The Complete Guide to Country of Origin & Country of Diffusion

Presented by Matthew Warren

Today’s Agenda

- Introduction
- Keynote
  - **How We Got Here**
  - **Country of Diffusion**
  - **Important COO Rules to Know & Data Collection Tips**
  - **Tariff Optimization Strategies & Tips**
  - **Getting Started: A 90 Day Plan**
- Q&A

Matthew Warren

Sourcing & Tariff Advisor @ Z2Data

- Experience in procurement and international trade, with a focus on the electronics industry.
- Formerly worked in procurement for a manufacturing company in China.
- Specializes in supply chain risk assessment and strengthening supply chain resilience.

How We Got Here

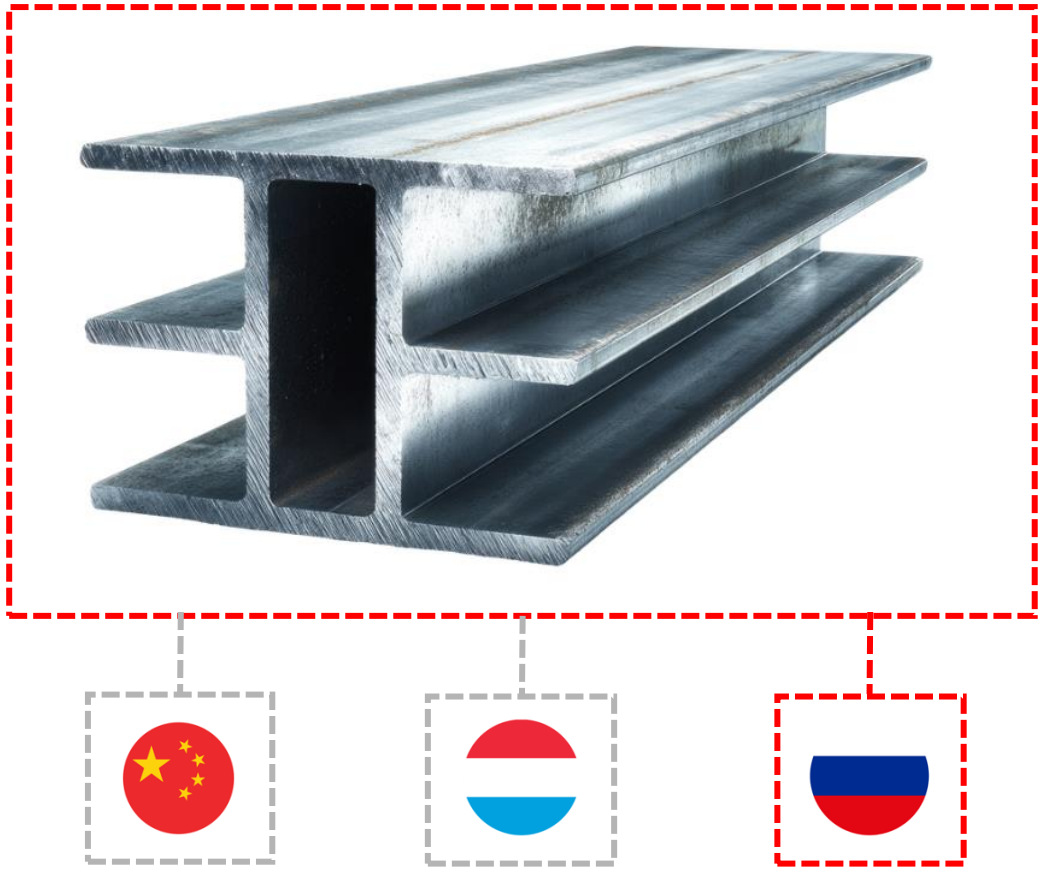
Country of Origin – What Is It?

Country of Origin (COO) is the country of manufacture, production, or growth that is declared upon entry to customs.

THE DECLARED COO:

- is the **basis for tariff rates**, quotas, and other import regulations
- can **vary by jurisdiction**—the same good can have multiple COOs

Why Does COO Clarity Matter?



