# **Electronics and Chemistry: An Unbreakable Bond**

Quite simply — developing and manufacturing electronics would not be possible without chemistry. Making everything from semiconductors to printed circuit boards to display materials, and many other electronic components requires a multitude of chemicals.

### **Did You Know?**

More chemistry will be needed to supply the return of electronics manufacturing to the U.S. To meet this growing demand and keep chemical manufacturing in America, policymakers must support the production of the chemistries needed to develop new technologies and make electronics.

1/\$10

1 out of 10 dollars' worth of materials used to produce **electronic components** is spent on **chemistry** 

**500** 

500 different **chemistries** are used to make a single semiconductor chip

\$50 Billion

The U.S. is investing more than **\$50 billion** through the CHIPS Act to help increase **semiconductor production**, which is expected to drive up **chemical demand** 





# **Chemistry Makes It Happen**

An enormous and diverse range of chemistries are required at each and every step when it comes to transforming sand/silica and other basic materials into electronic components and consumer products.

#### Chemicals necessary to:

- · Purify silicon
- Prevent contamination
- Etch circuits onto silicon wafers
- Build layers of materials to create circuits
- Bind and protect components

In addition to the products we use every day such as mobile phones, laptops, and electric vehicles, electronics and the chemistry that goes in to them are becoming increasingly more important to building data centers and artifical intelligence (AI).

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# **Promoting U.S. Leadership**

Increasing America's capacity to manufacture electronics, and the chemistry needed to support it, is critical to U.S. leadership and national security.

We need smart regulatory actions that encourage the development and manufacture of vital chemistries, including:

- Timely approval of new chemistries needed for electronic manufacturing and U.S. competitiveness,
- Stop proposed EPA bans of needed chemistries for electronic and semiconductor manufacturing, and
- A new White House review evaluating whether its goals from the CHIPS and Science Act, Bipartisan Infrastructure Bill, among others are being stopped by its own overreaching regulatory agenda.



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