>$2T Electronics Design & Manufacturing
Eco-SYSTEM

Without this.

None of these.
Gateway to the Electronics Supply Chain

$170B  Semiconductor Manufacturing

$477B  Semiconductor Revenue

$2T    Electronic Systems Revenue
Semiconductor Industry Outlook

ICs

<table>
<thead>
<tr>
<th>Year</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>$412B</td>
<td>$477B</td>
<td>$502B</td>
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</tbody>
</table>

Source: WSTS 8/18

Semiconductor Equipment

<table>
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<tr>
<th>Year</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>$57B</td>
<td>$62B</td>
<td>$64B</td>
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</tbody>
</table>

Source: SEMI 8/18

Semiconductor Materials

<table>
<thead>
<tr>
<th>Year</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
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<tr>
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<td>$47B</td>
<td>$52B</td>
<td>$53B</td>
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</table>

Source: SEMI 8/18
SEMI is the Gateway to the $2T Electronics Supply Chain

- 10+ Technology Communities
- 2000+ Member Companies
- 170+ Programs
- 7 SEMICONS
- 5000+ Volunteers
- 1.3MIL People Served
- 2300+ Program Hours
- 970+ Standards

SEMI is your global multiplier

Connect ♦ Collaborate ♦ Innovate
Grow ♦ Prosper
SEMI Ecosystem and 5 Vertical Application Platforms

SEMI GAAC
(Global Automotive Advisory Council)
Electronics components now 30% of a car’s manufacturing cost, likely >50% in 2030

80% of automobile innovations depend on semiconductors
Eras of Demand Driving Moore’s Law to $1 Trillion in 2030

Forecasting 2018 revenue records: IC $424B (+15% YoY)

Sources: IC Insights and VLSI Research

Source: IC Insights
SEMI Growing Workforce Development Response

SEMI High Tech U launched in 2000 to ignite interest in STEM and build the STEM pipeline. Delivered 236 programs globally to date.

“SEMI has made workforce development a top strategic priority. Globally, the industry is confronted with more than 10,000 job vacancies.”

Additional talent priority issues identified as:

- Higher education partnerships
- Training and mentorship
- Diversity and inclusion
- Industry image

Collaboration in war for talent is essential for continued industry growth and will help support a better future for our industry

Dan Durn, CFO Applied Materials
SEMI Industry Strategy Symposium, 18 January 2018
SEMI Comprehensive Workforce Development – Filling the Pipeline

Experiential team learning environment:
- Engage and inspire early
- Continue to engage and motivate K12-college
- Provide pathways to industry careers
SEMICON®

SEMI Focus Activities – Delivering On Member Issues

- Expositions
- Advocacy
- Standards
- Thought Leadership
- Talent Development
- Market Intelligence
- Communities
- Programs

> 270,000 verified visitors
+ 6% YoY visitors
> 4,500 companies
> 60 countries

Connecting the Industry

25 new Standards created
100+ Standards revised
600 meetings in six countries
5,000 industry volunteers

Oxygen for the Industry

SEMI STANDARDS

STRATEGIC ASSOCIATION PARTNERS

Global Supply Chain Collaboration
Executive Summary

• **Semiconductors, the heartbeat of the $2T Electronics Design & Manufacturing Ecosystem**
  – Semiconductors are the driving force behind Automotive and AI Evolution
  – Design Ecosystem critically strategic part of the Semiconductor industry

• **Europe is strategically positioned in the Global Electronics Supply Chain**
  – Automotive & Electronics – The Crown Jewels of Europe “Innovation to Applications”
  – **Medical** is the next Automotive

• **Workforce is an Industry Global Challenge, “Talent, Diversity & Inclusion”**
  – SEMI Comprehensive Workforce Development –
    • Filling the Pipeline supporting your business growth
SEMICON Europa & electronica Together
Bringing Europe’s Electronics Supply Chain to Global Connection

SEMI’s Mantra
Connect ♦ Collaborate ♦ Innovate ♦ Grow ♦ Prosper

SEMI speeds the time to better business results for its members across the global electronics manufacturing supply chain.