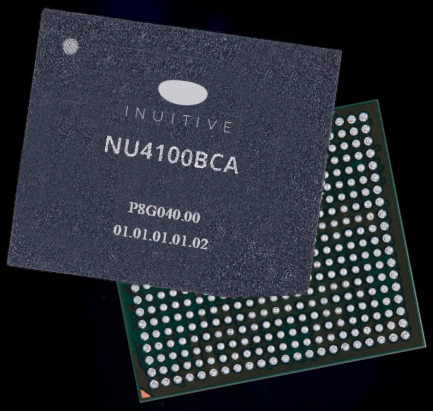
INUITIVE

NU4100

A multi core SoC that supports High-quality 3D depth, SLAM accelerators, strong Computer Vision engine and Deep Learning (CNN) processor



NU4100 is a superior multi core vision processor that supports 3D Imaging, Deep Learning and Computer Vision processing for Augmented Reality and Virtual Reality, Drones, Robots, and many other applications. This new generation processor enables high quality depth sensing, SLAM on-chip, Computer Vision and Deep Learning (CNN) capabilities; all in affordable form factor and minimized power consumption, leading the way for smarter user experiences.

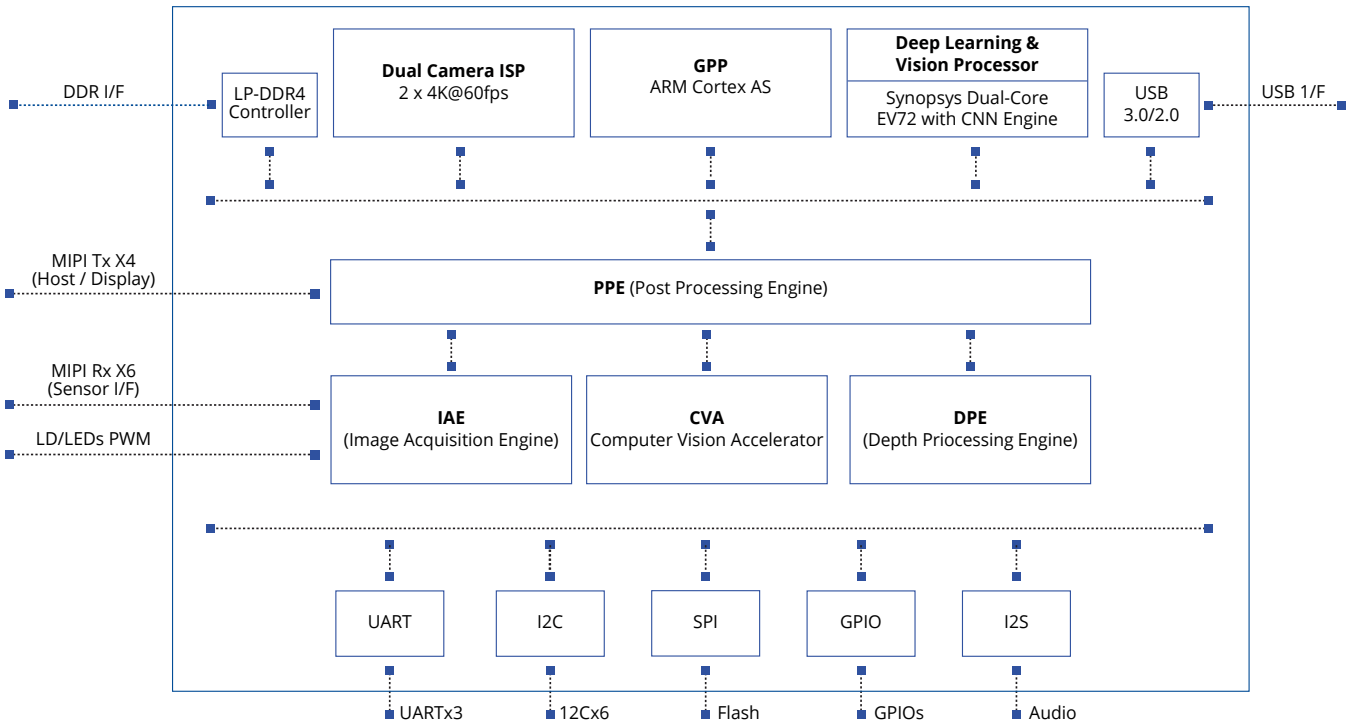
NU4100 brings to the market unmatched imaging, vision and AI computing power, exceeding a total of 8 Terra OPS (Operations per second). It introduces an optimized Embedded Vision architecture that effectively combines a set of computing blocks, making it the most powerful vision processor available to date.

KEY FEATURES AND PARAMETERS

- 2 Vector Cores that provide 350 Giga OPS – supports both floating and fixed point operation
- Dedicated CNN processor
  - High performance: 3.2 Terra OPS for AI/CNN
  - Supports large-scale deep neural networks at high frame rate (e.g. Yolo-V3 at 35 fps .)
- 3 Powerful CPU Cores that provide more than 13,000 CoreMark
- Depth processing engine that enables throughput of 120Mp/s and supports multiple simultaneous streams of both stereo and structured light
- SLAM engine that enables highly accurate key points extraction at 120fps from two cameras simultaneously
- Advanced low power 12nm silicon process
- High quality dual ISP for 2x4K @60fps
- Real time processing capable of synchronizing, time-stamping and process inputs, from multiple sensors to serve as a smart sensor hub
- Secured Boot
- More than 4MB of SRAM on-chip for servicing the vision cores
- High throughput LPDDR4 interface for reducing the external memory access bottleneck
- Connectivity to 6 cameras and 2 displays

NU4100 HIGH LEVEL ARCHITECTURE

BLOCK DIAGRAM



ABOUT INUITIVE

Inuitive designs powerful multi core processor ICs that serve as a Vision Processor in the areas of Augmented Reality and Virtual Reality, Drones, Robots and Autonomous Cars, to name a few of the applications that benefit from its technology. NU4100 employs advanced Artificial Intelligence combined with 3D Imaging, Computer Vision and Deep Learning capabilities that make smart devices even smarter.

Our R&D experts specialize in the fields of Imaging, Computer Vision algorithms, Optics, Embedded Systems software and System-on-Chip design. With the development team's contribution and combined effort, Inuitive is a leader in the development of unique processor architecture that delivers optimal tradeoff between performance and flexibility. Our powerful chip offloads the main CPU and dramatically shortens both system latency and response time, while saving power and improving overall performance (high frame rate, higher camera resolution, wide FOV).

HOW TO CONTACT US

2 Hatidhar Street, Raanana, Israel Phone: (+972) 73 7968 200
Contact: info@inuitive-tech.com www.inuitive-tech.com

INUITIVE