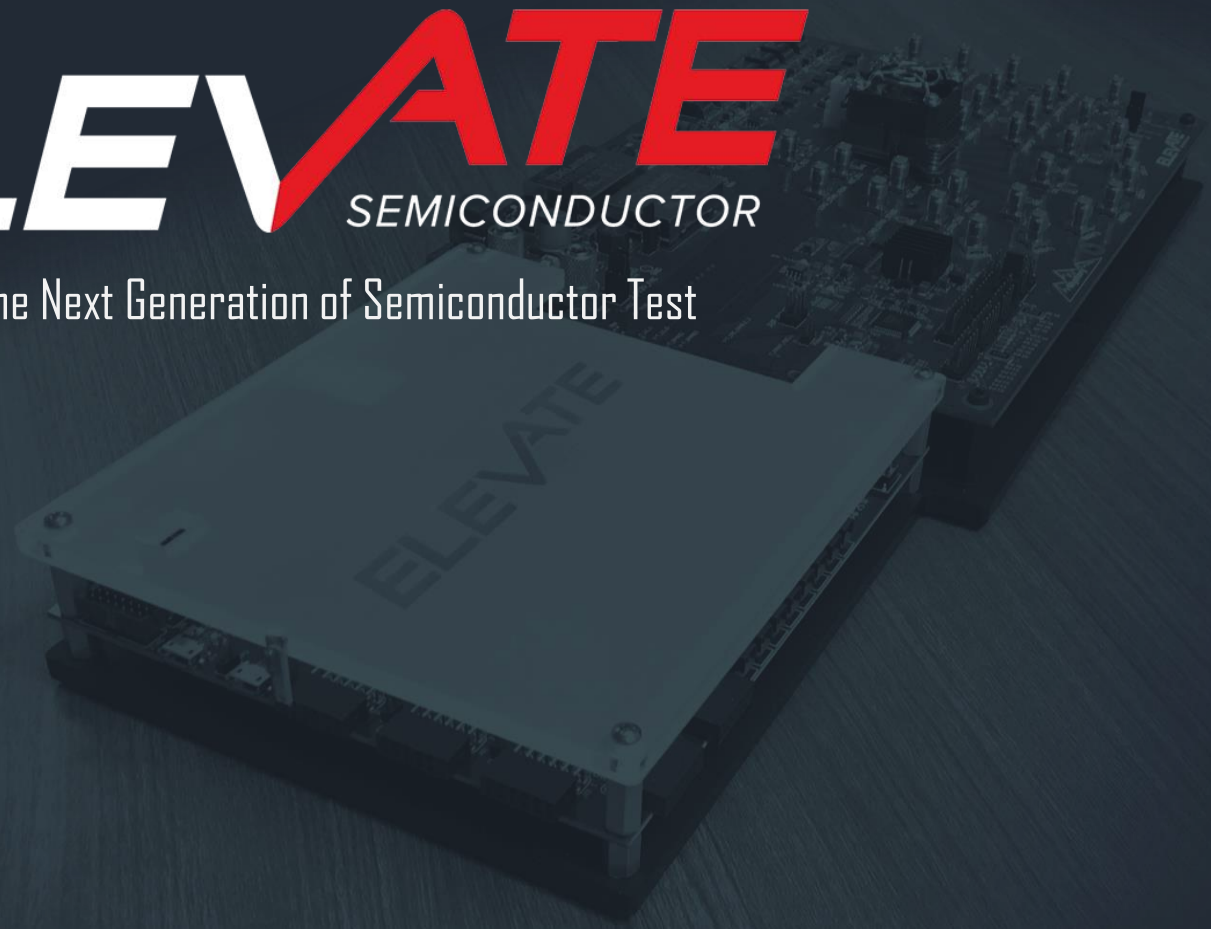
ELEVATE

SEMICONDUCTOR

Powering the Next Generation of Semiconductor Test



Thank You Salland!

