Tower Semiconductor

Where **Analog** and **Value** Meet

First Quarter 2024 Financial Results Conference Call

Supporting Slides

May 9, 2024

Safe Harbor

This presentation contains forward-looking statements within the meaning of the “safe harbor” provisions of the Private Securities Litigation Reform Act of 1995. These statements are based on management’s current expectations and beliefs and are subject to a number of risks, uncertainties and assumptions that could cause actual results to differ materially from those described in the forward-looking statements. All statements other than statements of historical fact are statements that could be deemed forward-looking statements.

For example, statements regarding expected (i) customer demand, (ii) utilization and cross utilization of our Fabs, (iii) demand from our end markets, (iv) market and technology trends, and (v) results regarding revenues, cash flow, margins and net profits are all forward-looking statements. Actual results may differ materially from those projected or implied by such forward-looking statements due to various risks and uncertainties applicable to Tower Semiconductor’s business as described in the reports filed by Tower Semiconductor Ltd. (“Tower”) with the Securities and Exchange Commission (the “SEC”) and the Israel Securities Authority (“ISA”), including the risks identified under the heading "Risk Factors" in Tower’s most recent filings on Forms 20-F and 6-K. No assurances can be given that any of the events anticipated by the forward-looking statements will transpire or occur, or if any of them do, what impact they will have on the results of operations or financial condition of Tower Semiconductor.

In addition, some of the financial information in this presentation, is non-GAAP financial measures, including, but not limited to, EBITDA, Cash, debt and Net Cash. These non-GAAP financial measures have the same definition as appear in our previously filed quarterly financial results related announcements and/ or other public filings.

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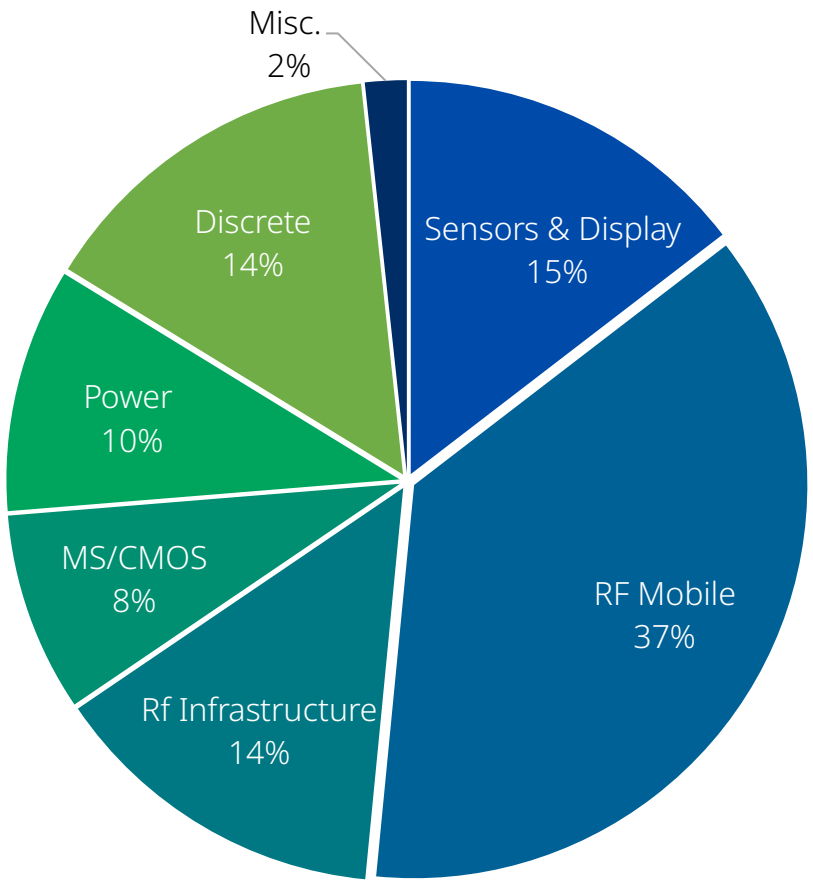
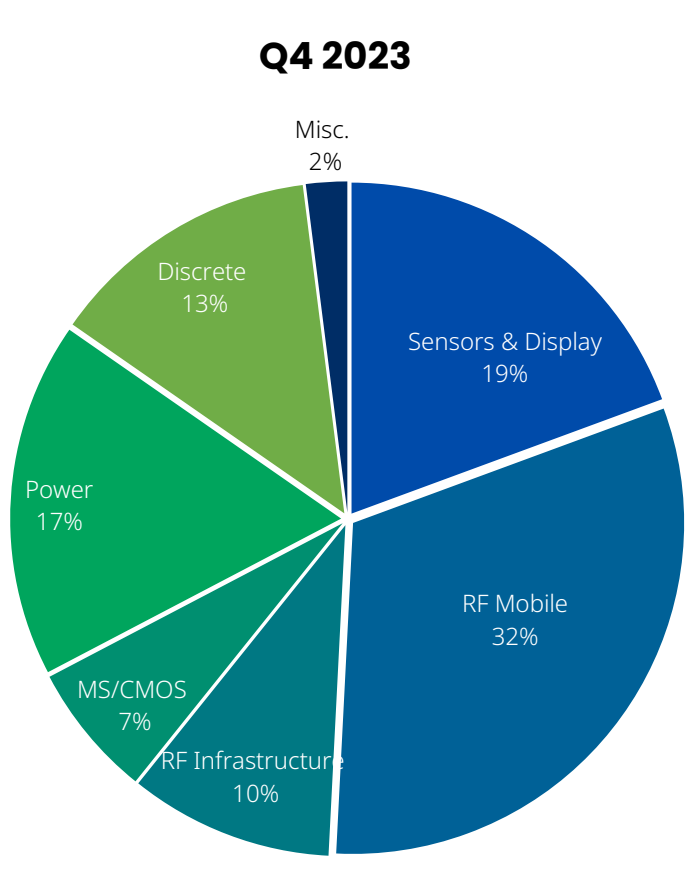
Q1 2024 Revenue Breakdown by Technology



