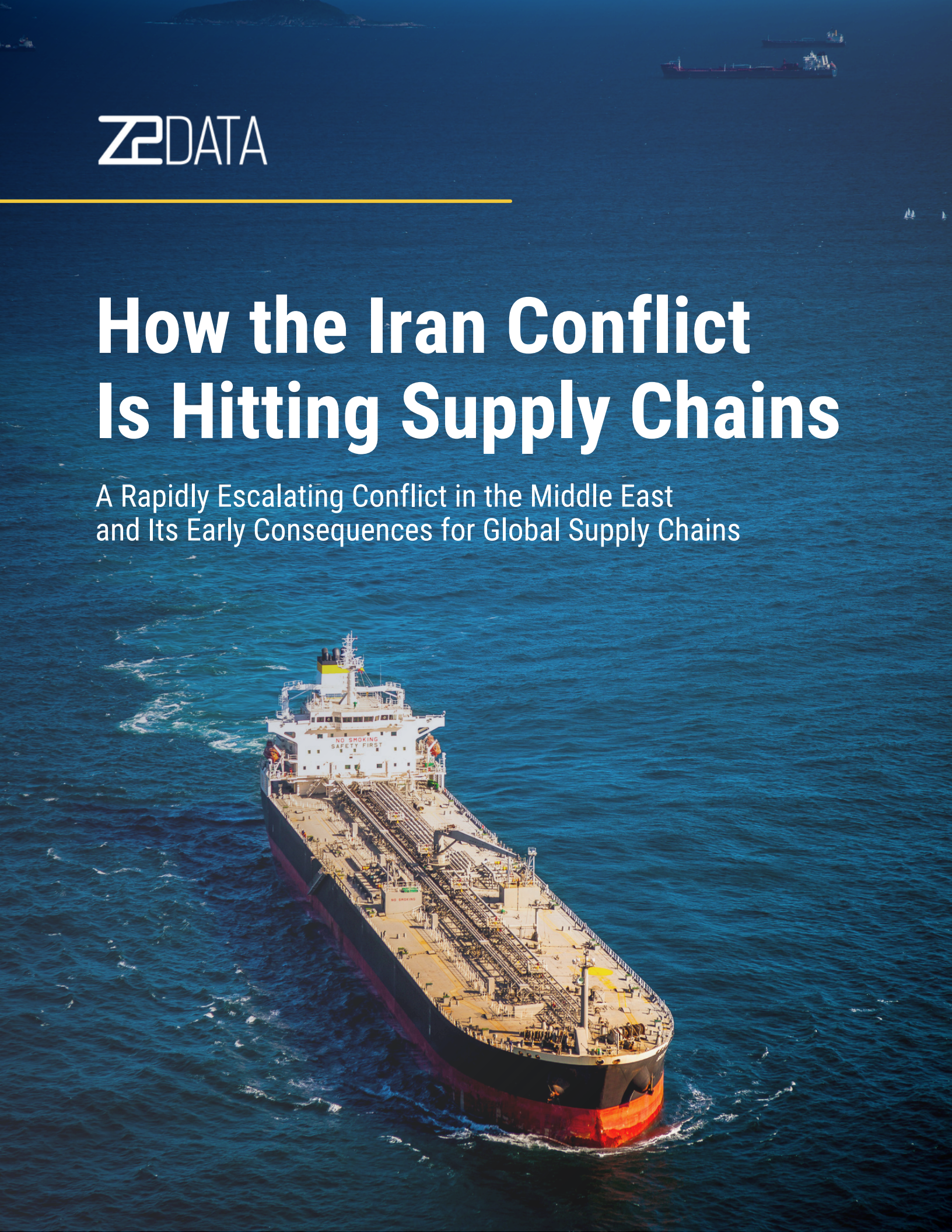
Z2DATA

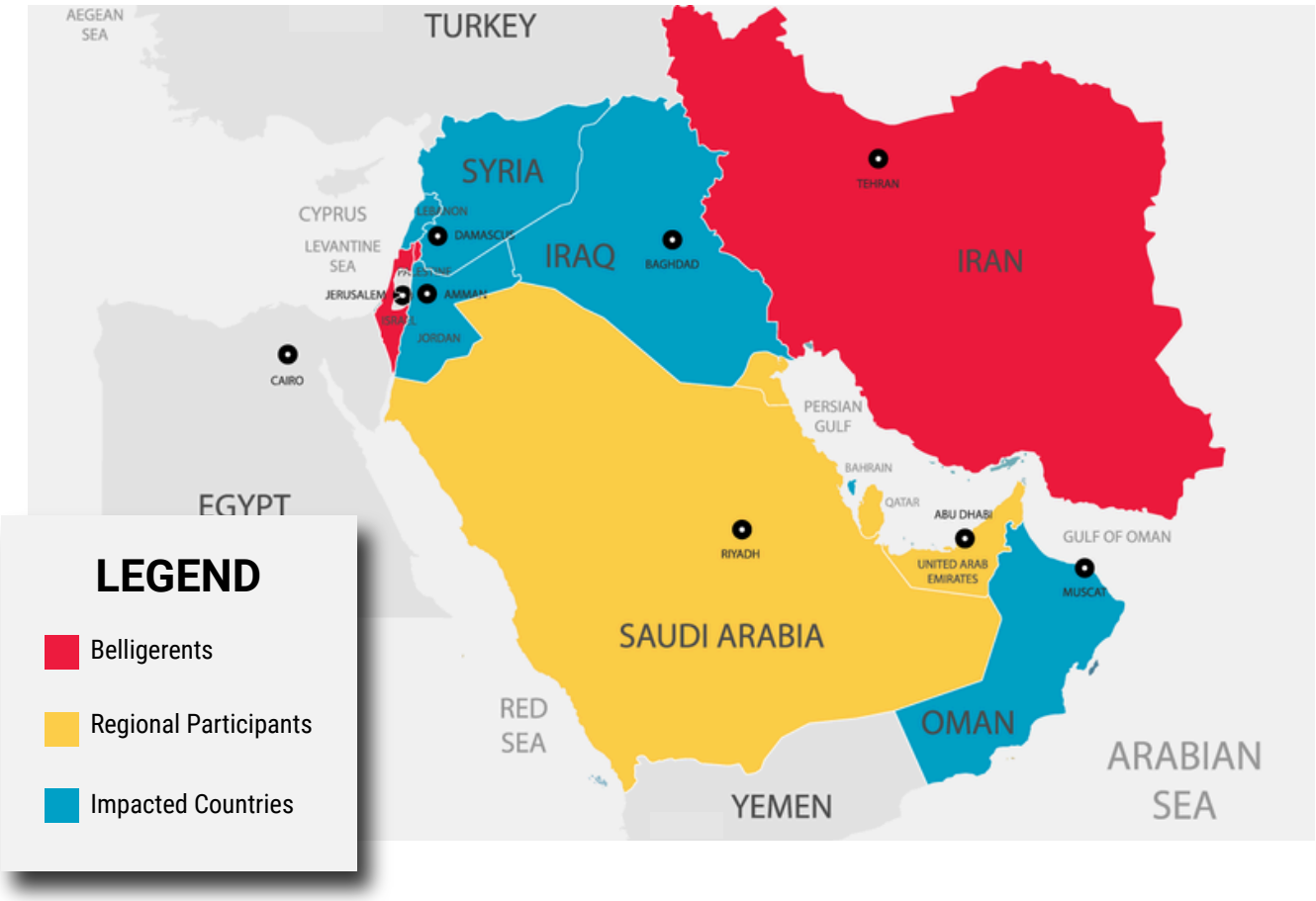
How the Iran Conflict Is Hitting Supply Chains

A Rapidly Escalating Conflict in the Middle East and Its Early Consequences for Global Supply Chains



What We Know Right Now

In the early morning hours of Saturday, February 28, the U.S. and Israel launched a highly coordinated air assault on Iran. The objective for both countries was to trigger regime change in the nation of 93 million, and by Saturday afternoon U.S. President Trump announced that Iranian Supreme Leader Ali Khamenei had been killed during the strikes. With its leadership decapitated, Iran responded with a swift counteroffensive, launching a fusillade of missiles against targets in Tel Aviv and Haifa, as well as at U.S. military bases across several Persian Gulf states.

