



IRIDA LABS

RA Ecosystem Partner Solution Irida Labs QR Scanning



Solution Summary

This PerCV.ai application software solution provides real-time QR code scanning functionality using an image sensor to detect QR codes within the coverage area. The non-disruptive, vision-only technology has tolerance to 3-axis rotations. Acquired information can display product data for optimal and automatic setting adjustments. The solution runs on the Renesas [RA8D1 MCU](#), one of the first Cortex-M85 MCUs in the market with Arm Helium™ technology.

Features/Benefits

- Robust, real-time optical QR code detection and decoding
- Non-disruptive, vision-only QR scanning
- Vision AI at the edge: all the processing done at the endpoint using RA8D1
- Plug and play, easily deployable, compact dimensions
- Cost effective and low power consumption
- Multiple QR detections supported at once
- Hardware and software solution

Diagrams/Graphics



Input Stream



Renesas EK-RA8D1



Application Examples

Target Markets and Applications

- Smart Home
- Home Appliances
- Smart Cities
- Smart Retail Applications
- Smart Health
- People Access Control
- Retail checkout
- Public transportation ticketing
- Mass market consumer IoT applications

<https://iridalabs.com/qr-scanning>

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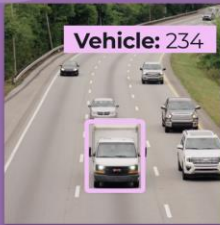
IRIDA LABS

Scaling Vision AI

[Irida Labs](#) is an embedded Vision AI software leader with a mission to bridge the gap between a camera and a human eye. We have joined the Renesas Preferred Partner and the Renesas Ready Partner Programs and work closely with Renesas teams in several initiatives, joint product releases and trade show demos.

Irida Labs' core product is a game-changing Computer Vision AI Platform - [PerCV.ai](#) (called Perceive AI), that comes with 2 suites of off-the-shelf Vision AI solutions; for Smart Cities & Spaces and Industry 4.0 respectively.

Smart Cities & Spaces Solutions Suite



Traffic Analytics



People Counting & Heatmapping



Free Flow Vehicle /
Number Plate Recognition



Smart Parking

powered by



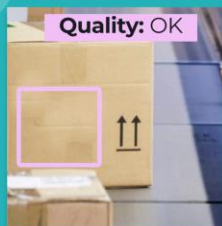
PerCV.ai

Computer Vision
AI Platform

Industry 4.0 Solutions Suite



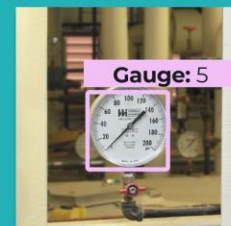
QR Scanning



Packaging Quality
Inspection



Warehouse Monitoring



Analogue Gauge
Digitization



Personnel Safety PPE
Monitoring



Vehicle Recognition



People Presence
Detection



Product Counting



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