- Complex supply chains are often **reduced to a single country** for regulatory purposes.
- Getting declarations right vs. wrong can **create large swings in costs** and compliance risks.

Critical COO Terms

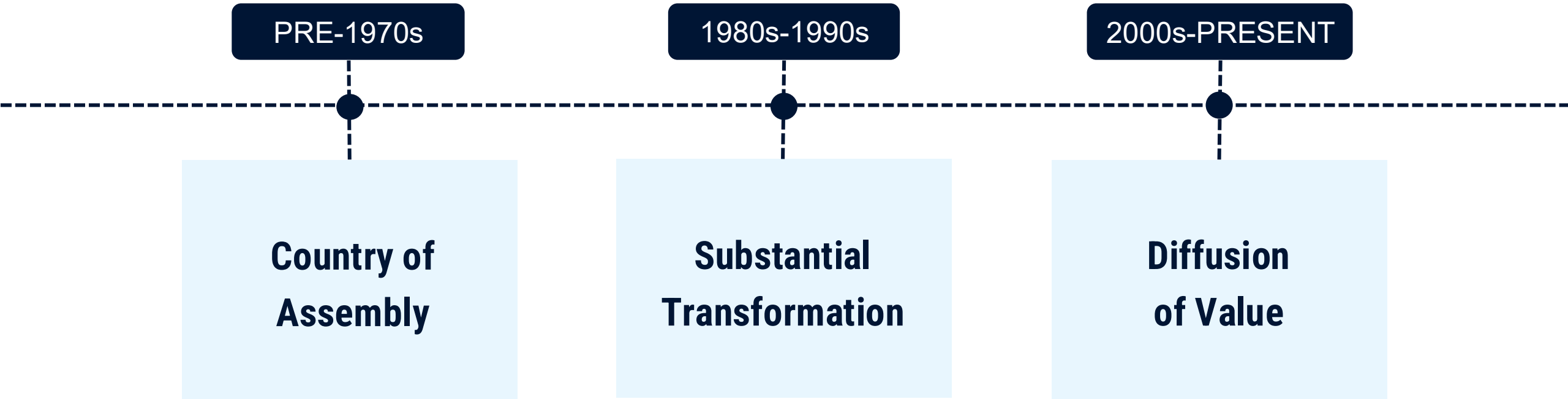
Country of Assembly (COA): The final country where a product was assembled.

Country of Diffusion (COD): The country where the majority of value was derived for semiconductors, the country where the IC's silicon wafer is fabricated.

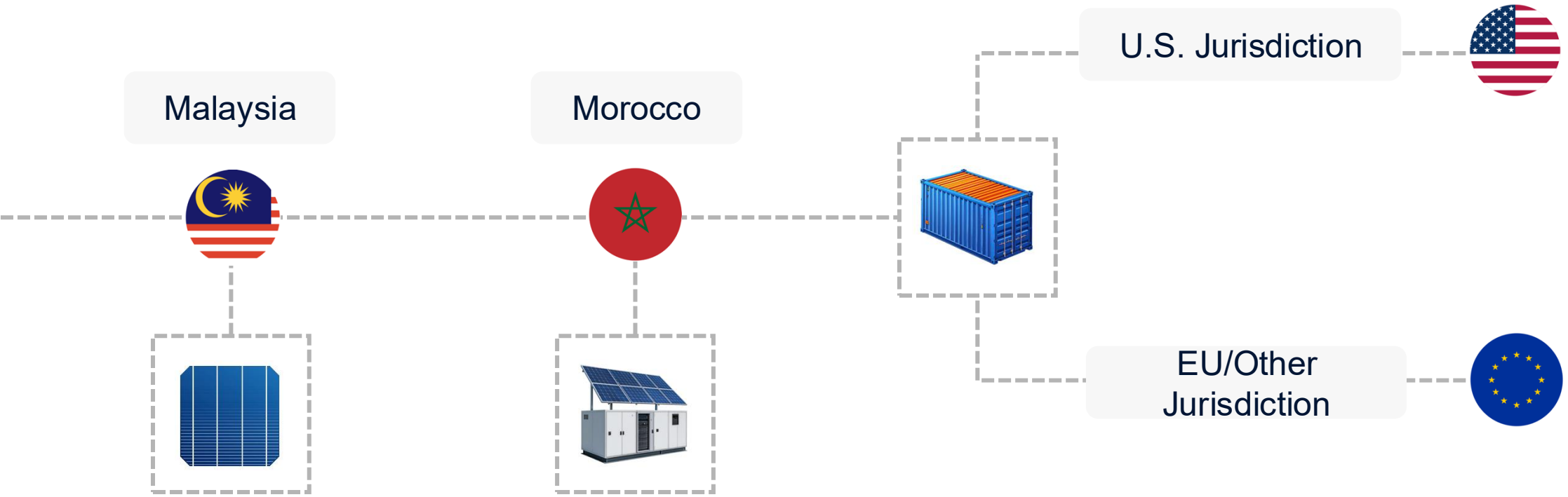
Value Diffusion: The countries where the value in the finished good comes from.