THE FUTURE

Autonomous Automobiles

Smart Cities

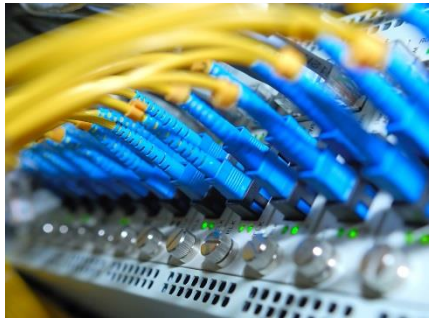
Personalized Medicine

TECHNOLOGY

Required To Provide This Future

Capture/Drive Data

Process this Data



Communicate this Data

Store this Data

(Locally and on Cloud)

DEMANDS ON TEST

TECHNOLOGY

Test must keep up with the new technology

- Need to keep up with higher speeds & disparate technologies MIPI, 5G (FR2), OTA test, System Test
- Lower Voltages mean greater DC accuracies needed
- Higher power devices demand higher density power, LV means load step response is critical.
- Automotive, Aeronautic and Industrial demand higher voltage

COST

Test must remain cost effective

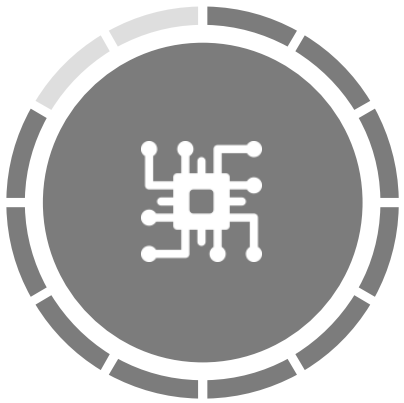
- ASPs in general will drop, while volumes increase making COT a larger % of COGS, so COT must come down.
- Low value products like MEMS sensors need to be tested efficiently
- Need greater number of digital pins, DPS and VI pins to drive greater throughput via multisite test.
- These pins need to be configured for high throughput and high efficiency.

WHO IS ELEVATE

We are a company that endeavors to solve current test needs, anticipate future test needs and provide a reasonable solution to our customers.

The following slides give examples of how Elevate is helping to enable ATE to keep up with the demands of the future.

OUR CORE FOCUS



Innovation

Our focus is ATE. We are a driving force in the development of new ATE technologies today and into the future

Quality

Elevate stands behind our products and back it with a quality assurance program and services soon to be ISO certified

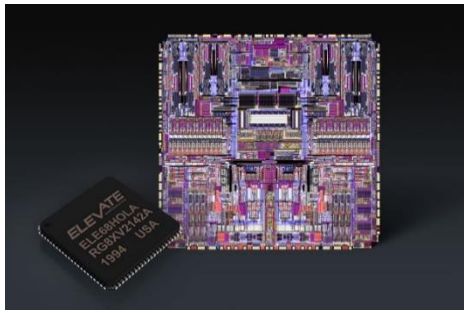
Flexibility

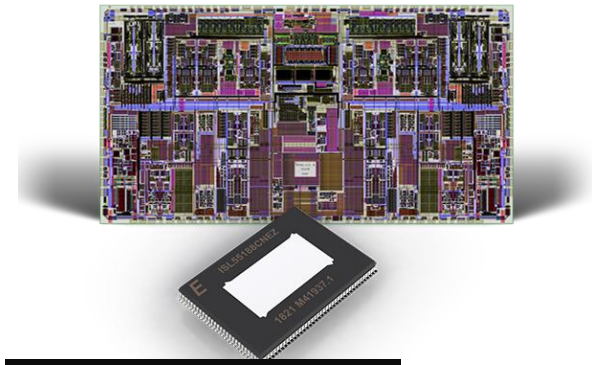
We offer numerous ways to do business, conform to the models of our customers. We are the only company developing fully customized solutions

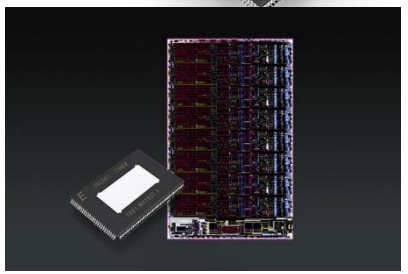
Elevate - First To Market

Elevate was first to introduce:

