



CES 2021

Mobility is the Heartbeat of Life **Autonomous Mobility**

www.continental-automotive.com











Continental Automotive Strategic Action Fields

We Make Autonomous Mobility Happen



Continental's Portfolio for Automated Driving

Level 2 Plus Solutions are the Enabler for HAD

Continental technology		in series	in series	from 2021	from 2021/22
		Partly Automated Driving (SAE L2)	L2 "Performance"	"L2 Plus" L2 "Premium"	Highly Automated Driving (HAD) (SAE L3)
					
				HAD Ready	
 Software	Highway Assist NCAP ¹ 5 stars		Traffic Jam Companion (hands-off ≤ 80 kph)	 Highway Companion (hands-off ≤ 130 kph) L2 in extended "Operational Design Domain"	 Cruising Chauffeur Traffic Jam Chauffeur
	AD High Performance Computer	optional	1	1	2
 Sensors	Radars	1 – 5	5 – 7	5 – 7	7
	Cameras	1 – 2	6	6	9
	Lidars			optional	≥ 2

Relying on our strong sensor heritage, we support our customers with the best fitting solutions for fulfill their needs

¹ New Car Assessment Programme

Continental Autonomous Mobility Approach

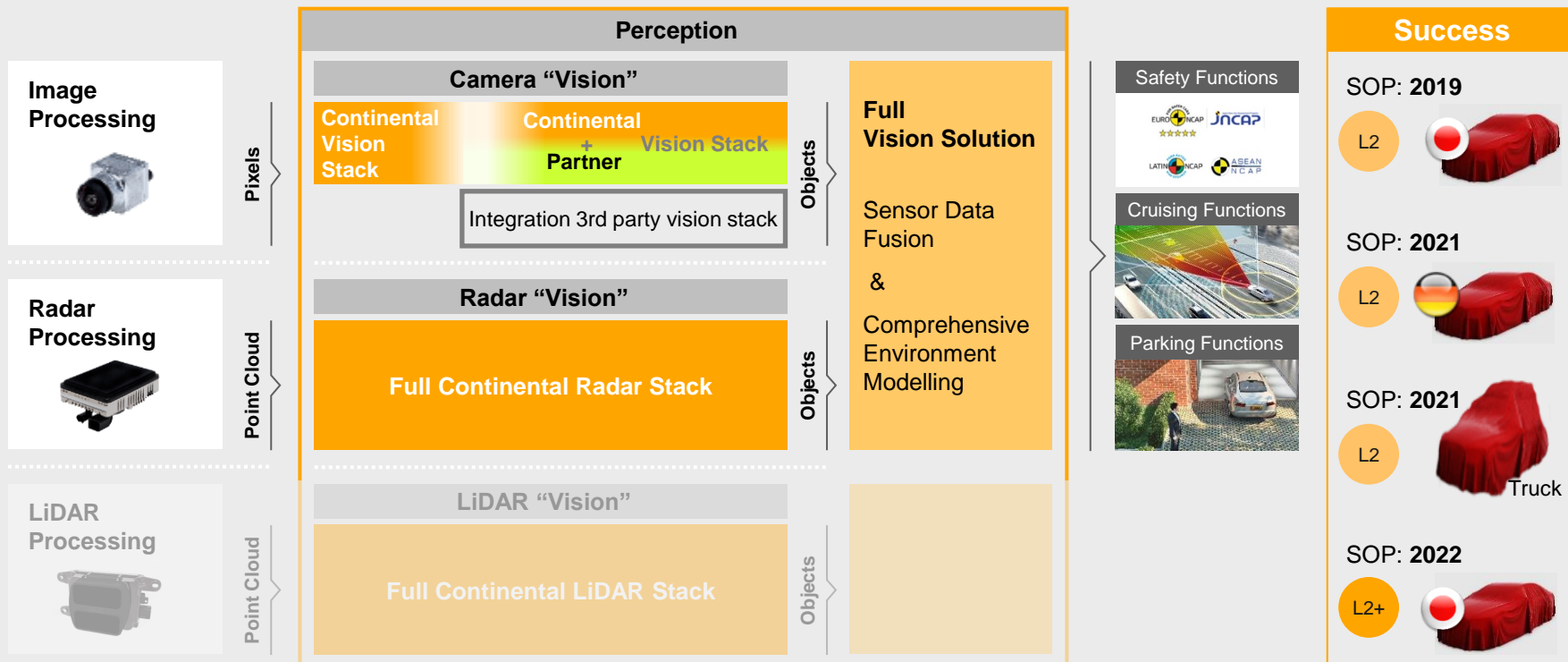
Outstanding sensor & fusion portfolio for L2, AD and HAD