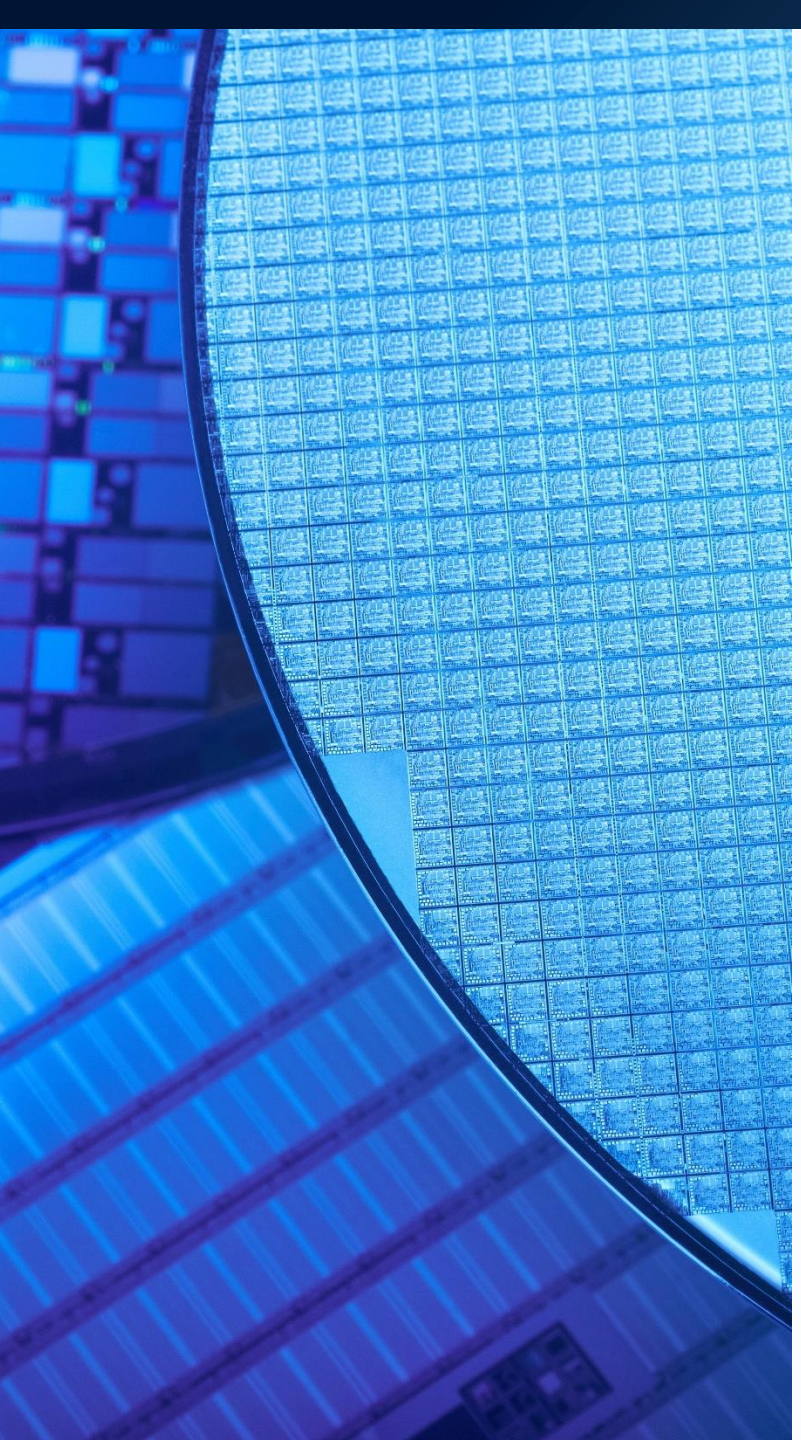
Substantial Transformation: When a product undergoes processing that results in a new name, character, or use—changing its country of origin.