- The first **SOC Pin Electronics for ATE.** The Worlds first SOC Dual Channel Pin Electronics Driver/Comparator/PPMU/Timing Deskew/DACs
- The first **High Voltage CMOS Integrated SOC** Designed specifically for the automotive and aeronautics industries
- The first **Dedicated Fully Integrated Octal DPS** Designed specifically for high density DPS applications
- The first **Fully Integrated Octal Timing Generator and Pin Electronics** Designed for one of our partners



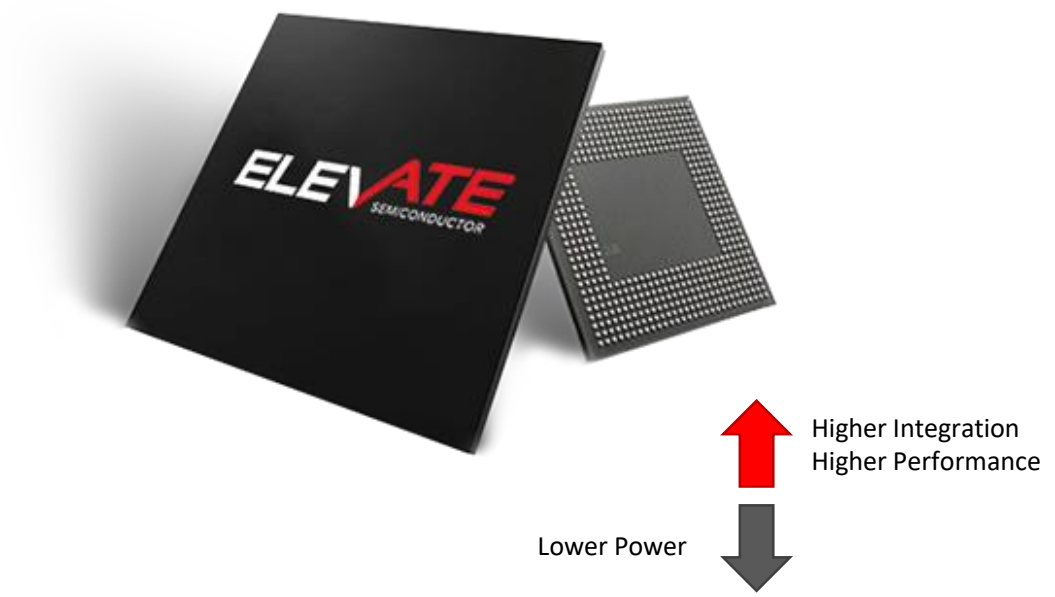




GENERAL NEEDS

High Integration requires

- Low power to maximize number of channels per board.
- High speed interfaces so programming does not bog down run times.
- Per Channel monitors so data collection is fast.
- High efficiency so high density DPS/VI does not require active power management per channel.
- Active clamps and thermal management for HV solutions.



