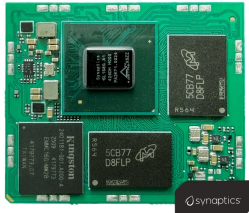
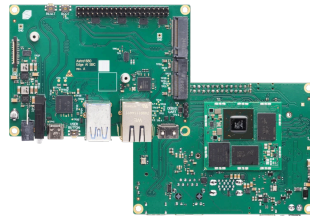


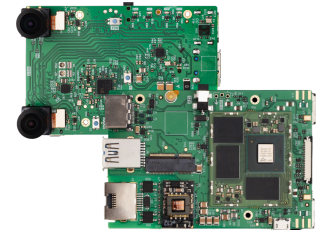
# Production-Ready Edge AI on the Grinn AstraSOM-1680 Platform



SOM-1680



SBC-1680



EVB-1680

**Bring Your Models, Not Your Platform Team.**

## The Solution

The Grinn AstraSOM-1680 delivers powerful on-device AI inference in an ultra-compact form factor built on Synaptics' AI-native SL1680 processor. But deploying edge AI products at scale requires far more than hardware alone.

Peridio's Avocado OS eliminates the production infrastructure gap with a validated Linux platform, OTA updates, fleet management, security hardening, and CRA-ready device operations — pre-integrated on the AstraSOM-1680 from day one.

**Together, we replace 12+ months of BSP and fleet infrastructure work with a production stack ready in weeks.**

## Built For Edge AI Deployments

### Industrial Vision & Inspection

Defect detection, automated optical inspection, and factory-floor vision systems with on-device AI inference, dual-camera capture, and managed fleet rollouts from prototype to production.

### Smart Cameras & Computer Vision

Deploy production-ready smart cameras with real-time object detection, tracking, and multi-camera processing — without building custom Linux, OTA, or security infrastructure from scratch.

### Remote & Distributed Edge AI

On-device AI inference for bandwidth-constrained, remote, and intermittently connected deployments. Ultra-low-power standby with sensor-based wake supports battery and solar-powered operation, while OTA updates and remote diagnostics simplify fleet operations at scale.



# Your OS Partner, Not Your OS Problem

Avocado OS + Peridio Core turns the Grinn AstraSOM-1680 into a production-ready vision platform with enterprise-grade OS, OTA, and fleet infrastructure:



## Peridio Core (SaaS)

OTA updates with delta compression, A/B rollback, staged rollouts. Fleet dashboard, health monitoring, remote debugging, config management.

## Peridio Core

OTA

Fleet

Observability



## Avocado OS

Production-hardened, embedded Linux runtime. Yocto-based without the Yocto expertise. Secure boot, verified boot, FDE out of the box.

## AVOCADO OS Production-Ready Linux

Vendor Support

Customer Apps

Avocado Linux Runtime

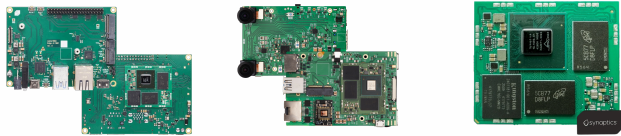
Supported hardware

NVIDIA NXP synaptics RENESAS



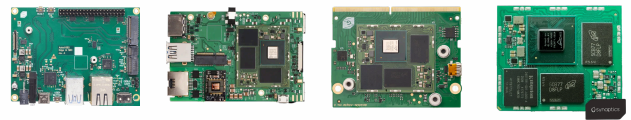
## Long Term Support (LTS)

Guaranteed stability and security of your fleet for the long haul.



## Vision AI Platforms

Model	SoC	TOPS	Sensor	Rating
AstraEVB	SL1680	7.9	Multi-camera	Eval
AstraSBC	SL1680	7.9	4K HDMI RX	Pico-ITX
AstraSOM	SL1680	7.9	Dual MIPI	37x42mm



## Edge Compute Platforms

Model	Form Factor	SoC	TOPS
AstraOneSBC-1680	Pico-ITX SBC	SL1680	7.9
AstraEVB-1680	Eval + Multi-cam	SL1680	7.9
AstraADA-1680	Machina Adapter	SL1680	7.9
AstraSOM-1680	37x42mm LGA	SL1680	7.9

## Stop Building Infrastructure. Start Shipping Products.

You didn't start your company to maintain Linux infrastructure. You started it to build something that works in the physical world. Let's get you back to that.



Learn more  
or get started