The History of COO



Different Countries — Different COO





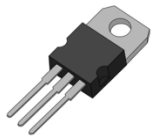
Country of Diffusion (COD)

Why Is COD So Technical?

- COD determines COO **based on the manufacturing process**, not just the last country of modification.

- Using COD to justify COO **may require case-by-case** technical evaluation.

Customs Rulings Online Search System (CROSS)



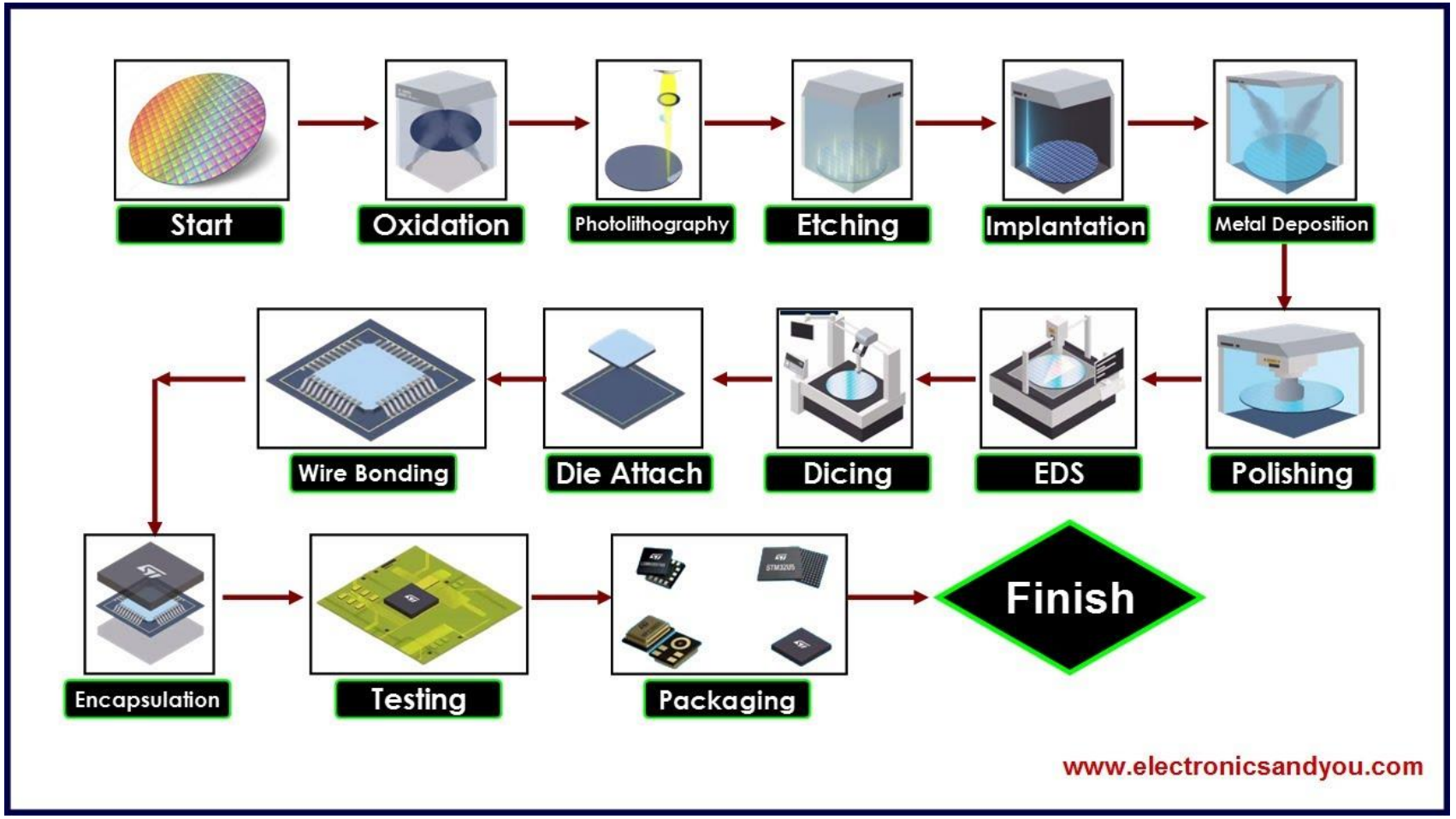
HOLDING:

