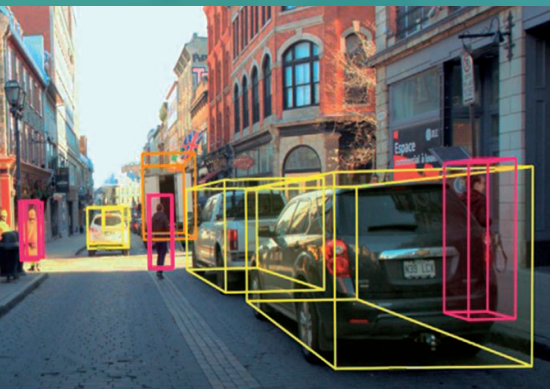# LeddarTech®

An Automotive Software Company

Nasdaq LDTC

Automotive Software and Inspired Products That Enable ADAS & AD Applications

Increased Performance, Scalability and Flexibility at Low Cost

A global software company founded in 2007 and headquartered in Quebec City with additional R&D centers in Montreal, Toronto and Tel Aviv, Israel, LeddarTech develops and provides comprehensive AI-based low-level sensor fusion and perception software solutions that enable the deployment of ADAS and autonomous driving (AD) applications. LeddarTech's automotive-grade software applies advanced AI and computer vision algorithms to generate accurate 3D models of the environment to achieve better decision making and safer navigation.

This high-performance, scalable, cost-effective technology is available to OEMs and Tier 1-2 suppliers to efficiently implement automotive and off-road vehicle ADAS solutions.

150+ patents (80 granted) cover the complete spectrum from signal acquisition to perception and fusion.

Fundamental IP

✓ **Fundamental proprietary fusion IP** is core to the benefits of superior performance, flexibility and scalability at lower cost.

✓ **Solid anteriority** — many patents filed before most auto tech companies began research.

Our mission is to improve safety and quality of life for road users, travelers, commuters and workers by enabling applications that reduce traffic congestion, minimize the risk of road accidents and improve the overall efficiency of road transport.

Our customers are automotive OEMs and Tier-1 & Tier-2 suppliers looking for sensing and perception solutions that are flexible, adaptable and scalable, allowing them to meet their key performance, cost and development time requirements.

We believe that sensing, perception and automation are instrumental in making global mobility safer, efficient, ecological and affordable. This is what drives us to seek to become the most widely adopted sensor fusion and perception software solution in the market.

LeddarVision™
Sensor Fusion & Perception Software and Inspired Products

Low-Level Sensor Fusion & Perception Software for Automotive and Off-Road Industrial Vehicles L2-L5 Applications

LeddarVision™ is an advanced environmental perception solution for the automotive market, from passenger light vehicles to off-road, heavy industrial vehicles.

Based on LeddarTech's comprehensive AI-based low-level sensor data fusion technology, LeddarVision software provides a comprehensive 3D environment model delivering superior perception performance from any sensor set. LeddarVision's unified architecture accelerates the custom development by OEMs and Tier 1-2 suppliers of cost-effective perception solutions that are scalable from ADAS to highly automated driving. LeddarVision's advanced AI becomes the central enabler of such scalability as perception training continues to improve from system to system.

LeddarVision-Inspired Products for L2 to L3 ADAS Applications

LeddarTech supports customers seeking specific perception systems that enable ADAS capabilities with preconfigured LeddarVision products for front-view (LVF), surround-view (LVS-2⁺) and parking assist (LVP) perception. The LeddarVision product family is designed to enable L2/L2+/L3 ADAS but also to meet a 5-star safety rating (ADAS) for new car assessment programs (NCAP) and general safety regulations (GSR).

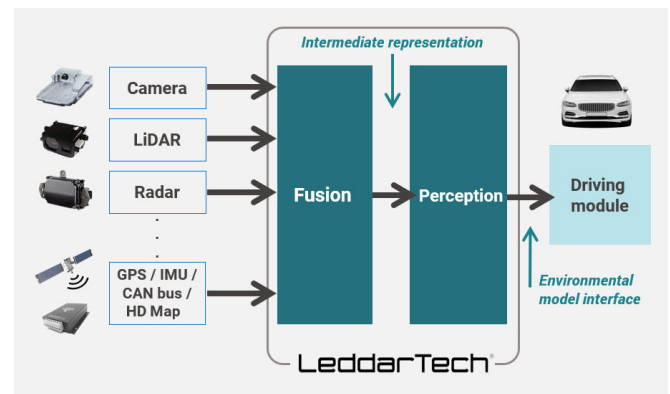# Low-Level Sensor Fusion Outperforms Object Fusion

