Supply Chain Explorer

By the Emerging Technology Observatory

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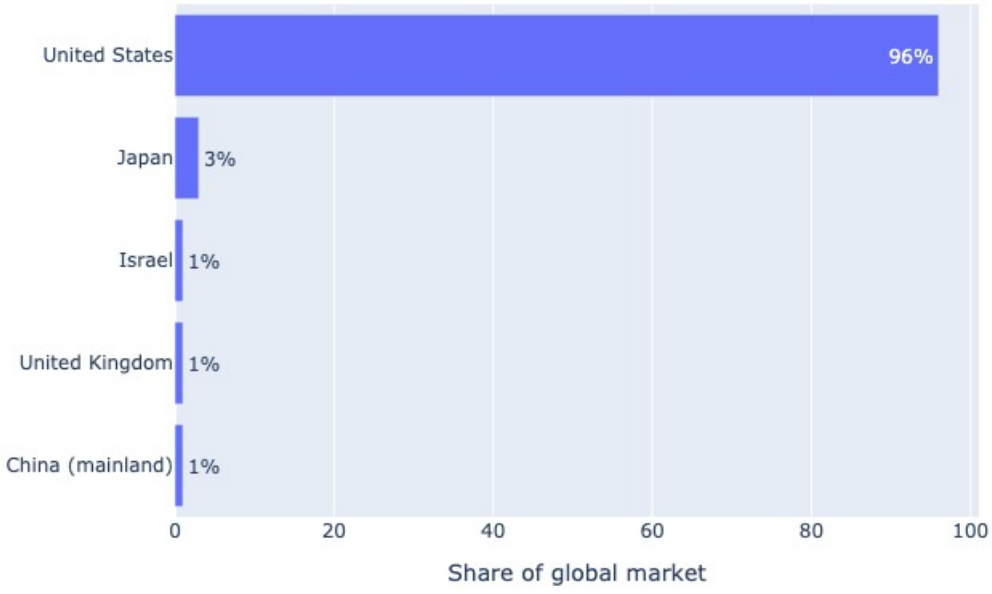
Electronic design automation software

Until the 1970s, when chips included few electric components, engineers drew designs manually. Today, chips include billions of interconnected transistors and other electrical components. To manage this complexity, chip designers use complex EDA software to produce logic chip designs.

U.S. firms are currently the exclusive providers of EDA software with the full-spectrum capabilities needed by engineers at fabless firms and IDMs to design leading-edge chips. U.S. firms also dominate capabilities relevant to AI chip design, such as ASIC layouts. Although the industry is top-heavy, startups frequently enter the EDA space. However, they struggle to compete with top EDA firms that typically acquire them to incorporate the startups' niche functionality to their full-spectrum capabilities.

Country provision



Notable supplier companies

- Ansys - United States
- Arcas-da (negligible market share) - China (mainland)
- Cadence - United States
- Huada Empyrean (negligible market share) - China (mainland)
- Mentor Graphics - United States
- Microscapes (negligible market share) - China (mainland)
- PDF Solutions - United States
- Platform-da (negligible market share) - China (mainland)
- Primarius (negligible market share) - China (mainland)
- Semitronix (negligible market share) - China (mainland)
- Silvaco - United States
- Synopsys - United States
- Xpeedic (negligible market share) - China (mainland)