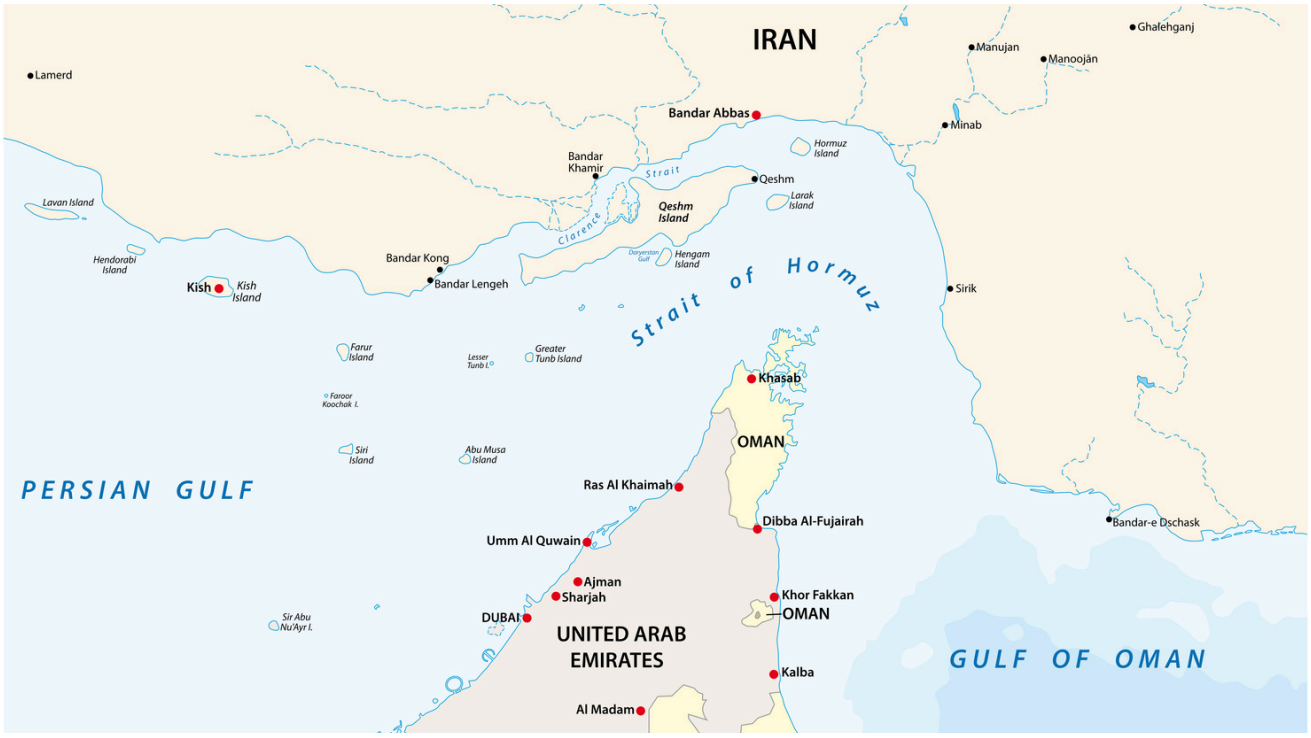


Since the initial assault, the conflict had widened significantly. While the U.S. and Israel have continued to target Iranian government buildings, nuclear facilities, and other key infrastructure, Iran has launched missiles against not only Israel but Qatar, Kuwait, Saudi Arabia, and the United Arab Emirates (UAE). According to PBS, the conflict has now impacted at least 14 additional countries in the Middle East and beyond.

Current Supply Chain Ramifications

With the conflict little more than a week old—and more and more nations being pulled into its chaotic orbit every day—it remains difficult to determine exactly how long the U.S. and Israel's war with Iran will last, and what the enduring ramifications will ultimately be.

From a supply chain perspective, the most important impact thus far has been on the Strait of Hormuz. A critical maritime shipping lane connecting the Persian Gulf to the Gulf of Oman and the Arabian Sea, the Strait of Hormuz is a vital transportation route for not only oil and gas but a range of other major products and commodities. Following the initial U.S.-Israeli strikes, Iran, which is geographically perched over the strait, clamped down on the waterway. On Monday, March 2, the Iran Revolutionary Guard threatened shipping through the strait, effectively paralyzing all traffic.