The country of origin of the transistors produced as described above is Italy. As the transistors are not a product of China, they are not subject to the Section 301 tariffs for goods of China.

Regarding the country of origin of these Razer Blade Gaming Laptop personal computers, it is the opinion of this office that the motherboard PCBAs are the dominant component of these laptop PCs because they are the article within the assembly that houses and controls the interconnection of the processor, CPU, memory, and contains the BIOS that permits the ADP machine to function. The assembly work conducted in China, which entails inserting, plugging, and fastening, does not substantially transform the motherboard PCBAs into new and different articles. Accordingly, we find that the Razer Blade 18, model numbers RZ09-05827ER3-R3U1, RZ09-05828ER3-R3U1, RZ09-05829ER4-R3U1, RZ09-0582DER9-R3U1, and RZ09-0582EER9-R3U1 are considered products of Vietnam for origin purposes at the time of importation into the United States.

SCAN TO VISIT

Semiconductor Manufacturing – COD Example



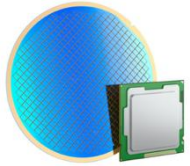
COD & CROSS Use Case – CBP Ruling H341544

3PEAK

China

Semiconductor Circuit Designs

Japan



Front-End Processing

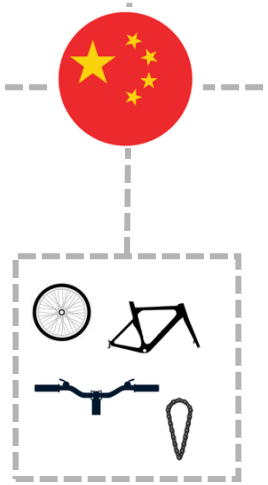
China

Back-End Packaging

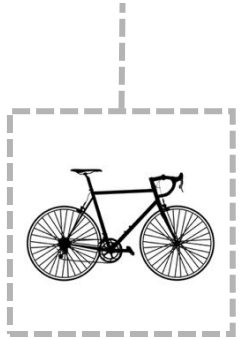
Important COO Rules to Know and Data Collection Tips

Substantial Transformation – Case Study

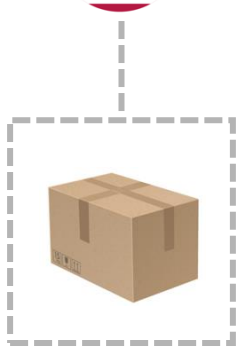
China



Mexico



United States



Questioning Supplier Declarations

01

Data & Manufacturing Knowledge is Critical

02

Limited Manufacturing Footprints Create Risk

03

Know Your Alternate Options

Tariff Optimization Strategies & Solutions

Required Data for Tariff Optimization

- **Accurate & Validated COO data** for each part and potential alternatives.
- **Capacity & Reliability Details** for alternative parts.
- **Risk Analysis** of continuing with status quo vs. changing suppliers.

