



Subaru new generation EyeSight powered by Xilinx

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Overview of News

- ▶ The Xilinx Automotive Grade (XA) Zynq® UltraScale+™ multi-processor system-on-chip (MPSoC) is powering Subaru's new stereo vision-based advanced driver-assistance system (ADAS), EyeSight
- ▶ Xilinx 16 nanometer technology provides the power to process stereo images into 3D point clouds with the ultra-low latency and functional safety that is required to ensure Eyesight can accurately understand and react to dynamic driving scenarios
- ▶ Subaru's new generation EyeSight system offers features such as:
 - adaptive cruise control (ACC)
 - lane keeping assist (LKA)
 - pre-collision braking

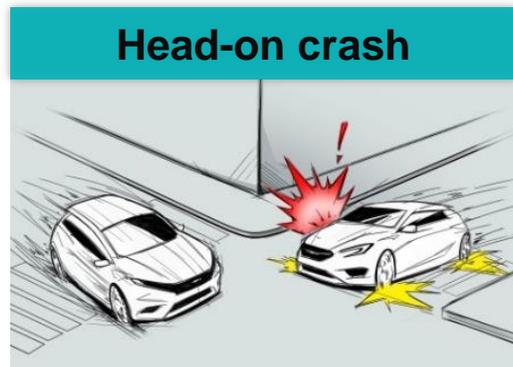
Evolution of Accident Prevention Features of New Gen. EyeSight