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Global industries and the ships that transport their goods responded swiftly to Iran's warnings. Within two days, maritime traffic passing through the Strait of Hormuz plummeted to near-zero, with satellite images showing oil tankers clustered together in the Persian Gulf and the Gulf of Oman. According to the Joint Maritime Information Center, vessel traffic traversing the Strait of Hormuz dropped from an average of 138 a day, prior to the conflict, to just two ships by Thursday, March 5.

Due to this development and other related factors stemming from the conflict, a number of global sectors are already facing new challenges and active disruptions.

Commodities & Raw Materials Facing Disruption

The conflict in Iran has already reverberated across myriad supply chains, impacting a number of different commodities and raw materials that sustain industries ranging from automotive to electronics to semiconductor manufacturing. Below, we break down four key areas the war is beginning to affect.

Energy

Roughly 13 million barrels of oil passed through the Strait of Hormuz every day last year—representing nearly a third of all seaborne crude. The disruption to the Strait of Hormuz and the deepening conflict in the Middle East are having a significant impact on global energy markets, driving up the price of crude and natural gas. As of Monday, March 9, the price of Brent crude was hovering around $100 a barrel, a 38% increase from the price it closed at on February 27, the day before the U.S. and Israel began strikes on Iran.

These surging prices have ramifications that go well beyond the crude market. Industries all over the world rely on oil and natural gas to power their operations, including transportation, automotive, chemical manufacturing, and agriculture. Automakers in particular rely on crude oil as a raw material for synthetic rubber and plastic parts, and sustained increases in oil prices stemming from the blockade could drive up material costs for auto manufacturers by as much as 25%.

> **Sustained increases in energy prices** will raise production costs for semiconductor manufacturing—a sector with ties to everything from consumer electronics to aerospace and defense.

Chipmakers are also not exempted from feeling the impact of this conflict. Sustained increases in energy prices will raise production costs for semiconductor manufacturing—a sector with ties to everything from consumer electronics to aerospace and defense. Nations in Asia, where most semiconductors are currently manufactured, are highly dependent on importing energy products from the Middle East. If energy prices remain high—or increase further as the conflict deepens—a semiconductor market already strained by a memory chip shortage will have to absorb another variable likely to increase costs.

Key energy and petrochemical manufacturers with operations in the region include SABIC (Saudi Arabia Basic Industries Corp) and German chemical manufacturer Henkel.

Helium

Helium plays a critical role in several major industries, including aerospace and defense, medical technology (where it supports M.R.I. machines), and semiconductor manufacturing. It's especially integral to the chipmaking process, where it's deployed for cooling and purging. Qatar is one of the world's top sources of the chemical, producing around a third of the total global supply. By Friday, March 6, spot prices of helium had increased by around 40% from just one week earlier, and initial reports have suggested that the conflict could wipe out one-third of the world's total helium supply.

Aluminum

Another key material being throttled by the Iran conflict is aluminum. Aluminum is used throughout manufacturing—automotive, aerospace and defense, electronics, and the industrial sector all rely on the metal. It also serves a number of critical functions in chip manufacturing, including in heat sinks, electrolytic capacitors, and certain types of packaging.

> **The Middle East has become a major aluminum manufacturer** over the past few decades and now accounts for over 8% of the total global production of the metal.

The Middle East has become a major aluminum manufacturer over the past few decades, and now accounts for over 8% of the total global production of the metal. The Gulf Cooperation Council, a political and economic union consisting of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the UAE, has gone from producing less than three million tons of aluminum in 2010, to over six million in 2025.

U.S. electronics manufacturers are heavily reliant on these aluminum imports, with nations from the Middle East supplying nearly 20% of the total U.S. supply of aluminum in 2025. The conflict has already prompted two major aluminum producers, Qatar and Bahrain, to suspend deliveries of the metal to global customers, forcing U.S. customers to secure alternative sourcing in regions like Asia and Australia.

Key metal manufacturers in the region potentially impacted by this conflict include Emirates Global Aluminum and steel companies like Khambati Metal and Al Ghurair Iron and Steel.