HIGHER PERFORMANCE + HIGHER INTEGRATION AT LOWER POWER

Highest Integration – Custom IC - 8 channel TOC

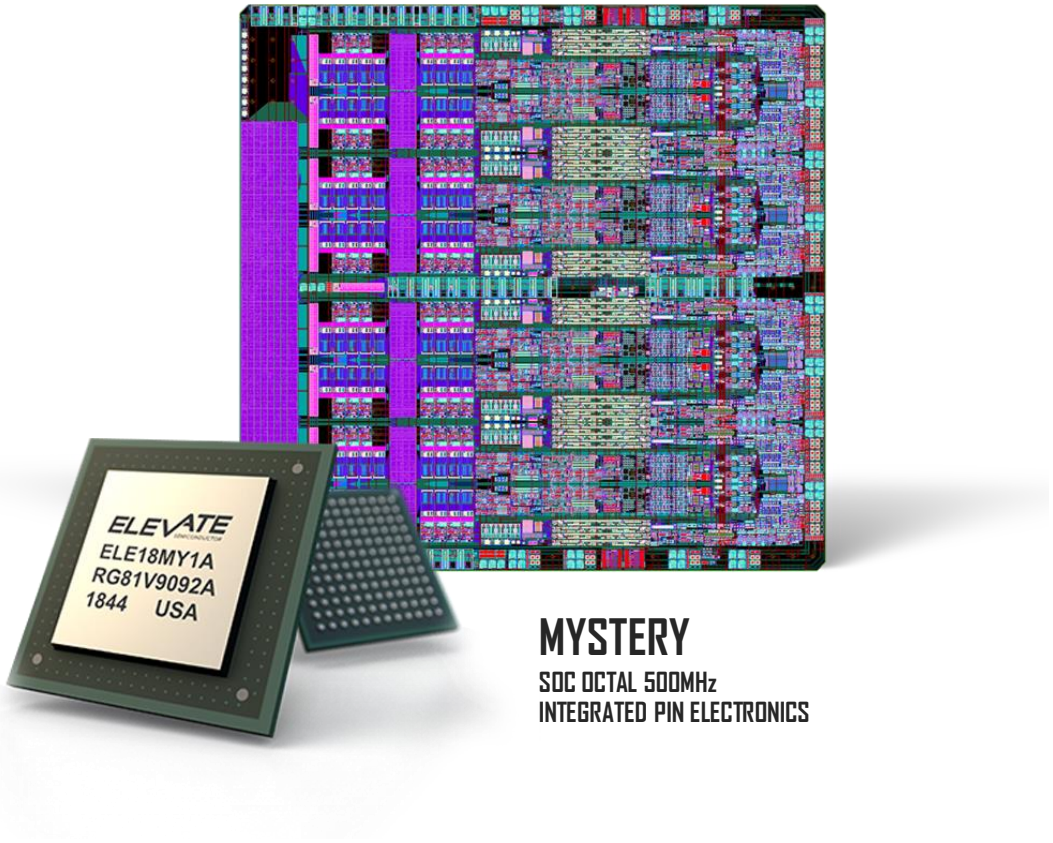
- Integrated Timing Generator with PE, PMU and active load and Integrated customer RTL
- 400mW/Ch

Highest Integration – Mystery – 8 Channel PE

- Integrated PE, PMU deskew and active load
- 500Mhz, 500mW/Ch
- Dual Channel SPI @ 100Mhz

High Speed Integration – Rainier – 8 Channel PE

- Integrated PE, PMU and active load
- 2.5Gbps, 500mW/Ch @ 1.6Gbps
- Dual Channel SPI @100Mhz



HIGHER INTEGRATION OF HIGH VOLTAGE DEVICES

High Integration - Automotive HV - 2 channel

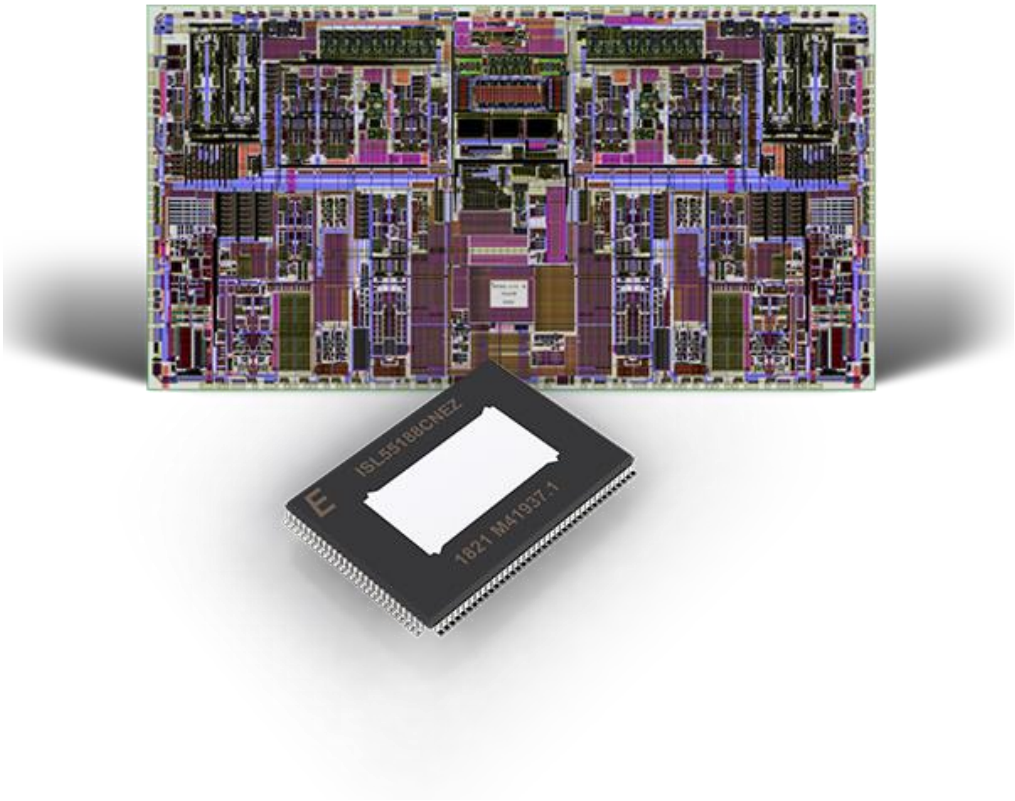
- Integrated HV PE, PMU and active load
- Integrated DACs
- Integrated Monitors per channel