First Half of 2020s

Enhance capacity to avoid intersection/urban area accidents

Enhance capacity to monitor driver status and respond to driver's errors

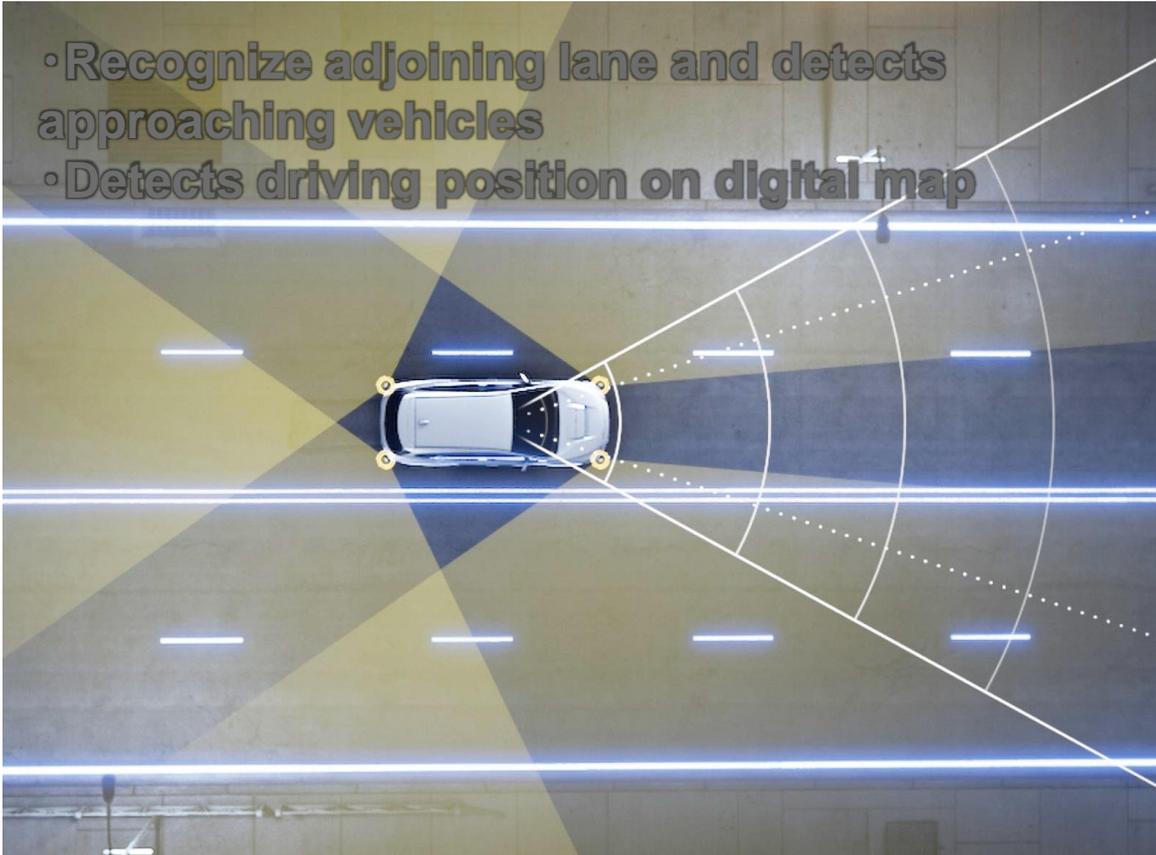


A number of features to avoid severe accidents and risks to be developed

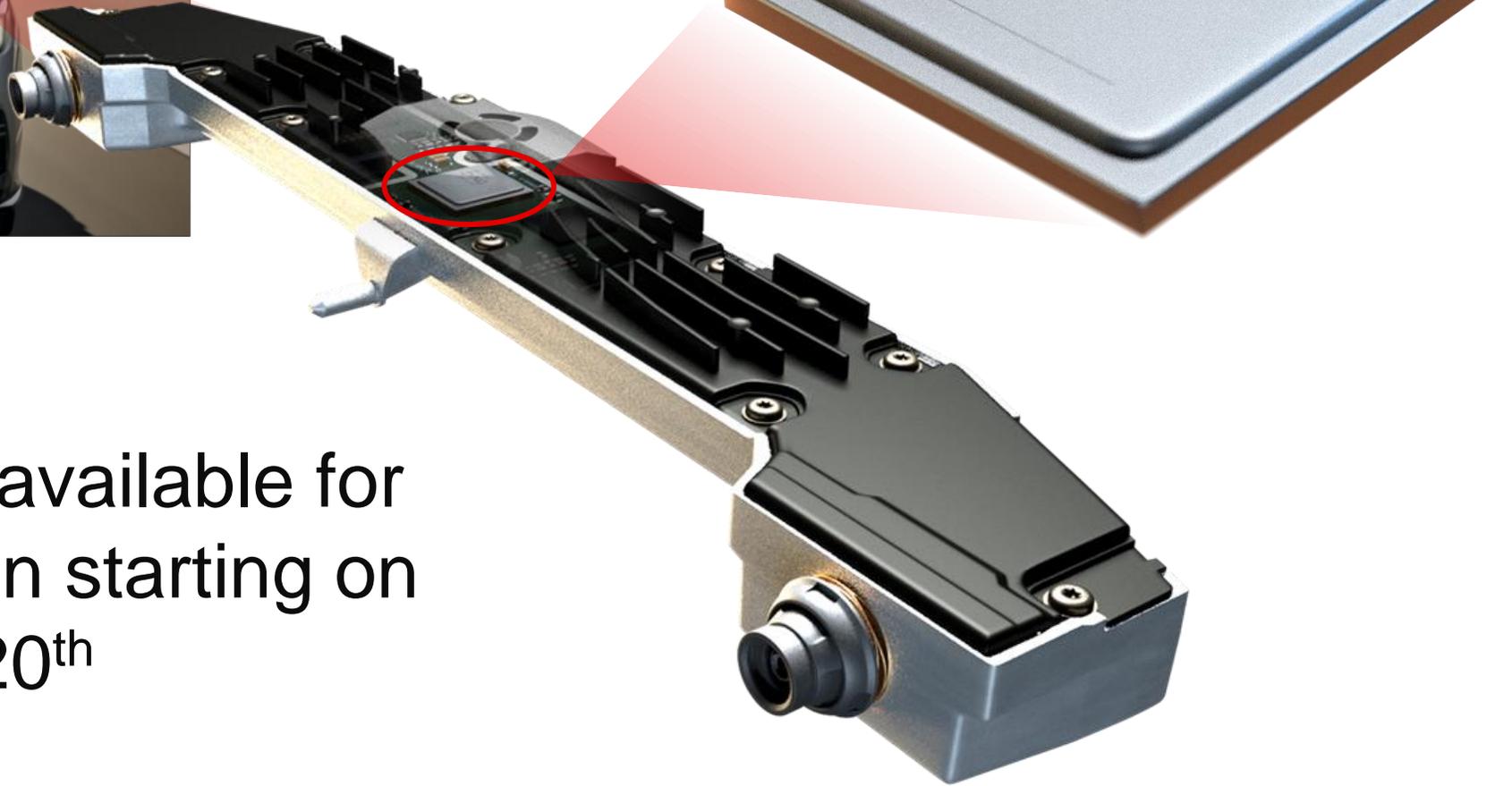
Evolution of Driver Assist Technologies

First Half of 2020s

Active lane change assist, auto deceleration based on curve prediction, and hands-off driving in congested traffic