Sulfur/Sulfuric Acid

Finally, the Middle East is also a major global provider of sulfur. Sulfur is required to make sulfuric acid, a mineral acid essential to processes in metallurgy, chemical synthesis, and semiconductor manufacturing, where it's used as a cleaning agent during wafer fabrication. Chip manufacturing facilities rely on high-purity sulfuric acid throughout the manufacturing process to eliminate any potential contaminants and maintain the cleanest, most sterile surfaces possible.

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The Middle East—and the Persian Gulf in particular—is responsible for a substantial portion of global sulfur production. Countries like Saudi Arabia, the UAE, and Qatar collectively produce between a quarter and a third of all sulfur worldwide. While sulfur shortages are not yet being reported—and hardly drive headlines the way volatility in the crude market does—choking off the Middle East's supply of the chemical element could eventually ripple across the semiconductor manufacturing industry.

Manufacturing Sites at Risk of Disruption

The following list highlights key manufacturing facilities—including semiconductor fabrication plants, semiconductor equipment sites, contract manufacturing locations, and industrial component facilities—that may face disruption as a result of the conflict. The sites are drawn from Z2Data's internal database and are not intended to be exhaustive.

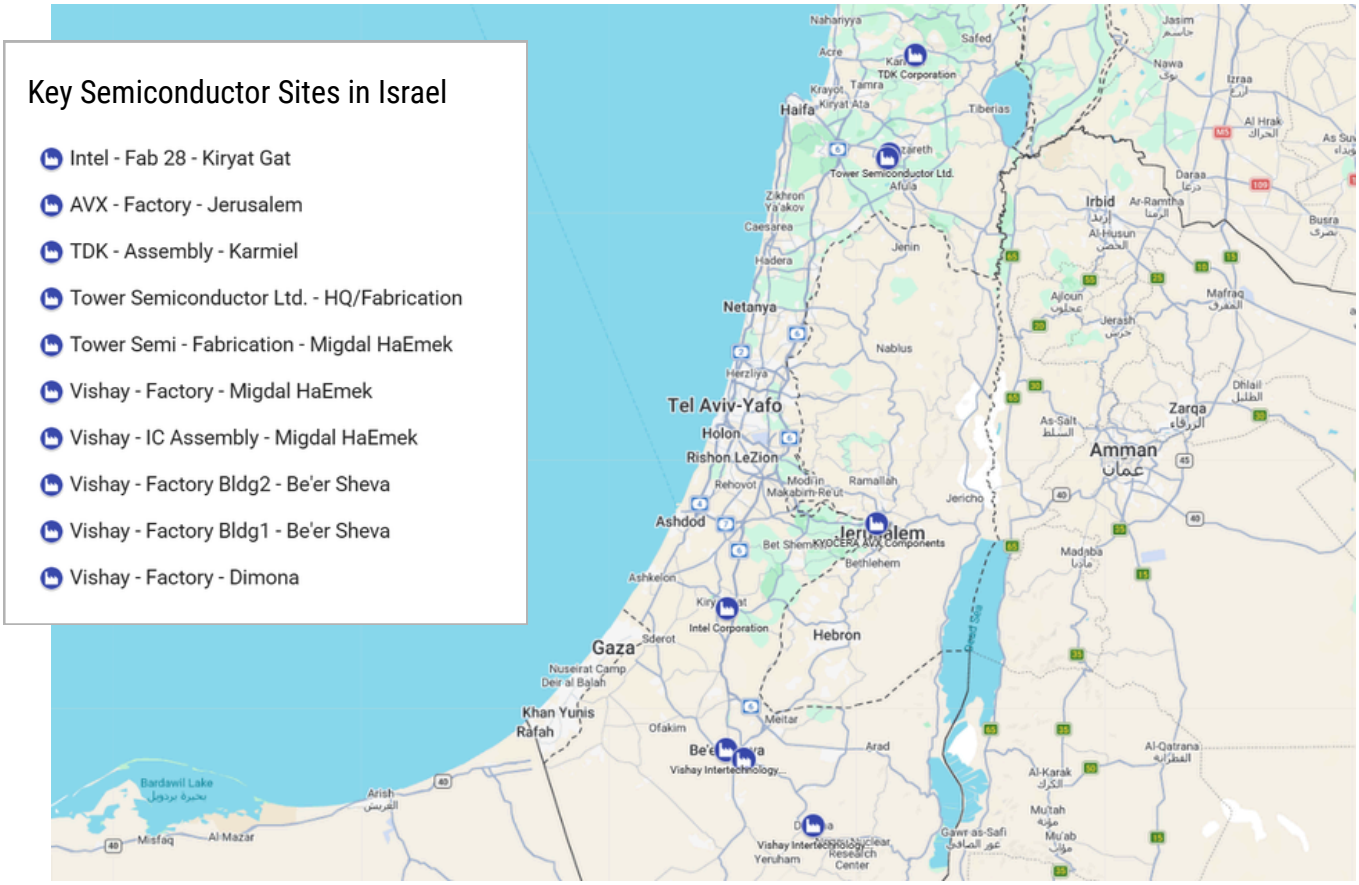
Early Signals Show a Shift Away From Tower Semiconductor