Highest Integration – 8 Channel OLED

- HV PMU and Active Load
- Dual comparators per channel

High Voltage Integration – Whitney – 2 Channel VI

- HV 70V PMU
- DACs, MI, Monitors included.



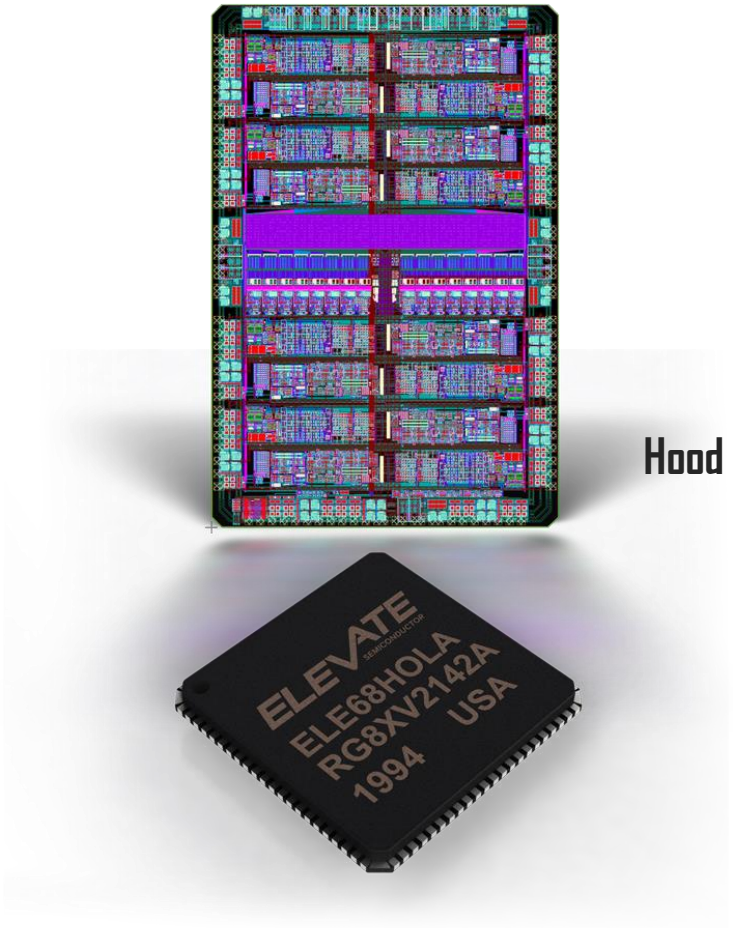
HIGHER EFFICIENCY

High Integration – DPS - 8 Channel – Memory/General

- Low power
- Hooks for high efficiency per channel eliminating complex power management of instrument.

Highest Integration – Mt. Hood – 8 Channel PPMU

- Low Power
- Hooks for high efficiency per channel eliminating complex power management of instrument.



STAYING AHEAD OF THE GAME

Technology is Changing at a Faster Pace Then Ever Before.

Elevate is a driving force within ATE. Technological advances within 5G, Aeronautics, Automotive and IOT are driving new applications and technology within the ATE market — Understanding these new technologies and our customers needs, then transforming that knowledge into new products is key for success at Elevate.

Thank You