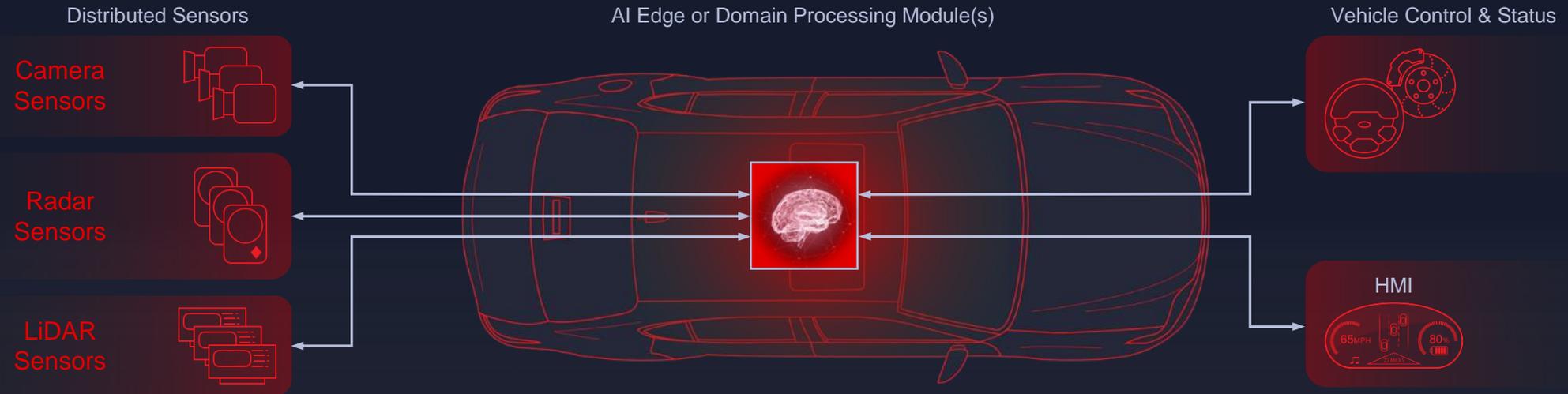
State-of-the-art features for comfortable and safe travels on highways



Subaru Levorg is available for pre-orders in Japan starting on August 20th

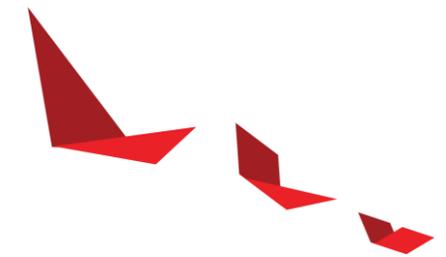
Image: provided by Veoneer

Comprehensive Portfolio



Zynq UltraScale+ MPSoC

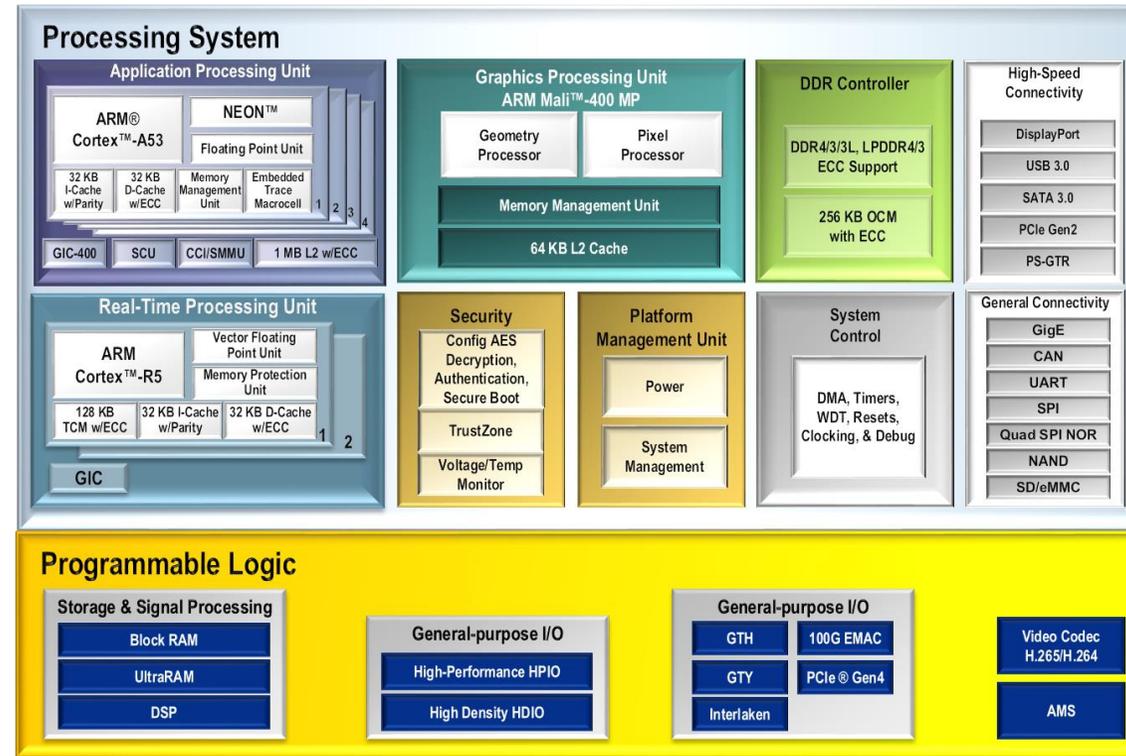
Heterogeneous Multi-Processing at the Heart of the System



