



# RZ Ecosystem Partner Solution

## IMDT V2H SOM



### Solution Summary

The IMDT V2H SOM (System on Module) is a high-performance, cost-effective module designed for a range of AI-driven vision applications. Powered by Renesas' [RZ/V2H](#) processor, it features an Arm® Quad Cortex®-A55 (1.8GHz) CPU, an integrated AI accelerator DRP-AI3 and 4K encoder/decoder, optimized for vision-based tasks. It supports up to four cameras via 4 x 4-lane MIPI CSI-2 connections. Customizable options include onboard Wi-Fi/Bluetooth, various memory and storage capacities, and PHY configurations, making it ideal for developing advanced AI solutions efficiently, reducing both time and costs for developers.

### Features/Benefits

- Based on Renesas' RZ/V2H Quad Cortex®-A55 processor
- Small Form Factor by (WxLxH): 58x36x6mm
- Complete solution including HW&SW
  - IMDT V2H Evaluation Kit and SW for evaluating cameras and sensors is available
- Flexible & modular platform
  - Configurable memory size (DDR, eMMC, Flash)
  - Customizable carrier board and the associated SW services
- Enhanced security
  - Edge-AI realized by V2H SOM reduces potential data breaches of cloud-based system

### Diagrams/Graphics



### Target Markets and Applications

- Robotics and drones
- IoT applications
- Industrial applications
- Smart retail
- Medical
- Smart city
- Smart home

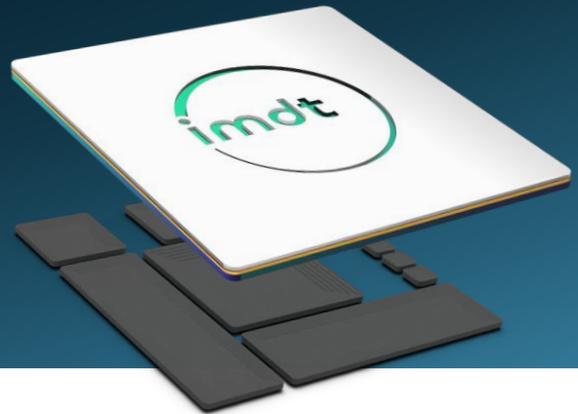
<http://www.imd-tec.com/products/v2h-som>



## IMDT Solutions

### Take your innovations to design, development & manufacturing

we tailor end-to-end solutions that transform technology aspirations into cutting-edge applications



Design

Development

Manufacturing

#### IMDT IPs:



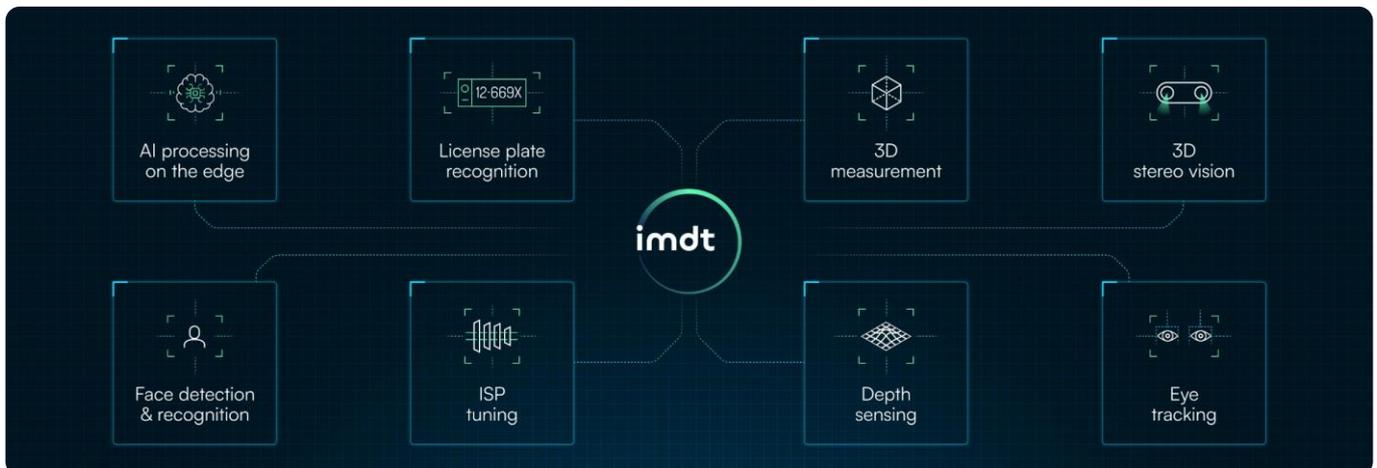
**3D Measuring System**  
Calibration algorithm  
Depth algorithm



**Face recognition**  
ML customizable design

- Accelerate product time-to-market
- Reduced cost of development and manufacture
- Simplified production
- Optimized performance
- Seamless customization of algorithms, devices and systems
- On the platform of your choice

## IMDT Solutions Overview



## About IMDT

IMDT Technologies, with headquarters in the UK and Israel, specializes in creating advanced vision and AI-powered products and systems. Leveraging extensive engineering experience in real-time applications, including vision and AI on edge hardware and software, IMDT has excelled in design, development, and manufacturing since its inception in 2017. The company globally addresses complex vision and AI challenges, focusing on partnerships with leading chip manufacturers and delivering turnkey projects in medical, robotics, smart cities, smart homes, and industrial IoT. For more information contact: [sales@imd-tec.com](mailto:sales@imd-tec.com)