



Laser Beam Scanning Projector

High brightness, full color, video projector
for Automotive applications

AI sight

IZB

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Contact

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Automotive Applications

One projection platform. Many vehicle experiences.

From functional lighting to immersive displays

01

**Headlight
Projection**



02

**Welcome light
Projection**

03

**Dashboard
Illumination**

04

**Ambient interior
Lighting**

05

**Head-up
Display**



Up to 100 lm

High-brightness output

RGB full color

Video capable

LBS Display Applications in Automotive

Exterior projection

Welcome lighting

Dynamic light scenarios create a distinctive welcome experience and strengthen brand identity.

Light communication

Projected symbols and visual signals enable intuitive communication with pedestrians and other road users.



Interior projection

Cockpit & Window Projection

Dynamic information and visual content projected onto dashboard and side-window surfaces

Interior Surface Projection

Flexible projection onto roof, headrest, pillar and door surfaces for information, ambience and entertainment.



Head-Up Display

Augmented Reality HUD

Driving information and navigation guidance visually aligned with the road environment

Panoramic HUD

An extended display area for distributing information across a wider section of the windshield



Advantages of Laser Beam Scanning Projections

LBS combines brightness, efficiency and compactness in one flexible display platform.

Optical Performance

Wide color gamut

Narrow RGB wavelengths enable vivid, saturated colors.

High brightness & contrast

High radiance with pixel-level light modulation and true black.

Focus-free projection

Large depth of field across varying distances and surfaces.

Adaptive Imaging

Software-defined imaging

Trajectory, effective resolution and refresh rate can be optimized for different applications.

Dynamic image geometry

Electronic adjustment of scaling, position, and image geometry to suit the installation environment and projection surface.

Variable / adaptive FOV

Electronic adjustment of scan amplitude and active image area.

System Advantage

Content-adaptive efficiency

Light is generated pixel by pixel instead of continuously illuminating a panel.

Compact optical engine

Low étendue and a MEMS mirror enable compact coupling optics.

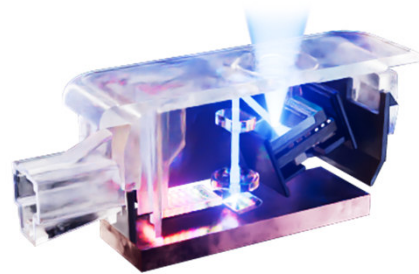
Scalable platform

One MEMS, sensing, ASIC and control architecture for multiple applications.

One Projection System, many applications

A scalable Laser Beam Scanning platform for automotive and wearable applications.

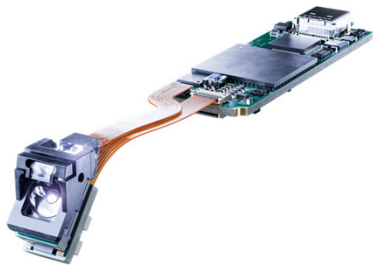
AR Display



High Power LBS System, for high brightness



Laser display for exterior projection



Compact Light Engine



Interior Roof Projection



Head-Up Display Projection

