JABIL | AUTOMOTIVE & TRANSPORTATION

DRIVER MONITORING SYSTEM

Fact Sheet

Improving Safety: Helping Drivers Stay Awake, Alert and Alive

Increasing demands from global safety regulators are aligning with the race to implement higher levels of autonomous driving. This is driving the automotive industry to develop increasingly sophisticated active safety systems that provide the driver with greater situational awareness to help reduce crashes.

These advanced driver assistant systems (ADAS) are not just focused on the environment external to the vehicle. Internally, technology is being developed to ensure a driver is awake and alert. Driver Monitoring Systems (DMS) help reduce crashes related to drowsy or distracted drivers; and are also used to check that a driver is capable of taking back control of the vehicle after 'hands off and feet off' autonomous driving modes. In fact, SAE autonomous driving levels 3-4 can only be implemented with the use of an advanced driver monitoring system.

Strategic Partnership Delivering Best-in-class Complete DMS Solution

Jabil has strategically partnered with eyeSight, a leader in advanced computer vision and deep learning software to offer a complete hardware & software DMS.

Our platform solution delivers best-in-class performance, lean processing and seamless integration. This unique combination of features enables the automotive & transportation industries to implement DMS technology in all types of vehicles to reduce drowsiness- and distraction-related crashes, and enable autonomous driving levels 3-4.

Superior Performance	• Best-in-class accuracy • Best-in-class dependability • Out-performs in 'edge-use'cases
Lean Processing Requirements	• Runs on standard processors • Integrates into existing ARM architecture
Seamless Intergration	• Multiple hardware & software configurations • Miniaturized hardware
Cost Optimized	• Hardware & software platform solution • Accelerated time to market • Cost-optimized hardware • Global, scalable manufacturing

Strategic Partnership

Automotive-grade precision optics and manufacturing

JABIL

Advanced computer vision and deep learning software

eyeSight

For More Information, please contact Mario Zielke, Sales Manager Advanced Driver Assistance Systems
Cell.: +49 (0) 170 22 45 776; E-Mail: mario_zielke@jabil.com, or your Customer Account Lead.

JABIL | AUTOMOTIVE & TRANSPORTATION

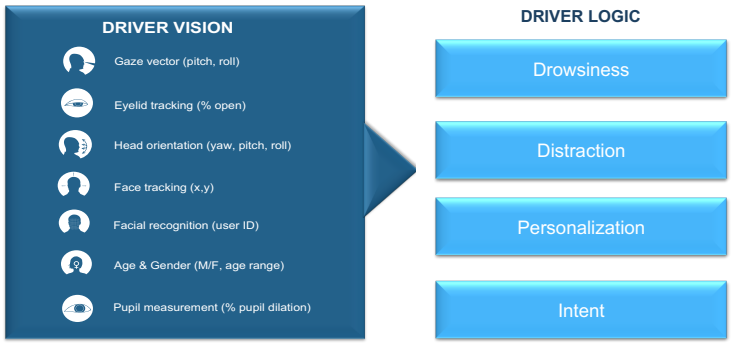
DRIVER MONITORING SYSTEM

A System That "See's More"

The complete hardware and software DMS system improves safety by alerting the driver and integrated safety systems if there is a risk such as driver drowsiness or distraction, it can also adjust the in-car environment to the driver's preferences.

DMS software is available in two options:

- Driver Vision: detects and recognizes the drivers face and eyes; tracks head position
- Driver Logic: analyses the Driver Vision data to determine the state of the driver in terms of distraction, drowsiness, identity and intent.

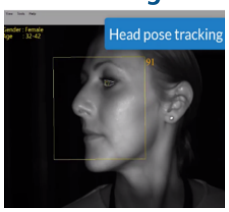


Jabil's custom designed lenses and optics are optimized to eyeSight's software, enabling the partnership to deliver the highest accuracy of driver monitoring.

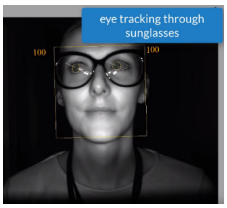
Out-Performs in Edge-Use Cases

The Jabil/eyeSight system offers best-in-class performance in 'edge-use' cases, when the system is operating at the edge of normal operation, such as the driver looking out of the window, wearing dark glasses or an eye-patch. This ensures the continued accuracy and dependability of the system, irrespective of what the driver is wearing or doing.

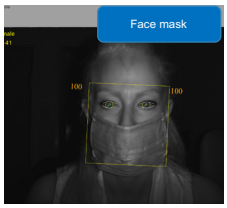
Head Pose Tracking



Eye tracking through sunglasses

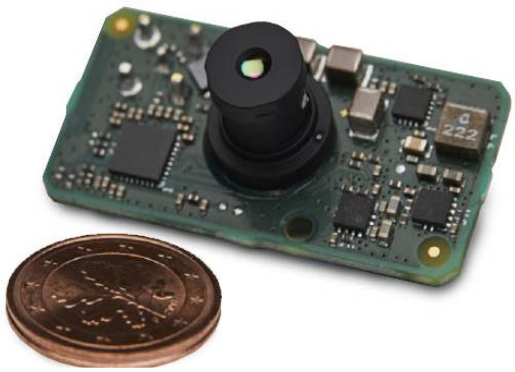


Facial occlusion: face mask



Miniaturized Optics & Hardware for Non-visible Packaging

Jabil's modular architecture gives customers design freedom in product and vehicle. Miniaturized optics facilitate packaging into thin instruments or display units.



- 1 megapixel camera
- 48° horizontal field of view
- Produced using Active Alignment technology

The system is available in multiple options:

- Standalone one box-one camera solution for steering column packaging
- Multiple camera and illuminator options for seamless and non-visible integration into any cockpit electronics

For More Information, please contact Mario Zielke, Sales Manager Advanced Driver Assistance Systems
Cell.: +49 (0) 170 22 45 776; E-Mail: mario_zielke@jabil.com, or your Customer Account Lead.