* MEMS: Micro electro-mechanical system

From Vision to Perception

Sensor Know-how Enables Vision Solutions & Functions



Radar – Fundamental for ADAS and AD

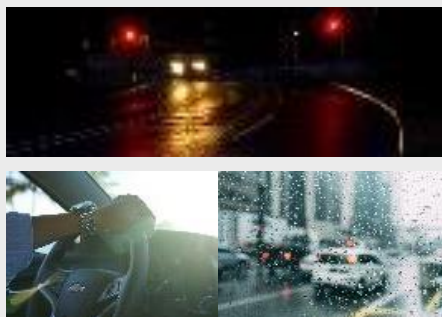
4D Imaging Radar Securing Technology Leadership



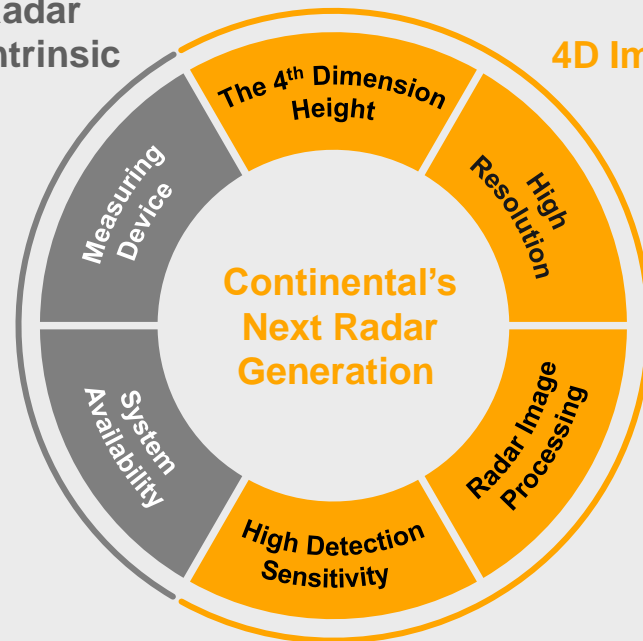
Precise distance and speed in real-time



Adverse weather conditions



Radar
intrinsic



NEW!
4D Imaging Radar



Underridable
elevated objects



Non overridable
ground obstacles



Road boundaries



Debris/potholes



Complex/dense traffic



Landmarks



Success

Expected **first to market**

SOP: **2021**



SOP: **2024**



Camera – Comprehensive Surround Vision Strategy

Leveraging 360° Vision for Automated Driving

Leading Surround View Systems

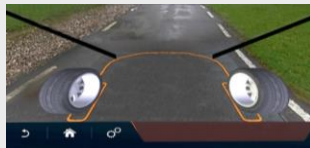
Benchmark **Adaptive 3D View**

1st SOP: 2018



First to market **Transparent Hood**

1st SOP: 2020



Easy-learning **Trailer Reverse Assist**

1st SOP: 2020 First to Market!



