**STEVIE FOR  
WOMEN IN  
BUSINESS 2022**  
Finalist



**FASTCOMPANY**  
2022 World-  
Changing Ideas  
Visionary



**FASTCOMPANY**  
2022 World-  
Changing Ideas



**MARCOM 2022**  
2 Platinum and 1 Gold for  
Best Website, Content, Video, and PR



**BULLDOG PR 2022**  
PR Award 2022 Best Brand Launch, Best PR and  
Communication, and Best Thought Leadership Campaign



**EXCELLENCE 2022**  
Executive of the Year  
Public Relations Department of the Year



**FMS 2020**  
Best of Show for  
Applications



**INTELLYX**  
2022 Digital  
Innovator



**Fumihide Esaka  
Scott Hanson**



**TITAN 2022**  
1 Platinum and 2 Gold  
for Engineering, Technology and Science, and  
Most Innovative Company of the Year



**INTERNATIONAL**  
Innovation 2021



**HUAWEI  
QUALITY AWARD**  
2020, and 2021



**HUAWEI**  
CBG Supply Guarantee



**HONOR**  
Sailing Together





I don't want to spoil it but...  
**We did it again!**

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All details  
1.12.23

# Thank you