There are already some early signals that businesses are looking to shift their sourcing away from semiconductor manufacturers in the region. Original equipment manufacturers (OEMs) and other customers are moving orders away from Tower Semiconductor—which is headquartered in Israel and has faced production disruptions stemming from the war—and to alternative suppliers like Vanguard International Semiconductor and Powerchip Semiconductor Manufacturing Corp. (PSMC).

Major Tower Semiconductor customers include:

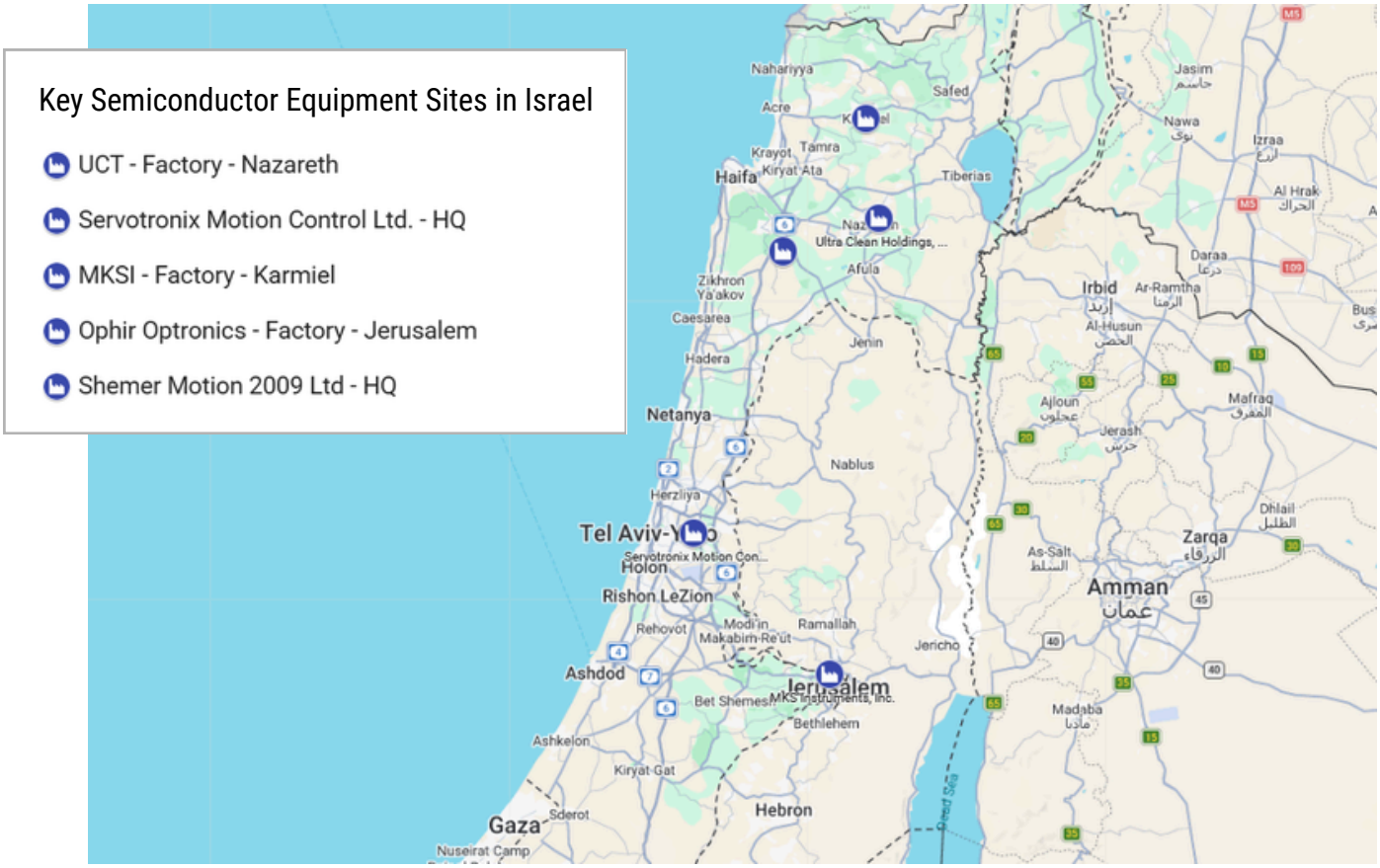
- **Vishay**
- **Onsemi**
- **3Peak**
- **QuickLogic**