- OPTIONAL Tariff forecast considerations.
- OPTIONAL Product re-design analysis.

Options to Gather Accurate & Validated COO Data

01

Manual Contacting & Data Collection

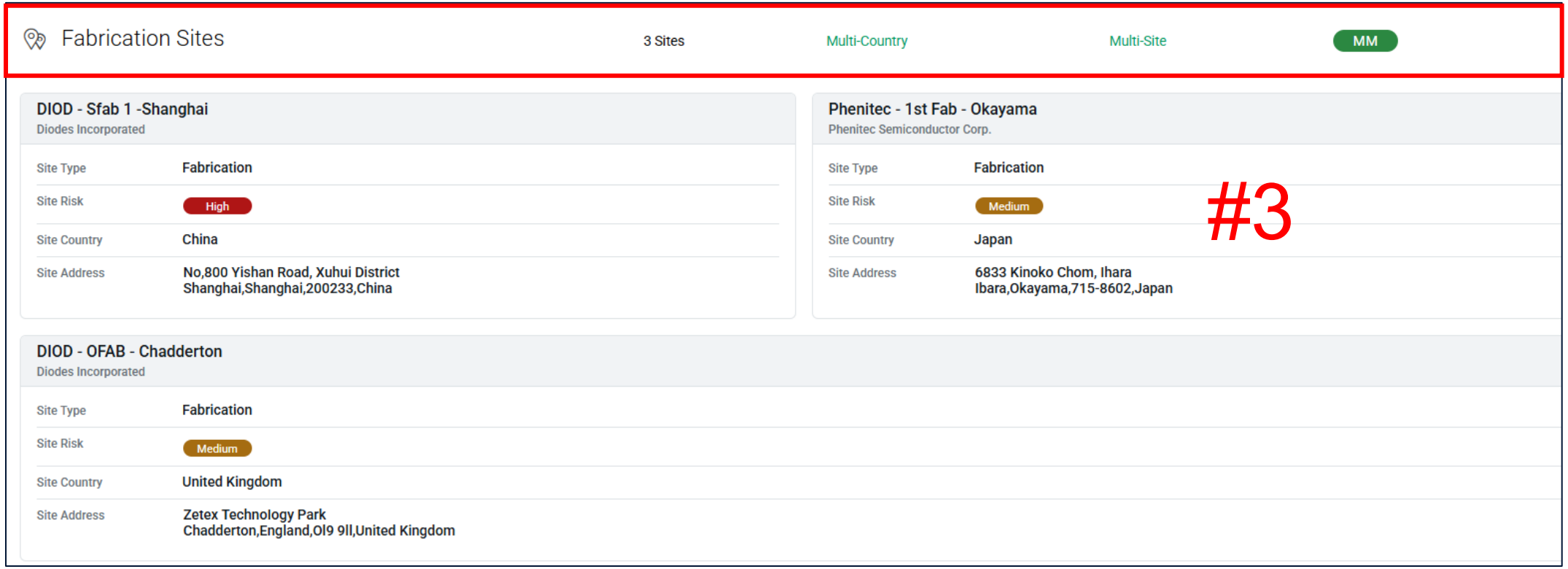
02

Patchwork Database Solutions

03

Consolidated Databases or Software Providers (like Z2)