Object-Level Fusion Architecture
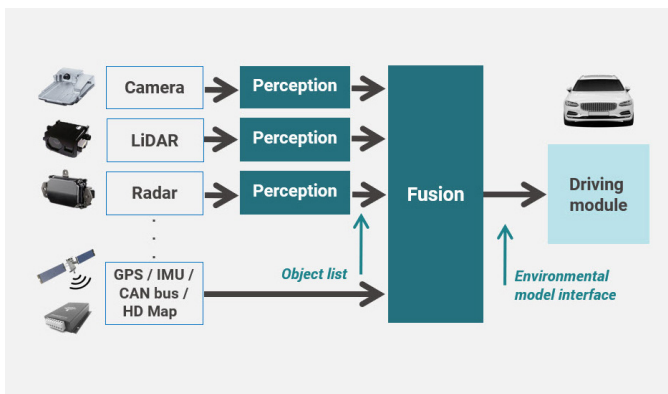
- **Each sensor detects** and classifies objects.
- Sensors' **decisions are then fused**.

— **Raw information** from the sensors is **lost**.

— **False alarm** removal is difficult.

— **Sensor changes** require **high efforts** in **perception** changes.

LeddarVision Low-Level Fusion Architecture

- Raw data from sensors **is first fused together**.
- Detection and classification **algorithms then run on the fused model**.

+ Sensors' conflicts and missing sensor info are **inherently solved**.

+ **Perception** is more **invariant** to **sensor changes**, enhancing solution **scalability**.

Low-Level Sensor Fusion Benefits

Low-level fusion (LLF) does not just tune between precision and recall. It actually pushes the performance envelope for better mean average precision (mAP), utilizing ALL sensors for better decision making.

Precision/Recall
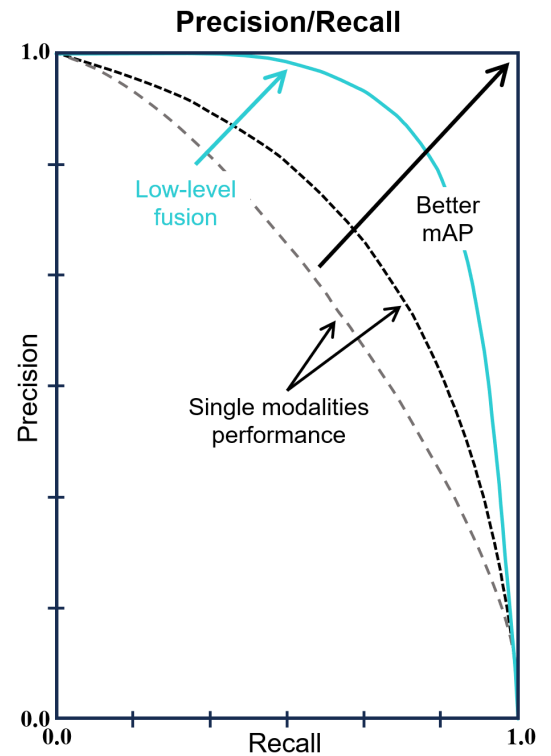
LeddarTech Addresses Customer Challenges

High-Performance
- Surpasses object-level fusion performance and increases the sensors' effective range.
- Inherent sensor redundancy, providing superior performance and reliable operation in presence of degraded, failing or conflicting sensors and adverse scenarios.

Cost-Effective
- Enables entry-level ADAS offering with 1V2R lowest-cost sensors.
- Streamlines development efforts for optimized R&D costs.
- AI perception training continues to improve from system to system.

Scalable
- Single architectural approach that scales from entry-level to premium segments.
- Reduces rework efforts with sensor changes and efficiently scales computational power with sensor additions.

Sensor and Processor-Agnostic
- Drives optimal performance from various sensor sets and works with different sensor providers.
- Flexibility to handle a wide variety of use cases is highly important in multi-SOP platform development.
- Works on any processor for ultimate flexibility.

