anabrid

General Purpose Analog Co-Processor (Anabrid™ G-PAC)



The industry-first General Purpose Analog Co-Processor is a versatile, highly integrated analog computer-on-chip that offers automatic reconfiguration. At the heart of every General Purpose Analog Co-Processor (Anabrid™ G-PAC) processor block is our core IP that integrates a memory array and analog circuits delivering energy efficient, scalable, mature, speedy compute power with reduced latency.



As a technology demonstrator, it showcases the potential of analog computing and can function as a co-processor in conventional digital systems. For instance, it could be used in Al acceleration, complex signal processing, or real-time data analysis, significantly enhancing tasks that require low-latency and energy-efficient computation.

Product Features

- 1.000 Anabrid CMOS Oscillator Nodes
- 4-lane PCle 2.1 high speed serial interface with 4GB/s/lane or up to 2GB/s of bandwith
- Available I/Os GPIOs, QSPI, I2C and UART
- -40°C to 150°C operating temperatur (junction)

Performance and Power Efficiency

- Power of 3W when running typical models
- 10,000x lower power than comparable digital solutions

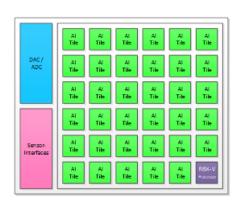
Extensions

 CMOS IP can be integrated neatless on-chip as a co-

processor for any digital design

- CMOS-based circuits: existing semiconductor technologies configured to emulate neuron and synapse functions.
- anabrid chips can be interconnected without bounds

to allow any size of network



TARGET APPLICATIONS

- O CONSUMER ELECTRONICS, SMART HOME
- **O AI ACCELERATION**
- EDGE SERVER
- EMBEDDED CONTROL SYSTEMS
- **O WEARABLES AND MEDTECH**
- AVIATION AND SPACE

As a vertically integrated semiconductor and analog company, we deliver IP, custom silicon, and discrete analog products that are leveraged by customers globally in R&D, data centers, computing, and AI applications.

