

The Akida FPGA is a hardware development target to install and run Akida IP core configurations to execute neural models for demonstration, emulation, validation and system integration for system and chip designers. The Akida FPGA platform supports BrainChip's Akida AI neural processing acceleration that is scalable, configurable and programmable to support CNN, and Temporal Event-Based Neural Network models (TENNs).

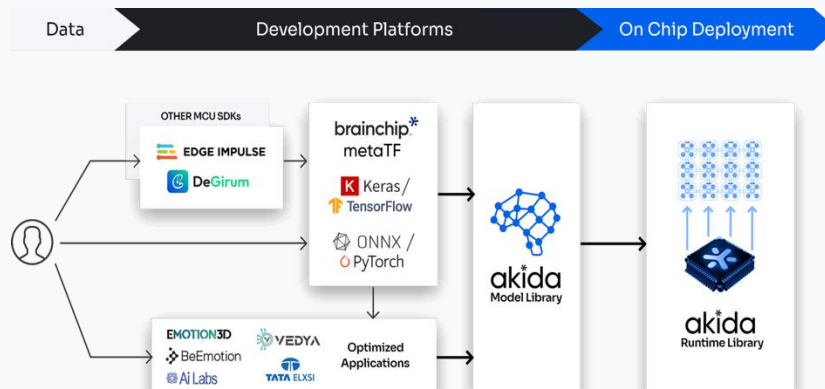
The Akida FPGA can be configured for a wide range of performance and network solutions, from 1 to 6 neural nodes of Akida 2 as an accelerator in an embedded or hosted platform. Hosted with a Linux integrated single board computer based on Ubuntu.

### Features


- Support of multi-node (up to 6) configurations
- Akida scalable architecture
- Core subsystems and interfaces
  - ❖ 4-bit and 8-bit precision arithmetic support
  - ❖ Configuration DMA for model weights
  - ❖ Configurable On-Chip Local memory
- Industry standard interfaces
  - ❖ PCIe 4, wifi, USB, Ethernet

### Getting Started:

akida + metaTF



### Applications:

-  Consumer products (Wearables)
-  Smart Home / Business

-  Retail
-  Industrial IoT

-  Defense
-  Automotive



Akida FPGA Platform

### Key Benefits

- ✓ Verify model performance on hardware
- ✓ Quantify latency and power before moving to silicon
- ✓ Execution of CNN, and TENNs
- ✓ Industry Standard Development Environment
- ✓ Low Host CPU overhead
- ✓ Sparsity efficient design with event-based data flow computations