

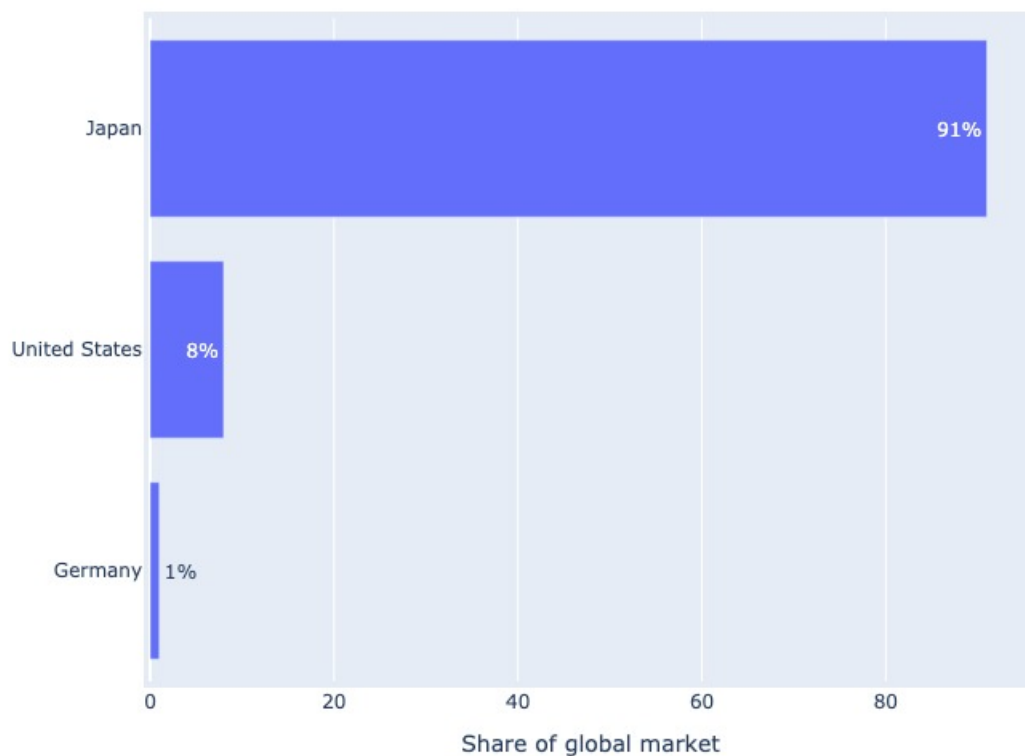
# Supply Chain Explorer: Electron-beam lithography tools

This is an export from the Emerging Technology Observatory **Supply Chain Explorer** (<https://chipexplorer.eto.tech>). You can see the web version of this content at <https://chipexplorer.eto.tech/?filter-choose=input-resource&input-resource=N29>.

## Electron-beam lithography tools

Electron-beam (or "e-beam") lithography tools draw patterns in a substrate using electrons. They are the dominant tools for photomask production, and are also infrequently used for low-volume chip production. Like other maskless lithography tools, e-beam tools can quickly and cheaply make new patterns, but are slow at drawing patterns into wafers, making them ill-suited to mass chip production.

### Supplier countries



### Notable supplier companies

- Applied Materials (negligible market share) - United States
- JEOL - Japan
- NuFlare - Japan
- Vistec (negligible market share) - Germany