LeddarVision Optimizes ADAS Performance

AI-based low-level sensor fusion (LLF) leverages the raw information from all sensors to enable better perception and more reliable operation. Based on advanced LLF, LeddarTech's perception software generates superior performance from any sensor set, as demonstrated by industry benchmarks.

Comprehensive Environmental Model

Delivering SUPERIOR PERCEPTION performance from MOST sensor sets into SINGLE and UNIFIED ENVIRONMENTAL MODEL to enable and accelerate the development of HIGH-PERFORMANCE and SCALABLE ADAS to HAD solutions based on our strong and demonstrated LOW-LEVEL FUSION AND PERCEPTION domain expertise.
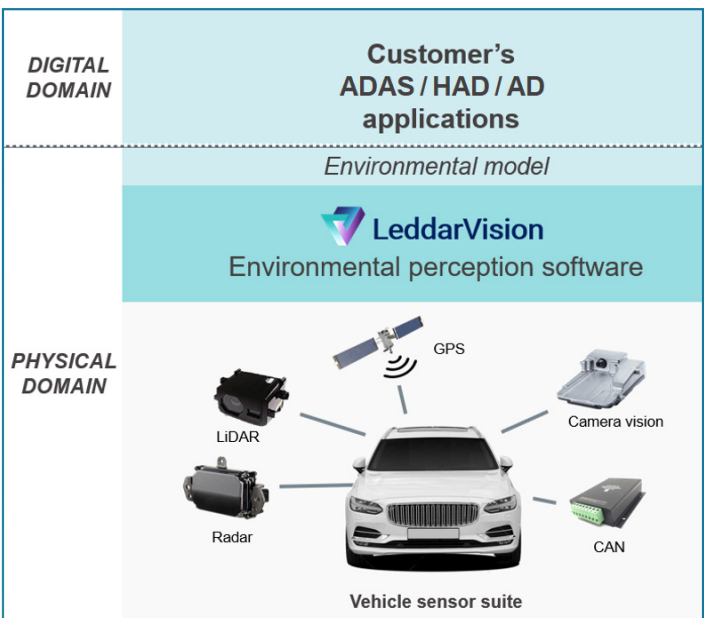
LeddarTech Offers Automotive OEMs and Tier 1-2 Suppliers

Software

LeddarVision Sensor Fusion and Perception Software

An advanced environmental perception solution for the automotive and mobility segments, from passenger light vehicles to off-road, heavy industrial vehicles. LeddarVision software provides a comprehensive environment model delivering superior perception performance from any sensor set that supports customers wishing to enable and accelerate the development of high-performance solutions scalable from ADAS to highly automated driving (HAD).

LeddarVision Products

Sensor Fusion and Perception Software Stacks Built on LeddarVision

The newly released LeddarVision family of automotive software products addresses the challenges faced by Tier 1-2 suppliers and OEMs when developing Level 2/2+ ADAS applications targeting a 5-star NCAP 2025/GSR 2022 rating, such as solving safety issues and finding a scalable fusion and perception software stack that offers high performance at a low cost.

LVF-E

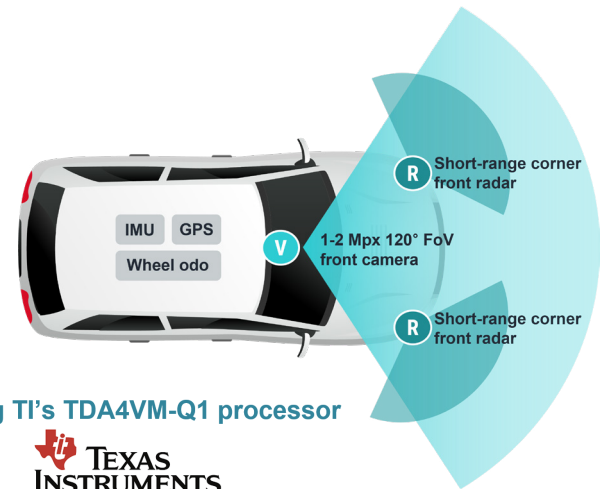## LeddarVision Front-View – Entry-Level

For customers seeking to develop entry-level ADAS safety and highway assistance L2/L2+ applications

LVF-E is a comprehensive front-view fusion and perception stack for entry-level ADAS L2/L2+ highway assist and 5-star NCAP 2025/GSR 2022. LeddarTech's low-level fusion (LLF) technology pushes the performance envelope, doubling the effective range of the sensors and enabling, for the first time, a solution with only a single 1-2 megapixel 120-degree front camera and two short-range front corner radars in a 1V2R configuration. Efficient implementation on the TDA4VM-Q1 platform achieves one of the lowest system costs for L2/L2+ entry-level ADAS without sacrificing system performance.