Automotive: 10%



Automotive: 12%

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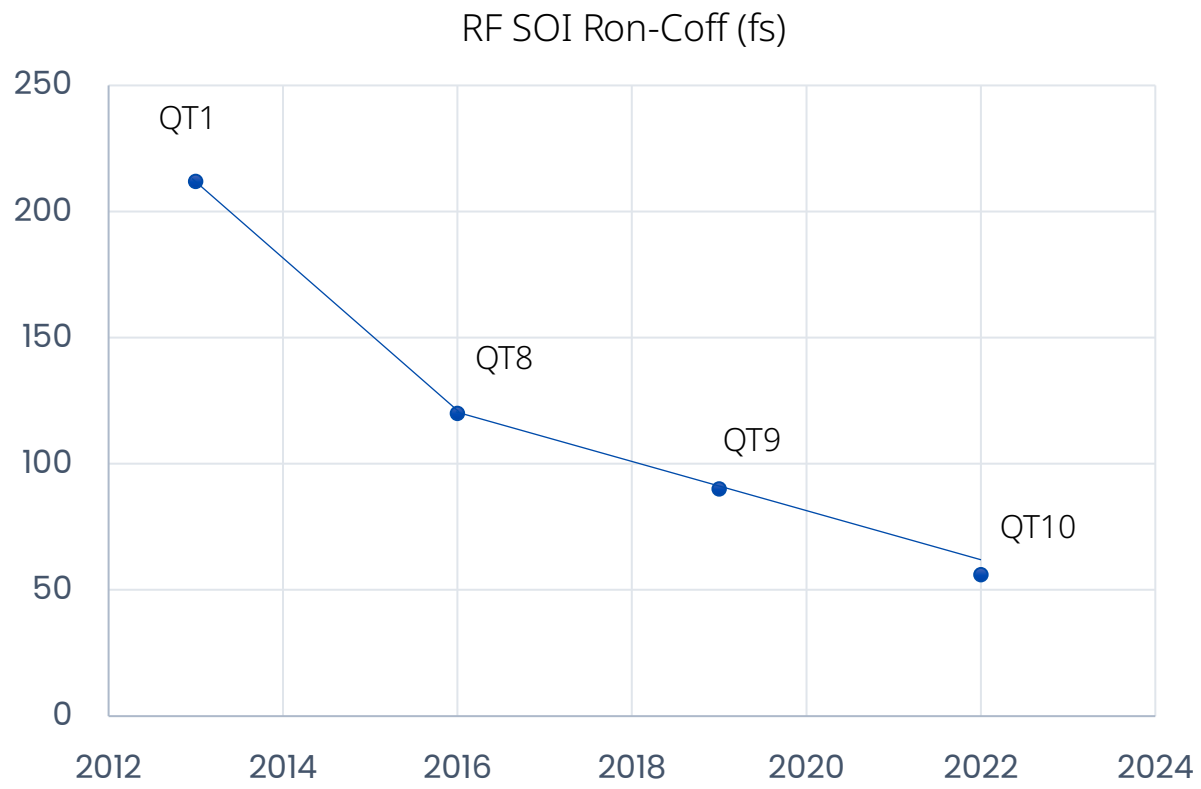
Tower RF SOI Technology



