RZ Ecosystem Partner Solution

IMDT V2H & V2N SBC

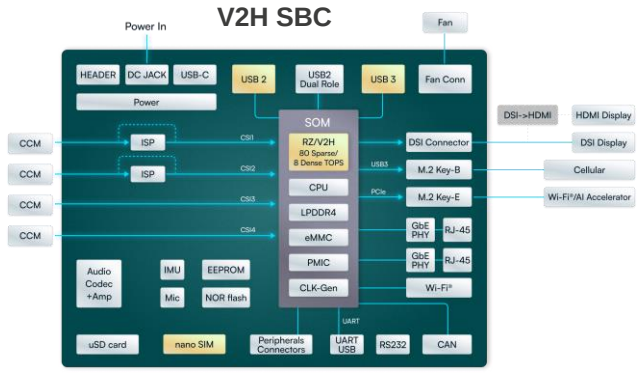
Solution Summary

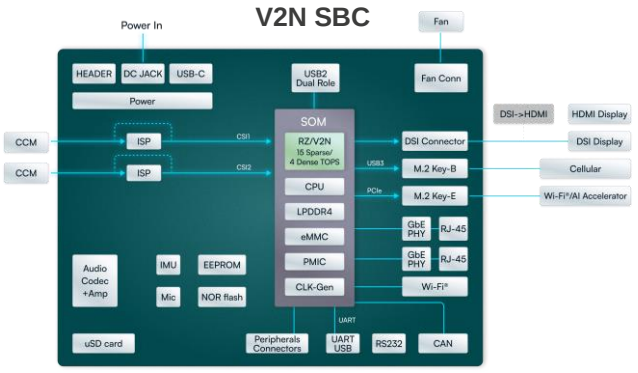
The IMDT V2H and V2N SBCs (Single Board Computers) carrier board transforms IMDT SOMs based on Renesas RZ/V2H and RZ/V2N into powerful, compact mini-computers. Designed for AI-driven vision applications, these SBCs provide an optimal balance of performance, efficiency, and cost while offering extensive assembly options and comprehensive onboard connectivity to meet diverse development needs. Their energy-efficient design and small footprint make them the ideal choice for developers building compact, high-performance applications.

Features/Benefits

- Muti-Camera Solution by multiple 4-lane MIPI CSI-2
- Full Connectivity
    - M.2 NGFF Key-E for Wi-Fi module or AI accelerator
    - M.2 NGFF Key-B for cellular module
    - Wi-Fi 4 , Dual-band
    - 2 x RJ-45 , 1000Base-T, optional PoE
- Small Form Factor (WxLxH): 125 x 80 x 20mm
- Low Power SBC without heat sink
- 6-DOF IMU,3-Axis magnetometer for motion sensing
- Quick prototyping with IMDT's V2H & V2N Evaluation Kit

Diagrams/Graphics





Target Markets and Applications

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

www.imd-tec.com/product-category/renesas

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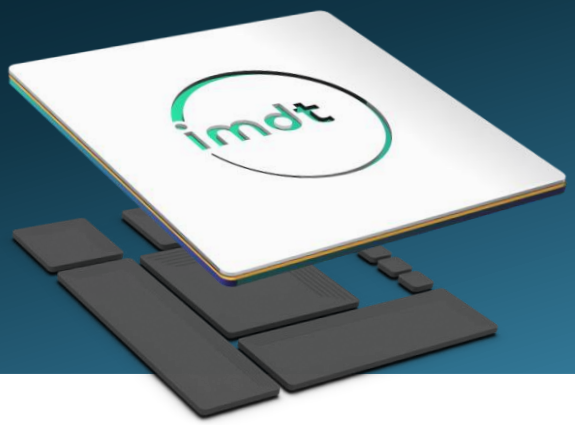
IMDT Solutions

Take your innovations to design, development & manufacturing

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



Design ▶ **Development** ▶ **Manufacturing**

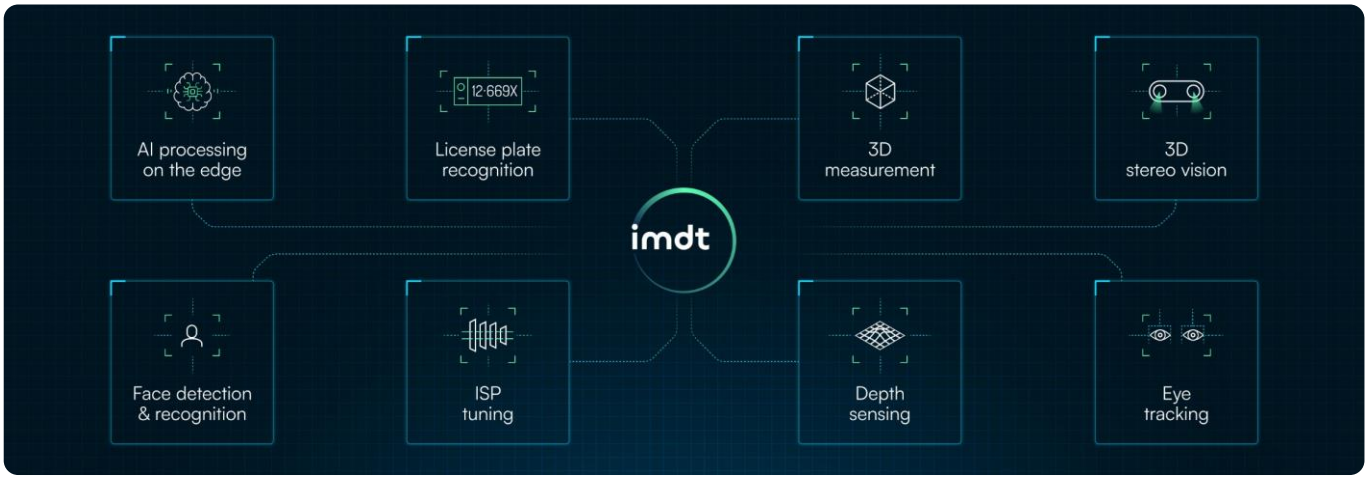
IMDT IPs:

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



Evaluation Kit

IMDT's V2H and V2N Evaluation Kit, based on the IMDT V2H SBC (Single Board Computer) and V2N SBC, is a high-performance mini-computer designed for a variety of applications in robotics, drones, and smart city projects. The kit offers a user-friendly board with comprehensive onboard connectivity, providing developers with an energy-efficient solution that occupies minimal space.
The V2H and V2N Evaluation Kit can serve as a comprehensive development platform for both evaluation and application development purposes. The kit offers an excellent demonstration of the each SOM and SBC connectivity features and performance.