Satellite Camera Platform

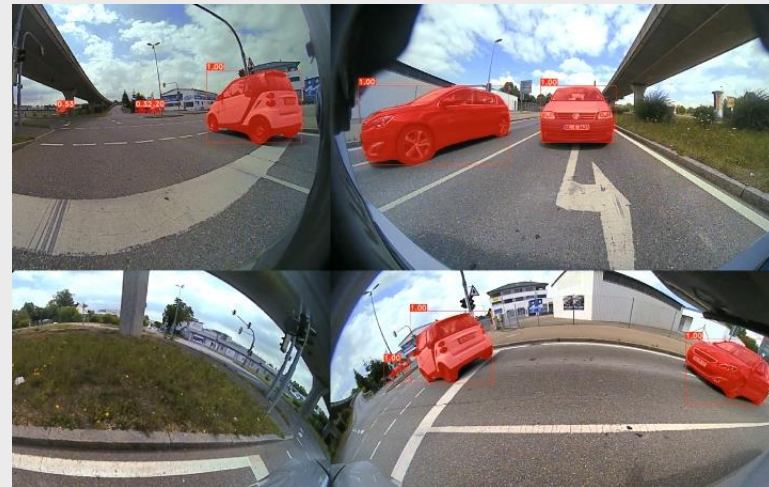
1st SOP: In production since 2017

2022



360° Vision for Systems \geq L2 Plus

Synergetic utilization of near range **Camera Vision for Cruising**



Target SOP: 2024

LiDAR – Required for Safe Automated Driving

Full Range Portfolio

Short Range LiDAR



Solid State Flash LiDAR

Highlights

- › No gaps in image/data! No motion distortion!
- › High accuracy object and free space detection

Target application:

Urban areas, traffic jam, robocabs

Success

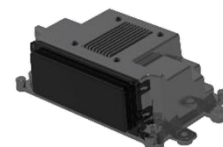
SOP: 2021

L2+
L3



Long Range LiDAR

Strategic investment in LiDAR pioneer



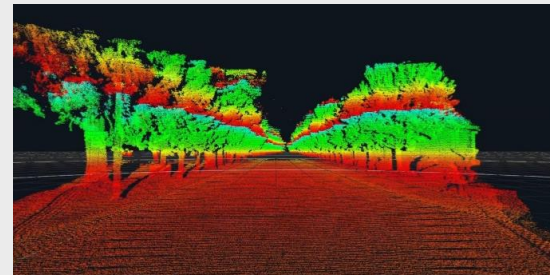
MEMS¹ Mirror Scanning LiDAR

Highlights

- › Patented novel advanced MEMS¹ technology
- › Dynamic spatial resolution enabling concurrent far range, high resolution and high sensitivity at minimized power consumption

Target application:

Highway



Target SOP: 2024

¹ MEMS: Micro electro-mechanical system

Software Stack and Hardware Platform Solutions

Modular & Scalable to Manage High Complexity

Full Stack Capability

Driving and Parking Functions



Perception



Operating System and Middleware



Software components from

Continental

Continental subsidiary

Continental subsidiary

3rd party



High Performance Computer (AD HPC)

Partly Automated Driving (SAE L2)

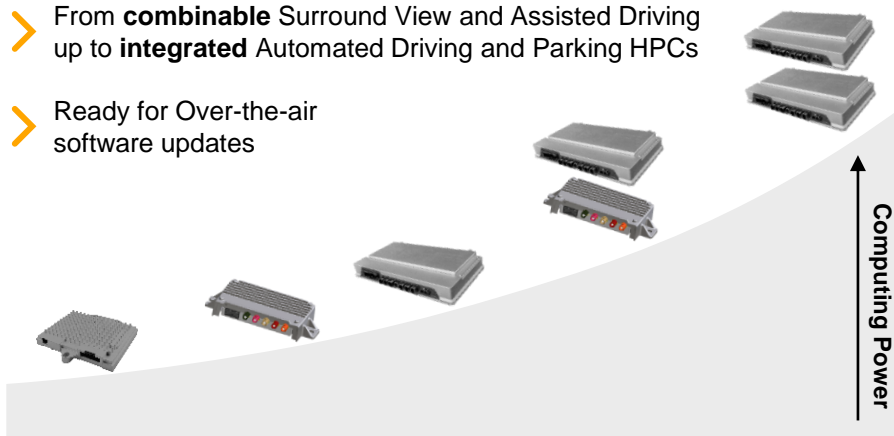
"L2 Plus"
Performance Premium

Highly Automated Driving (SAE L3)