LVF-E production samples are now available.

LVF-E Product Brief

R Short-range corner front radar
V 1-2 Mpx 120° FoV front camera
R Short-range corner front radar
IMU GPS
Wheel odo

Featuring TI's TDA4VM-Q1 processor

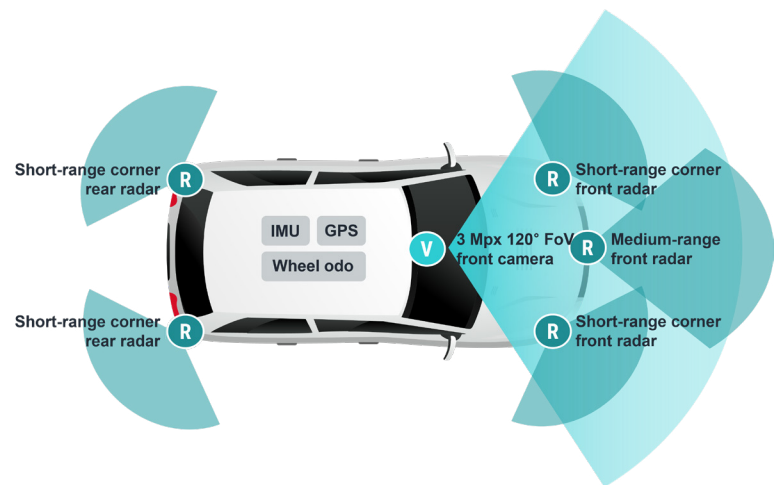TEXAS INSTRUMENTS

LVF-H

LeddarVision Front-View – High-End

For customers seeking to develop premium ADAS safety and highway assistance L2/L2+ applications

With sensor configuration extended to 1V5R based on a single 3-megapixel 120-degree camera, single front medium-range radar and four short-range corner radars, the LVF-H stack extends the perception support to highway assist applications at lower system cost, including 160 km/h adaptive cruise control, 200-meter range and semi-automated lane change. It also enhances the NCAP 2025 support for overtaking/reverse/dooring scenarios.

LVF-H Product Brief

Short-range corner rear radar R
IMU GPS
Wheel odo
Short-range corner rear radar R
R Short-range corner front radar
V 3 Mpx 120° FoV front camera
R Medium-range front radar
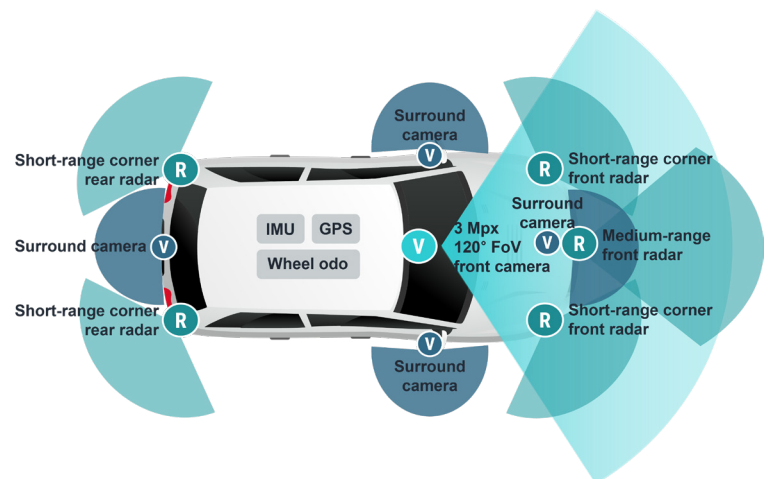R Short-range corner front radar

---

LVS-2⁺

LeddarVision Surround-View for Premium ADAS L2/L2+

For premium ADAS L2/L2+ highway assist and 5-star NCAP 2025/GSR 2025 applications

The newly launched LVS-2⁺ is a comprehensive fusion and perception software stack supporting premium surround-view L2/L2+ ADAS highway assistance and 5-star NCAP 2025/GSR 2022 safety applications. Based on LeddarVision architecture, LVS-2⁺ efficiently extends the LVF front-view product family 1VxR sensor configuration to a 5V5R configuration, enhancing support to TJA and HWA applications, and enabling automated lane changes, overtaking and extended speed range adaptive cruise control (ACC).

