PARAVISION

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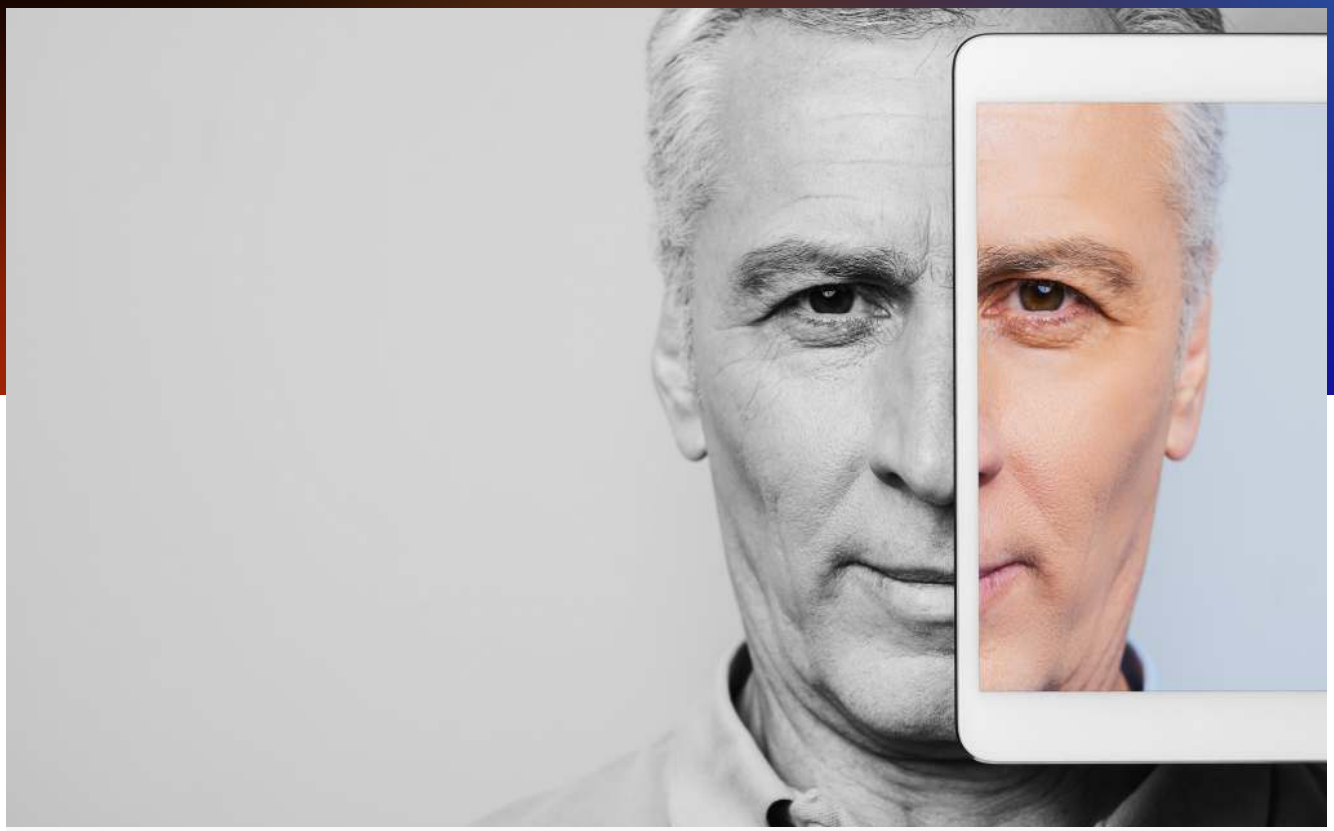
Paravision Liveness for Specialized Cameras – Datasheet



Ensuring the authenticity of biometric images is critical to high confidence biometric identification and authentication in unattended or fully automated use cases, from physical access control to air travel. To protect against presentation attacks in these use cases, Paravision Liveness for Specialized Cameras delivers advanced AI-based anti-spoofing optimized for embedded processing and specialized 3D/NIR imaging configurations. Leveraging the latest advances in Vision AI, Paravision Liveness for Specialized Cameras is fully passive and operates in real-time, enabling advanced protection without compromising user experience.