- 200mm and 300mm wafer sizes
- 180nm to 65nm nodes
- 4 facilities in high volume + qualifying Agrate
- Best-in-class FoM and roadmap with low Ron-Coff and high-power handling

Tower SiPho Serving a Gamut of Applications

Pluggable transceivers
DR/FR/LR

Pluggable transceivers
ZR/ZR+

Quantum Applications

Artificial Intelligence

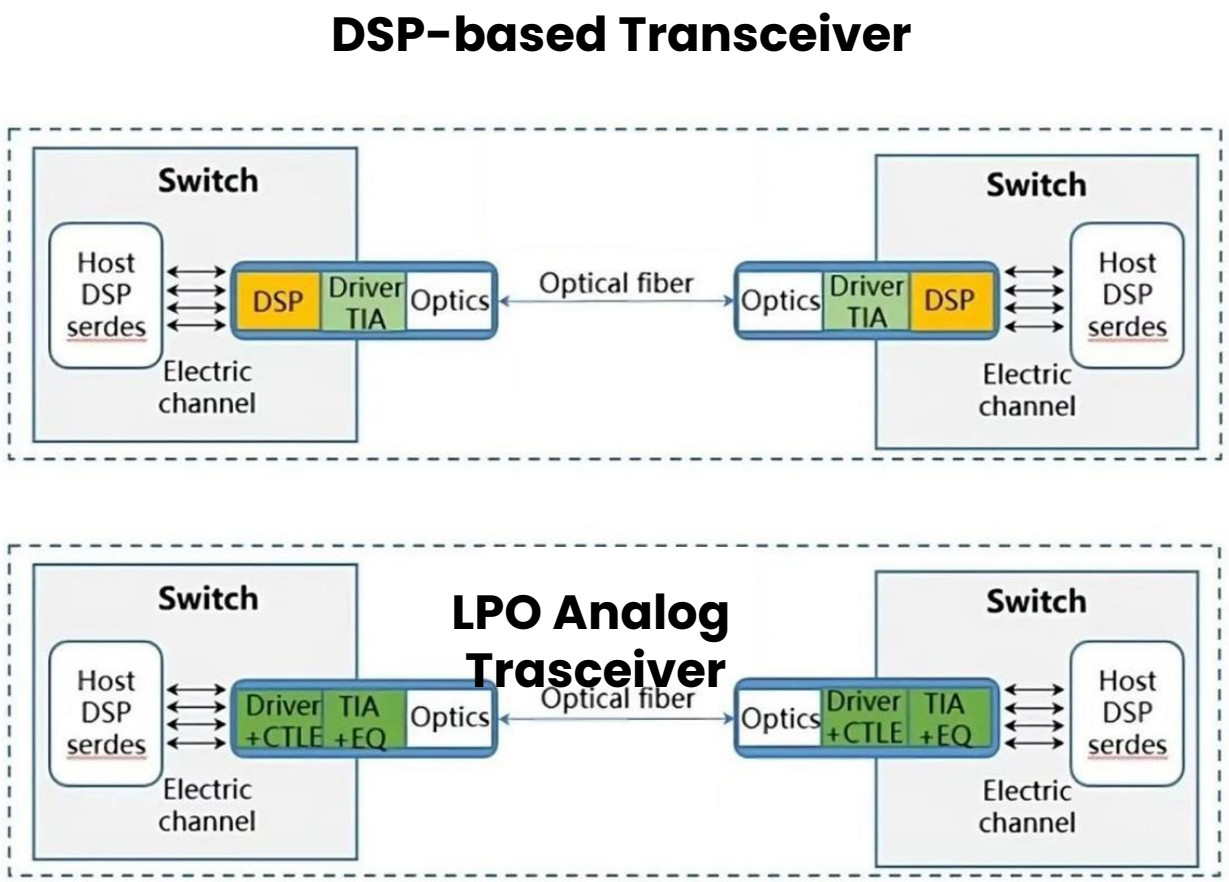
Gyroscopes

FMCW LiDAR

Co-packaged Optics

Biosensors

Linear Pluggable Optics Replace the DSP with SiGe-based Redrivers and TIAs



Source: Ruijie Networks

Linear Drive (no DSP)

Lower Cost

Lower Power

Lower Latency

Larger market for SiGe

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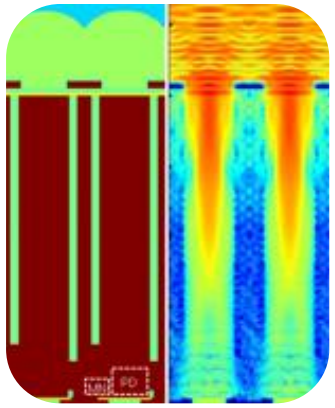

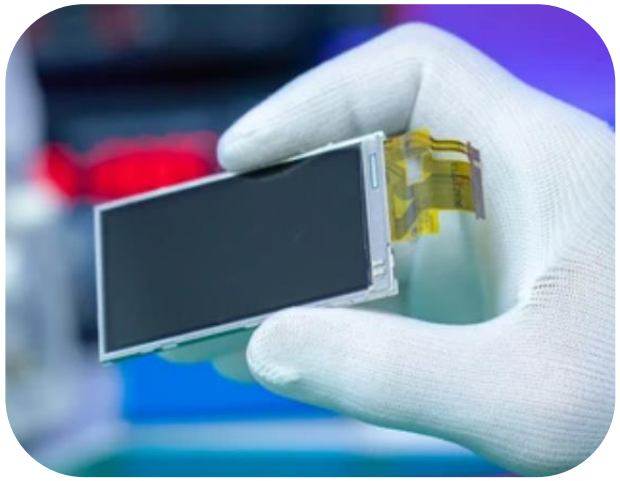

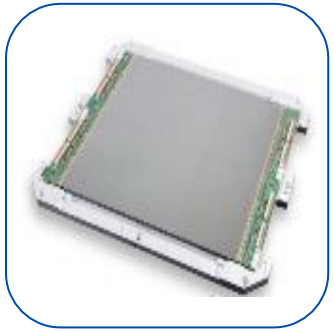

Sensors & Displays Development Activities

- Next Generation Stacked BSI Global Shutter pixel platforms:
  - 2.74um for High Resolution stitched sensors (100Mp to 325Mp)
  - 2.2um for low to medium resolutions (from 2Mp up to 50Mp) with high shutter efficiency
- Fast Stacked BSI Rolling Shutter stitched pixel platform for next generation high-end photography Full Frame sensors
- Medical X-Ray stitched lean flow on 300mm to compete with IGZO technology, alongside with next generation pixel platform based on edge photo-detection for next generation CT
- Low leakage high voltage (8-10V) unique platform for CMOS backplane for micro- OLED displays (OLEDoS) for VR headsets.

