Technical Article Lighting the Way with DLP® Automotive Headlights

TEXAS INSTRUMENTS

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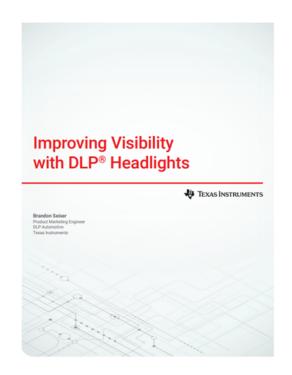


Recently, there has been a big push in the automotive lighting industry to improve both vehicle headlight functionality and driver visibility, which has led to the development of adaptive driving beam (ADB) headlights. ADB is an automotive exterior lighting system that automatically controls the high beam, to allow the driver to focus on the road ahead without manually controlling the high beam. DLP automotive technology can be used to enable ADB systems with over 1.3 million pixels to project more light on the road. In addition to ADB, headlights with DLP automotive headlights can enable many new features.

Download our white paper, *Improving Visibility with DLPHeadlights*, to learn more about how DLP technology can improve the functionality of your vehicle headlights.

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Evolving technologies

Although theDLP5533A-Q1 digital micromirror device (DMD) was designed to improve ADB resolution and help vehicles maximize the amount of light on the road, new applications are constantly being enabled. These new applications are using technology such as structured light to warn the driver of upcoming hazards, traffic sign dimming capabilities are being added to improve ADAS performance, and weather detection is used to help the vehicle adapt to surrounding conditions.

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