Consolidated Fabrication Site Data in Z2



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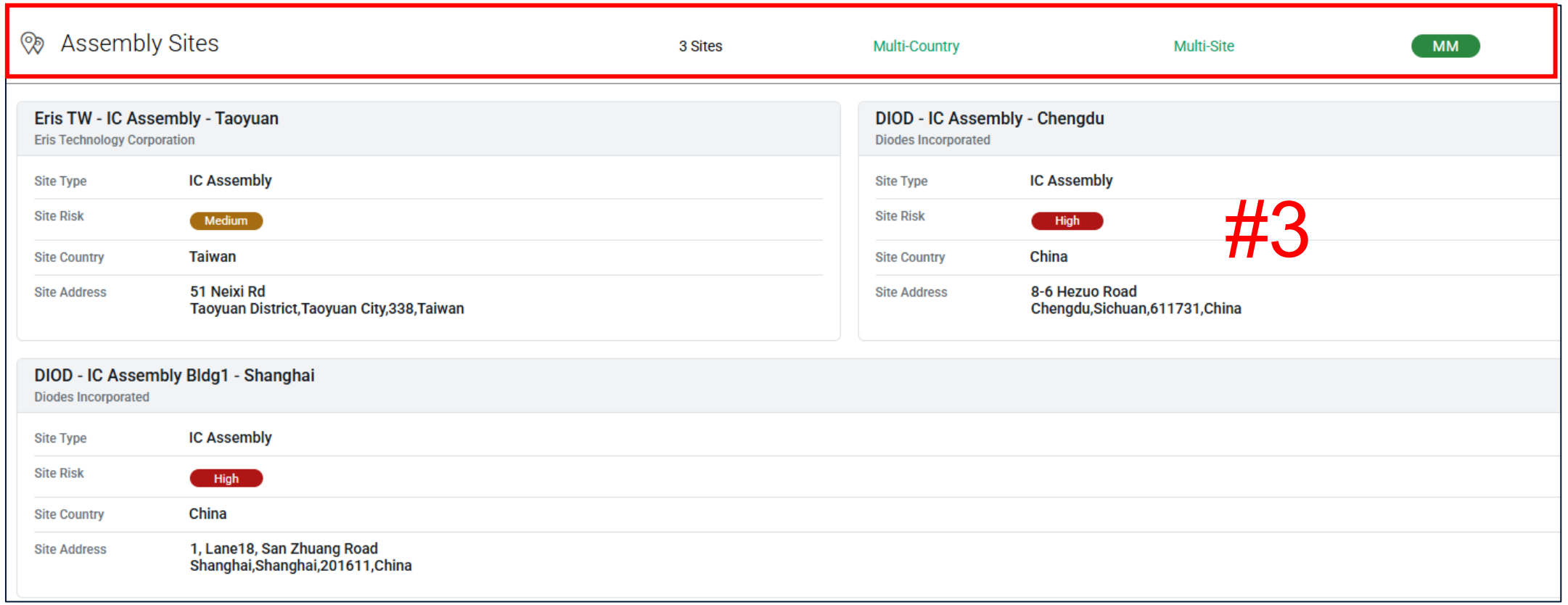
Assembly Site Data in Z2



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Tariff Optimization Strategies