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Tower BCD offering by voltages

Available

In development

Markets

48V

Industrial & Automotive

Isolated gate drivers
Digital Isolators
High voltage motor
GaN and MOSFET gate drivers
Automotive BMS (battery management system)
48V system power solutions

Mobile devices

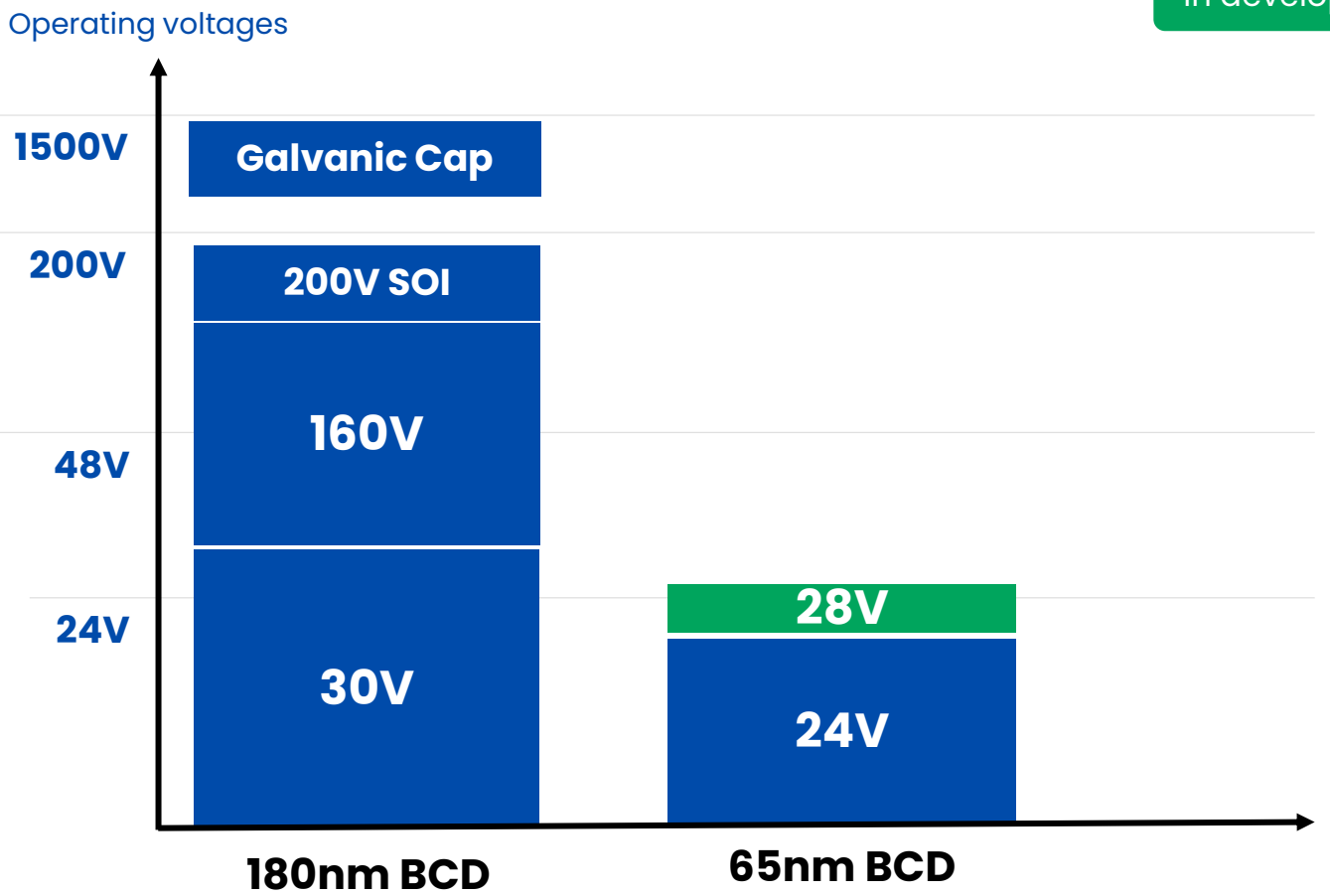
USB-C
PMIC
Audio
Haptic IC
BMS

CPU & GPU

PCIe & Server power supplies

Consumer Electrification

Motor driver
BMS
DCDC converter
Active fuses



180nm BCD

- RESURF technology bulk inc. DTI platform
- SOI process
- Galvanic capacitor
- Dual manufacturing sites

65nm BCD

- High modularity Platforms (Isolation, Devices, BE, Mask count)
- Aggressive developments & roadmap for 3rd Gen, Smart power & Analog enhancements
- Dual operations sites

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Thank You

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