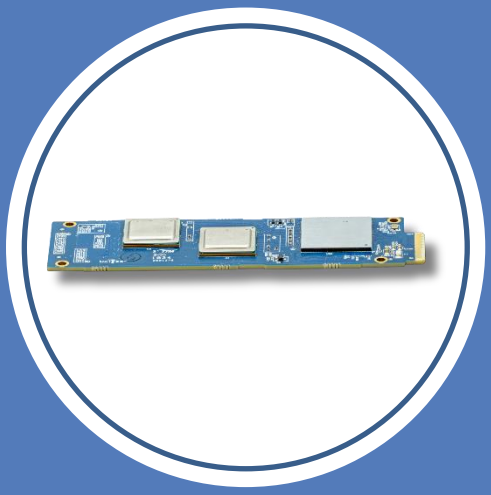

Biscotti AI E1.S

Dual TPU for 52 TOPS

The Biscotti E1.S uses up to 2 Hailo-8 Edge AI processors, featuring up to 26 tera-operations per second (TOPS) each. With an architecture that takes advantage of the core properties of neural networks, the Hailo-8 neural chips designed onto the E1.S allow edge devices to run deep learning applications at full scale more efficiently, effectively, and sustainably than other AI chips and solutions.

Performance vs Power

The Biscotti E1.S AI Module provides 52 TOPS from as little as 10 Watts. The Biscotti E1.S uses 2 Hailo-8 Edge AI processors, featuring up to 26 tera-operations per second (TOPS) each, stands out for its exceptional performance in the realm of edge processor modules. By using an E1.S, it becomes feasible to power both AI processors, resulting in performance that excels in power efficiency.

Plug-and-Play for Servers and Edge Devices

The Biscotti E1.S can be inserted directly into E1.S slots normally used by SSDs to instantly provide Artificial Intelligence in a much larger server configuration. Either for use to support multiple parallel Neural Networks from a large array of camera inputs or all integrated together as a single Large Language Model array to solve the largest AI cases. At much lower power than GPU modules or Add-In-Cards, a solution using Biscotti can change the game for a data center's power envelope.

Neural Network Models & Application Support

The AI processors integrated onto the Biscotti E1.S have a robust software suite that supports state-of-the-art deep learning models & applications out-of-the-box. Additionally, it is equipped with a comprehensive dataflow compiler that enables customers to port their neural network models easily & quickly. With support for AI frameworks: TensorFlow, TensorFlow Lite, Keras, PyTorch & ONNX, Biscotti supports Edge Neural Nets today and LLM Generative AI in the future.

Part Number	Configuration
UCT201-021-NC	Dual AI TPU w/12 lane Switch
UCT201-021-HS	Dual AI TPU (9.5mm Heatsink) w/12 lane Switch

Email : sales@unigen.com
Tel: 1-510-896-1818 (Main)
1-800-826-0808 (Toll Free)

Biscotti AI Module	
AI Processor	Dual Hailo-8
Form Factor	E1.S (EDSFF)
Power (Max)	10 Watts
Performance	52 TOPS
Interface	4 Lane PCIe Gen 3
Supported Frameworks	TensorFLow, TensorFlow Lite, ONNX, Keras, Pytorch
Supported OS	Linux, Windows
Certification	CE, FCC, VCCi, KCC, WEEE
Dimension	33.75mm x 118.75mm x 9.5mm (5.9mm w/o Heat Sink Enclosure)
Operating Temperature	0°C ~ 70°C
Biscotti Performance (With Atom X6414RE)	
Network (AI)	Frames per Second (HW)
Resnet_V1_50-Imagenet	2692.61
Yolov3_Gluon	50
Yolov3	50.4
Yolov4-leaky	56.59
Centerpose_regentx_1.6gf	4633.13
Eight Biscotti Module Performance (w/AMD Genoa System)	
Network (AI)	Frames per Second (HW)
Resnet_V1_50-Imagenet	21.5K
Yolov3_Gluon	400
Yolov3	403.2
Yolov4-leaky	452.72
Centerpose_regentx_1.6gf	37.1K

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