![Fraunhofer IIS logo]

Fraunhofer Institute for
Integrated Circuits IIS

**Fraunhofer Institute
for Integrated Circuits IIS**

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Neuromorphic
hardware

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Neuromorphic hardware

Bringing AI to hardware

Neuromorphic computing is based on massively parallel processing and speeds up calculations in a highly energy-efficient way. By putting these benefits into practice, neuromorphic hardware architectures are key to the deployment of neural networks in embedded devices and battery-powered sensors.

Consulting, design and implementation

We identify, develop and implement the optimum neuromorphic design for your specific use case:

- Requirements engineering
- Consulting, including cost and feasibility studies
- Customized neuromorphic solutions:
  analog, digital, spiking
- IP core licensing for ASICs

Application fields

Our solutions can be tailored to a wide variety of AI-supported tasks, such as condition monitoring, anomaly detection, predictive maintenance, edge processing and voice recognition with applications in automotive, healthcare, satellite communication, audio, Industry 4.0 and IoT.
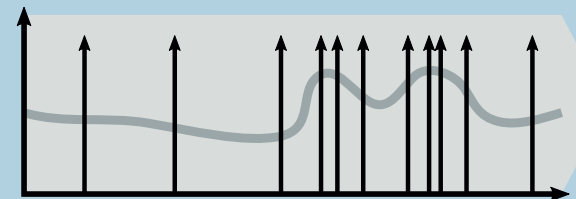
Neuromorphic architectures

Analog accelerators
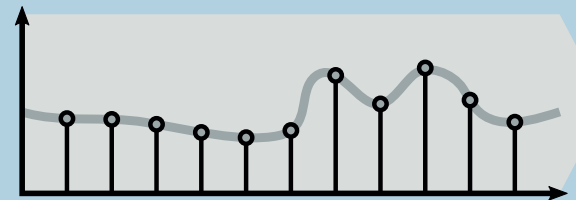
Digital accelerators

Spiking neural networks accelerators