Key Semiconductor Sites Potentially Impacted



Manufacturer	Sites In Region	Products / Focus
Intel	One fabrication facility in the Southern District	Microprocessors
KYOCERA AVX	One factory in the Jerusalem District	Passive components
TDK-Lambda Corporation	Design and manufacturing facility in Karmiel, Northern District	Programmable power supplies, AC-DC power supplies, DC-DC converters, and EMC/EMI filters
Tower Semiconductor	Headquarters and fabrication facilities in the North District	Radio frequency (RF), integrated power management, CMOS chips
Vishay Intertechnology	Factories and one IC assembly facility in the North and South Districts	Resistors, inductors, ceramic capacitors

Key Semiconductor Equipment Supplier Sites Potentially Impacted



Manufacturer	Sites In Region	Products / Focus
Ultra Clean Holdings Inc.	One factory in Nazareth, Northern District	Gas delivery systems, fluid handling systems, semiconductor equipment
HORIBA Advanced Techno	Jerusalem Technology Park, Jerusalem District	Semiconductor measurement and analytical instrumentation
Servotronix Motion Control Ltd.	Headquarters in Petah Tikva, Central District	Digital servo drives and motion control systems
MKS Inc.	Factory in Karmiel, Northern District	Optics, laser measurement, instruments
Shemer Motion / Industrial Motion	Headquarters in Yokne'am Illit, Northern District	Speed changers, drivers, gears

Key Contract Manufacturing Sites Potentially Impacted

Manufacturer	Sites In Region	Products / Focus
Flex	Assembly / EMS facilities in the North, South, and Central Districts	PCBA, automotive parts
Jabil	One assembly facility in the Haifa District	Optoelectronic systems

Key Industrial / Mechanical Component Sites Potentially Impacted

Manufacturer	Sites In Region	Products / Focus
Elimec Electro-Mechanical Engineering	Rishon LeZion, Central District	Electromechanical assemblies and precision mechanical components
Electrotherm Industry	Migdal HaEmek, Northern District	Industrial heating and thermal processing equipment

Navigating New Supply Chain Risks and Sources of Volatility

This regional conflict introduces significant risks to global supply chains, making multi-tier supply chain visibility increasingly critical for businesses. Organizations can use Z2's part-to-site mapping and supply chain monitoring tools to identify exposure and understand potential downstream impacts. Businesses can leverage Z2 to:

- **Map parts and BOMs to manufacturing sites** to identify components produced in conflict-affected countries such as Israel, Iran, Lebanon, and Saudi Arabia
- **Gain multi-tier visibility** into supply chain dependencies and vulnerabilities
- **Monitor 120+ risk types**, including armed conflict, infrastructure damage, and transportation disruptions
- **Model potential downstream impacts** using internal scenario modeling
- **Configure priority-based alerts** to filter noise and highlight risks impacting operations

Sign up for a free trial to see how Z2 can help your business identify risks, mitigate disruptions, and protect production continuity.

Get a Free Trial