➤ Full Power Domain (FPD)

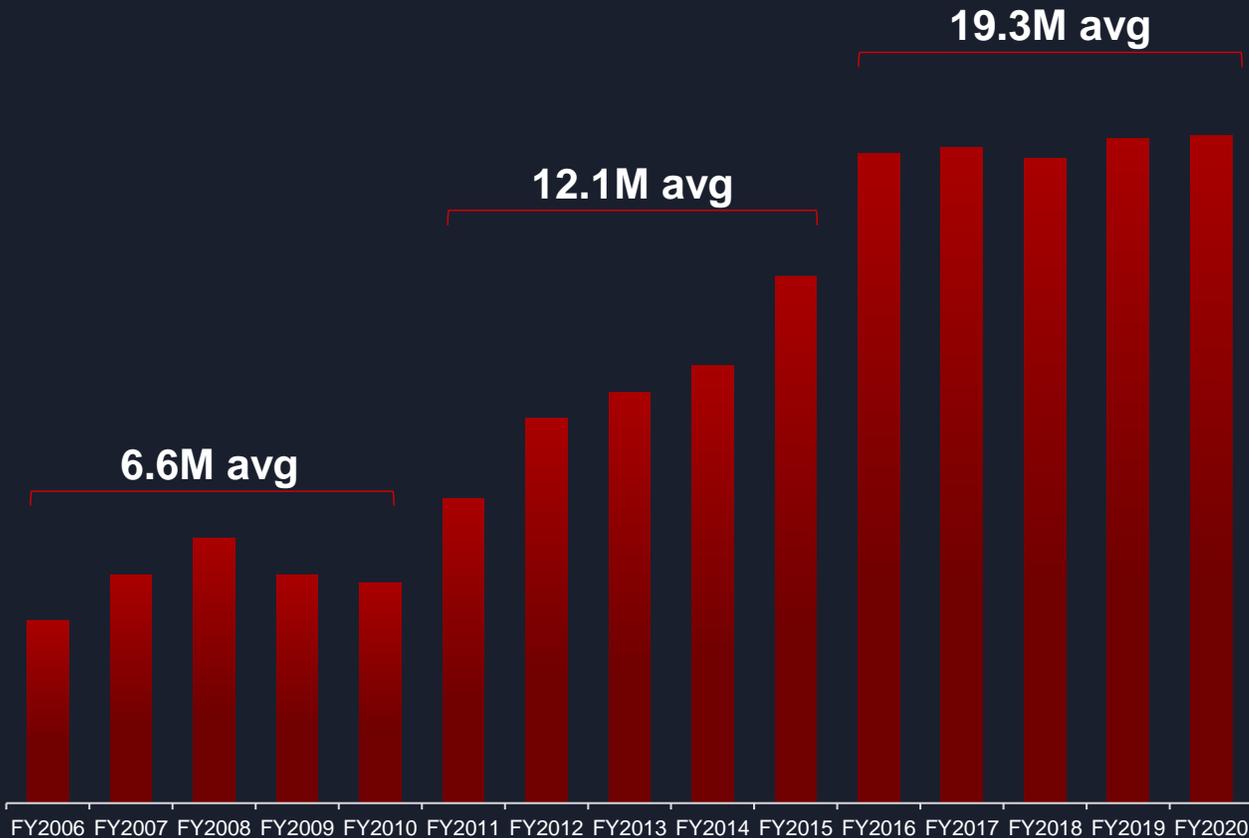
➤ Low Power Domain (LPD)

➤ Programmable Logic (PL)



Xilinx Steady Growth in Automotive

Unit Shipments



Consistent growth

- ▶ Double digit unit shipment growth over **15** years
- ▶ More than **190M** devices shipped
- ▶ More than **75M** devices shipped into ADAS

