



tiny**vision**.ai

Enabling embedded vision.

Venkat Rangan
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Challenges in integrating low power* CV today

Lack of knowledge & system solutions

Costly to build and scale

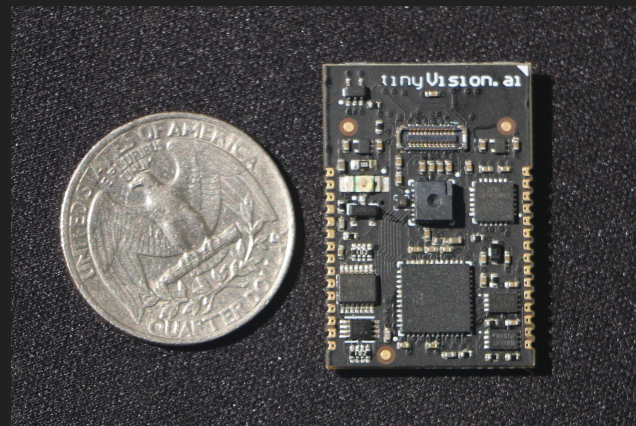
Time consuming

Highly specialized, multi-disciplinary & nascent field

Introducing the Low Power Vision SoM

- Goal: Common use case prototype in less than a day
- Reference design solution for the edge
 - Integrated sensor, processor (FPGA), IMU and Mic
- Scalable platform with simple API* to get started

- Integrated APIs for Lattice SensAI core to enable ML
 - Reference code and models for sample use cases



- Integrated low power mono global shutter image sensor, optional color rolling shutter
- 6DoF Invensense IMU with frame sync
- I2S microphone
- Lattice ICE40UP5K ultra low power FPGA
- TensorFlow compatible AI framework
- 1MB flash, 8MB SRAM
- Frame sync'ed IR LED
- 3 color LED
- ...



More details at: <https://github.com/tinyvision-ai-inc/Vision-FPGA-SoM>

Value Added Services

- Customization of the SoM for specific use cases
 - Modification of HW, API, connectivity & power (eg. energy harvesting)
 - AI model development support
 - Vertical solution enablement

- Product development/consulting with a focus on low power CV/AI processing
 - Fast turnaround, low to medium volume HW manufacturing (US based)

Questions ???