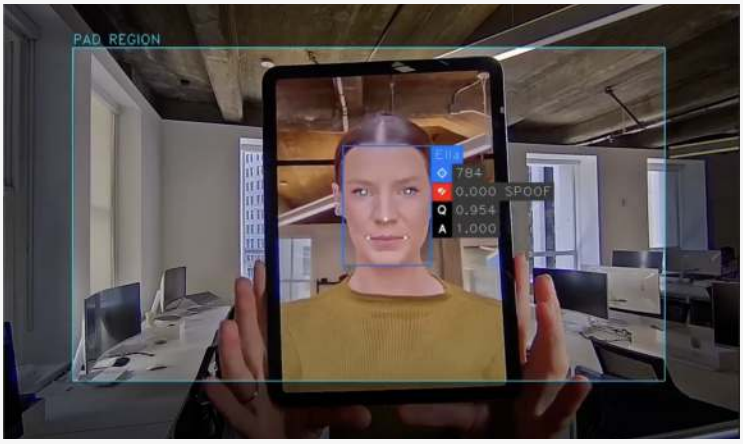
Paravision Liveness for Specialized Cameras is optimized for embedded devices that use a multi-channel combination of visible, near-infrared, and depth imaging:

a. Leverages Ambarella SoCs and the Ambarella / Lumentum / ON Semiconductor AIoT 3D imaging architecture
1. Delivers advanced liveness in 60msec with the Ambarella CV25 SoC family

This unique approach delivers an intuitive, real-time user experience supporting high throughput use cases with a compact, power-efficient, cost-effective approach to multispectral, multimodal (2D/3D) imaging. All liveness detection is computed on the edge device and can be integrated in concert with face detection, quality checks, intent to enter, and face matching to deliver a seamless, fully integrated capture flow.

User Interface Reference Apps

Paravision provides full reference apps with UI/UX recommendations as well as sample apps with source code that can be used for rapid, low-risk development.



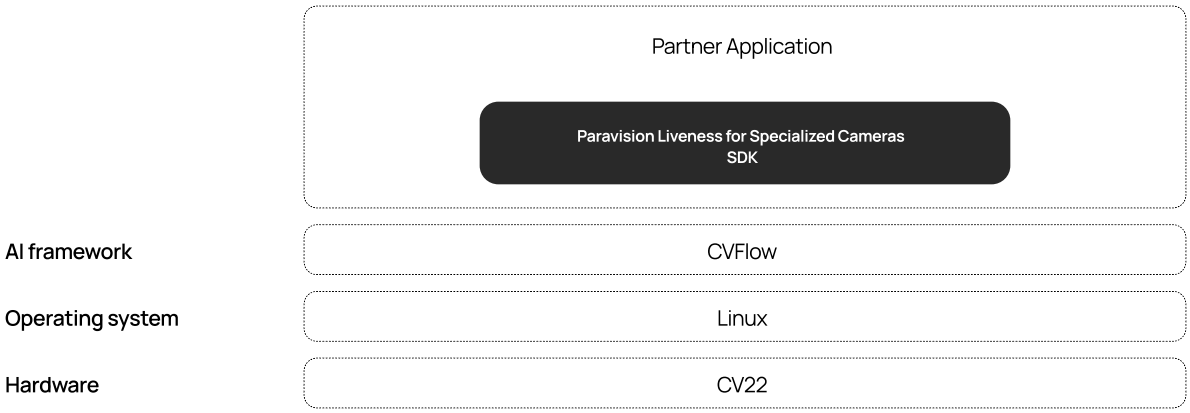
Embedded reference app screenshot

Supported Computing Environments

Paravision supports a wide range of computing environments, enabling our technology on a wide variety of platforms. Paravision proudly partners with leaders from Silicon Valley and around the world to deliver outstanding price, performance, availability, and support:

Supported System-on-Chip
Ambarella
Supported Computer Vision Framework
CVflow

System Architecture



Technical Specifications

Supported programming languages	C++ / C Wrapper
Supported operating system	Linux
Supported hardware platform	Ambarella CV25/ CV22 (CVflow) + On Semiconductor RGB-IR CMOS Sensor + Lumentum VCSEL
PAD (Liveness) Details	Level 1 and Level 2 PAD 3D/NIR liveness based on single face image and pattern from structured light emitter (VCSEL)