Fully Automated Driving (SAE L4)

> From **combinable** Surround View and Assisted Driving up to **integrated** Automated Driving and Parking HPCs

> Ready for Over-the-air software updates



Success

SOP: 2022

L2+



SOP: 2022/23

L2

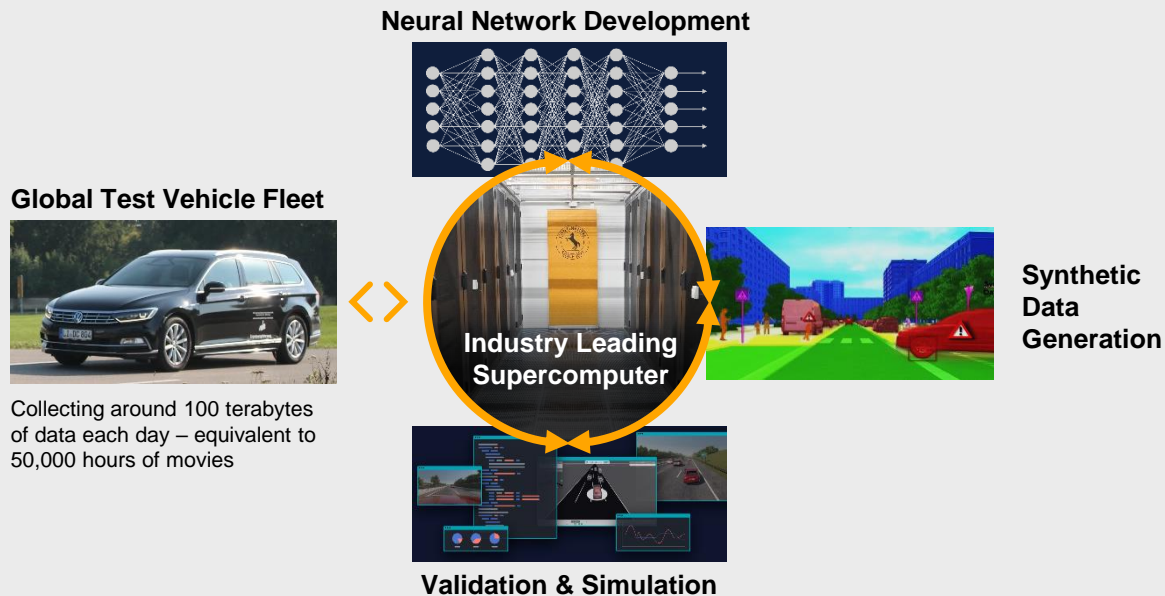
L2+



We Are Ready for the Challenges of the Future

AI and Simulation for the Next Era of AD Technologies

The Vital Importance of Data Quality & Efficient Data Management



AI Competence Center



- **Core development** of AI technologies
- **Roll-out** to product development teams

Relying on our strong sensor heritage, we support our customers with the best fitting solutions for fulfill their needs

On the Way to Autonomous Mobility

Summary



Our **sensor heritage** is the foundation for the realization of Autonomous Mobility

We offer **excellent software expertise** together with in-house suppliers like Elektrobit and Argus

We offer **Full Stack capabilities** – that our customers are perfectly prepared for the future

Selective **partnerships** complement our **in-house strength**

More Information

Get in touch with us!



More information can be found at

www.continental-automotive.com

www.continental.com/en-us



Or get in touch with us via our

[Contact Form](#)

Continental



The Future in Motion