Tier-1s



OEMs



Startups



Note: Only showing publicly-announced customer collaborations

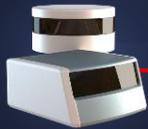
Production deployments with our 28nm and 16nm families to fuel continued growth

Xilinx Automotive ADAS & AD Focus Areas

Full Display Mirror



LiDAR



Surround View Camera

> Rear



> Side



> Front



Forward Camera

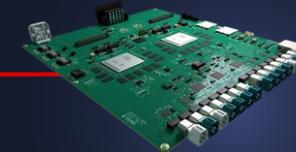


In-Cabin Monitoring Camera

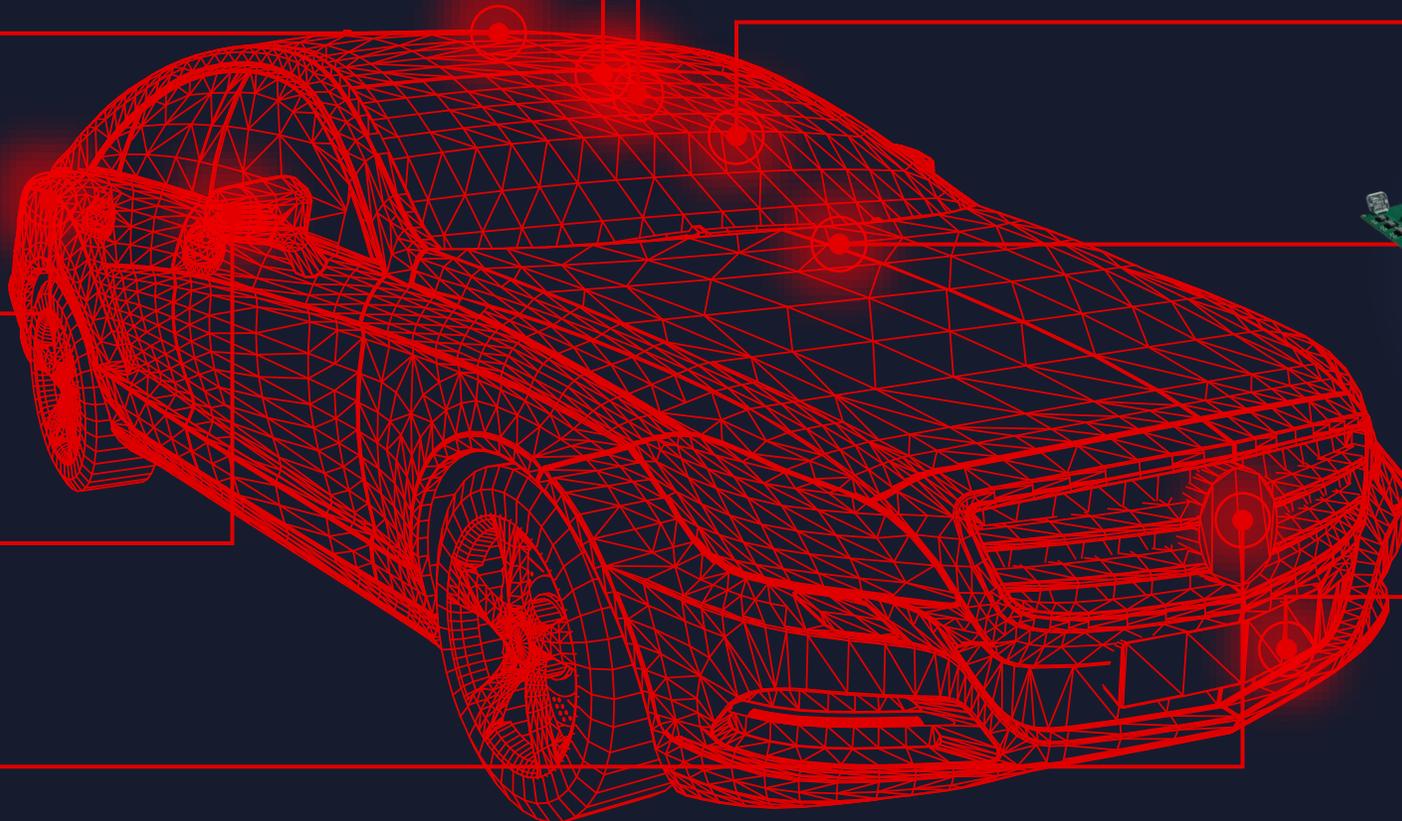


Domain Controller

- > Gateway
- > Compute Acceleration
- > Data Aggregation, Pre-processing, and Distribution (DAPD)



RADAR



Note: Not representing actual vehicle architecture; Sensors are for illustrative purposes