LVS-2⁺ Product Brief

Short-range corner rear radar R
Surround camera V
Short-range corner rear radar R
Surround camera V
IMU GPS
Wheel odo
V Surround camera
R Short-range corner front radar
Surround camera
V 3 Mpx 120° FoV front camera
V R Medium-range front radar
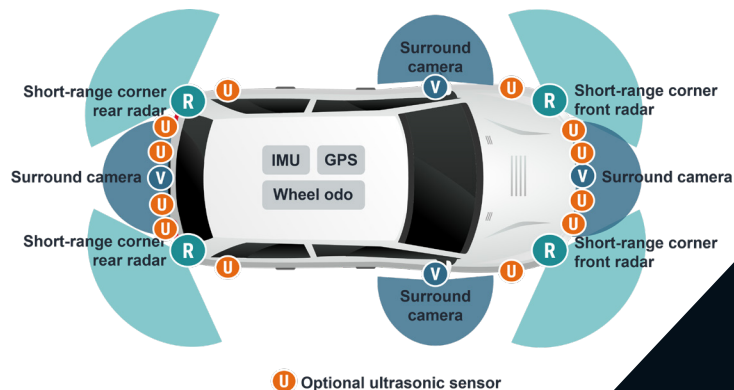R Short-range corner front radar
V Surround camera

LVP-H

LeddarVision for Automated Parking and Parking Assist

For premium ADAS L2/L2+ parking applications, including IPA, RPA and MA

Based on a 4V4R sensor configuration, LVP-H is a comprehensive fusion and perception software stack supporting premium ADAS L2/L2+ automated parking and parking assist applications, including intelligent parking assist (IPA), remote parking assist (RPA) and maneuver assist (MA). LVP-H optimally combines all sensor modalities to enhance performance and reliability for safer and stress-free parking experience. LVP-H enhances valid parking detection probability to over 95% with low false detections in challenging ODDs and environments and provides superior dynamic and static object detection for enhanced safety, including support to advanced NHTSA IPA safety scenarios.

LVP-H Product Brief

Short-range corner rear radar
Surround camera
Short-range corner front radar
Surround camera
Surround camera
Short-range corner rear radar
Short-range corner front radar
Surround camera

IMU GPS
Wheel odo

U Optional ultrasonic sensor

LeddarVision for Industrial Vehicles

Improving Automation for Off-Road Industrial Vehicles

From farms to mining sites, an increasing number of industrial vehicles are being equipped with environmental perception solutions aimed at providing advanced driver assistance capabilities, increasing productivity or fully automating the vehicle's operations. LeddarVision advanced, sensor-agnostic software platform offers customizable, high-performance environmental perception solutions for all levels of industrial vehicle autonomy.

Mining vehicles

Agriculture automation

Construction vehicles

Associations and Memberships

APMA – Automotive Parts Manufacturers' Association of Canada
AQT – Association québécoise des technologies
Autotech Council – Better and faster innovation
CCI – Council of Canadian Innovators
CCIQ – Québec Chamber of Commerce and Industry
CTA – Consumer Technology Association
FCCQ – Fédération des chambres de commerce du Québec

InnovÉÉ – Innovation in Electrical Energy (Québec)
INO – National Optics Institute
Linux Foundation – World-class open-source software
Propulsion Québec – Intelligent and Electrical Transports
Quebec Innovation Council – Network for Acceleration of Innovation
SOAFEE – Scalable Open Architecture for Embedded Edge

Specialized Expertise,
Global Recognition

Recent Awards and Recognitions

LeddarTech®

ISO 9001
Quality

LeddarTech head office
4535, boulevard Wilfrid-Hamel, Suite 240
Québec (Québec) G1P 2J7
Canada
Phone: + 1-418-653-9000
Toll-free: 1-855-865-9900
www.LeddarTech.com

Contact information
Sales: sales@LeddarTech.com
Media: media@LeddarTech.com
Investor relations contact: kevin.hunt@icrinc.com
Financial media contact: dan.brennan@icrinc.com