Validate Correct COO Declaration

Select Alternative Components

Initiate Product Re-Designs

Take Advantage of “First Sale” Rule

Explore Duty Drawbacks

Options for Finding & Selecting Alternate Parts

01

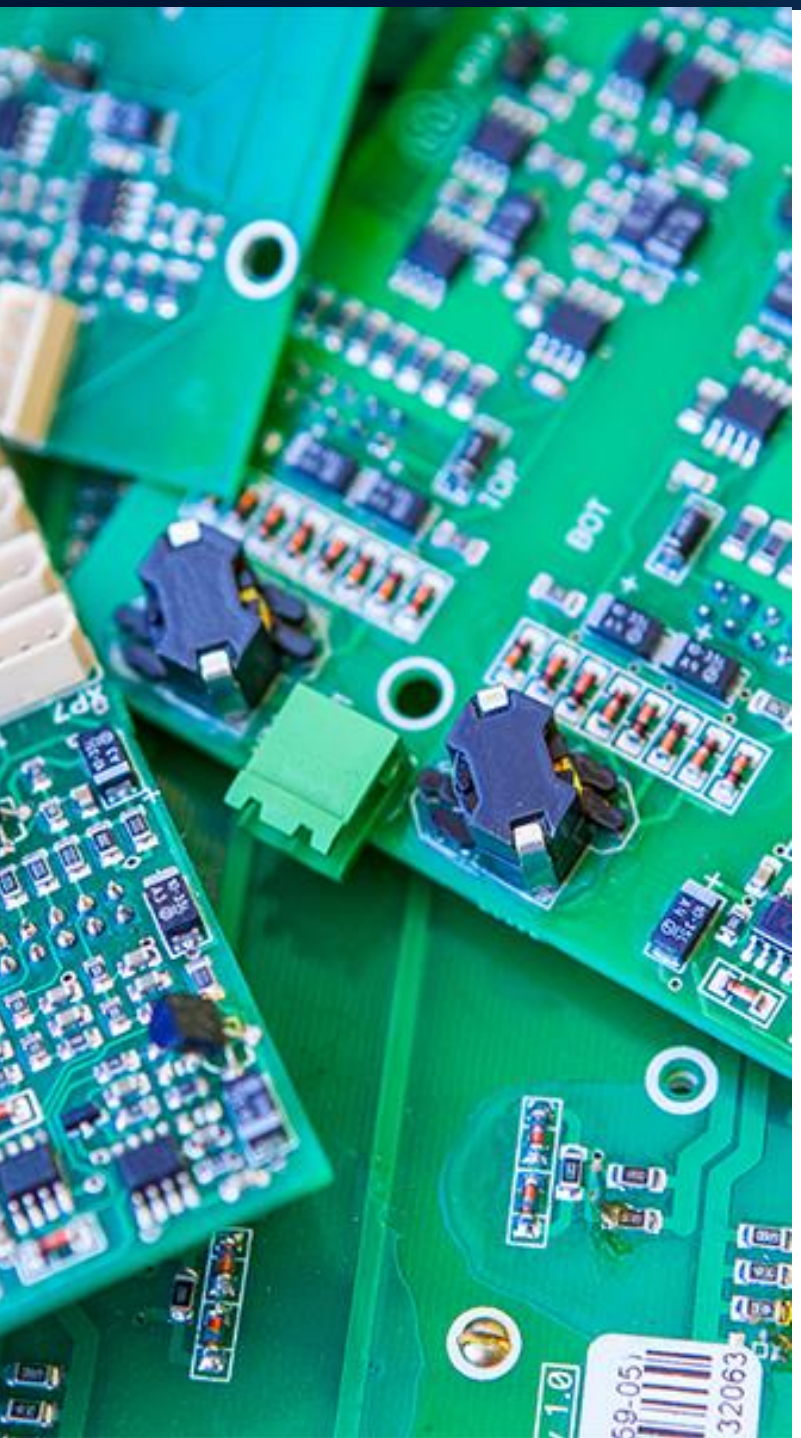
Log Alternates at New Part Setup

02

Manual Search/Log When Alternates Are Needed

03

Consolidated Database/Software Solution (Like Z2)



How to Choose Lower-Risk Alternate Parts

- Focus on the COO, minerals, and site locations that provide the least disruption.
- Evaluate the Total Cost of Ownership (TCO) as opposed to just a singular factor (tariffs, minerals, etc.).
- Talk with suppliers to see what they are doing to reduce risks around their parts.

Next Webinar

How Teams Use COO & COD in Z2Data to Optimize Tariffs

See how customers use COO and COD data inside Z2Data to identify tariff optimization opportunities.

February 25, 2026 @ 10 am PST (1 pm EST)

REGISTER NOW FOR FREE

SCAN TO REGISTER

Getting Started: A 90-Day Plan

90-Day Roadmap

- **Identify and Validate COO** of all components and replacement options. Initiate repeatable processes for new part setup.
- Create a **Matrix of Tariff Costs** and "Difficulty to Replace" for high-cost parts.
- **Choose and Execute** on a comprehensive strategy to optimize tariffs.

Ultimate Goals for Tariff Optimization

- Maintain a database that provides **real-time updates** on compliance and tariff data.
- Have alternate components already **identified and qualified** when setting up new parts.
- Move away from ad-hoc data collection when a new policy is announced to simply **running a report and doing analysis.**

Thank You!

Matthew Warren

matthew.warren@z2data.com

Matthew Warren 成学友 | LinkedIn