

ABOUT INNATERA

Innatera is a trailblazing developer of ultra-efficient neuromorphic processors. Spun out of the Delft University of Technology in 2018, it pioneers a revolutionary computing solution that enables next-generation AI and signal processing capabilities to be co-located with sensors in battery-powered and powerlimited devices.

Built on over a decade of research into the intersection of neuroscience and computer architecture, Innatera's proprietary Spiking Neural Processor architecture delivers ground-breaking cognition performance within a narrow power envelope. It delivers an unprecedented combination of ultra-low power consumption and short response latency for pattern recognition in sensor data streams. Innatera's solutions are a critical enabler of always-on sensing applications in consumer, industrial, and Internet-of-Things market verticals.

The always-on
processor for sensors

500x lower energy than conventional CPU/DSP/AI

100x shorter latency than conventional solutions

PyTorch integrated SDK for fast development



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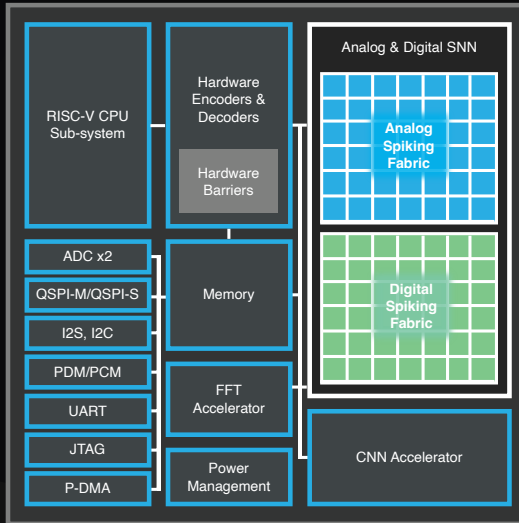


**SPIKING
NEURAL
PROCESSOR
PULSAR**

World's first ultra-low
power neuromorphic
processor for
Ambient Intelligence

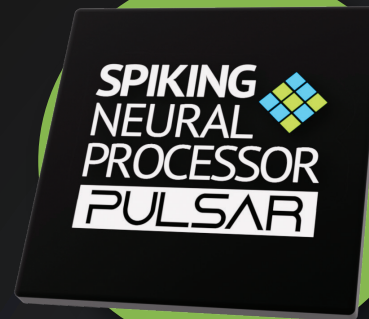
OUR PRODUCTS

With versatile silicon, a comprehensive SDK, AI model library, and application software, Innatera provides end-to-end solutions for a wide range of applications and sensor types



PULSAR EVALUATION KIT

Explore the power-performance benefits of neuromorphic processing



AMBIENT INTELLIGENCE

We are pioneering a new era of invisible, intuitive computing. Our technology represents a radical leap forward with the introduction of the world's first ultra-efficient neuromorphic microprocessor for sensors. In an ambiently intelligent world, technology does not merely await our requests; it quietly comprehends our needs, perceives our surroundings, and responds appropriately, often before we become aware of its presence. This approach reimagines our relationship with computing, where systems seamlessly integrate into the background of our daily lives.

SPIKING NEURAL PROCESSOR

An ultra-low power neuromorphic SoC for always-on AI at the edge

TALAMO SDK

Powerful software environment for application development and deploy-



Nimble on-chip RISC-V CPU

32-bit RISC-V core, 384 KB embedded SRAM



Fast ultra-low power processing

Analog mixed signal processing with event-driven spiking neural networks for sub-1mw pattern recognition



Multi-faceted processing capabilities

Efficiently implement SNNs, CNNs, and conventional processing in the same device



Diverse interfaces

QSPI-M, QSPI-S, JTAG, I2C, UART, GPIO, Analog in, I2S, PDM/PCM, CIF



Advanced power management

Three sleep modes to enable power-efficient operation across the application lifecycle



Pytorch front-end

Develop and train models with the industry-standard PyTorch ML framework, use powerful measurement and visualization capabilities of Tensorboard



Comprehensive

Wide-range of models, network topologies, libraries for application development

APPLICATIONS



Radar



Microphone



Image sensors



ECG/PPG



Ultrasonic sensors



IMU