

Supply Chain Explorer

By the Emerging Technology Observatory

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Logic chip design: AI ASICs

Application-specific integrated circuits for artificial intelligence ("AI ASICs"), a rapidly growing category of logic chips, often achieve greater speed and efficiency for artificial intelligence than GPUs and FPGAs, but are usable only for specific algorithms. ASICs can be easier to design than CPUs, GPUs, and FPGAs, opening the field to a wide range of design startups, including in China. Still, few highly specialized ASICs have been widely commercialized, as their markets are often too small for recouping fixed development costs.

Notable supplier companies

- Cambricon - China (mainland)
- Cerebras - United States
- Google - United States
- Graphcore - United Kingdom
- HiSilicon - China (mainland)
- Horizon Robotics - China (mainland)
- Intellifusion - China (mainland)
- Tesla - United States