

Bringing the power of TI DLP Cinema® projection to your head-up display

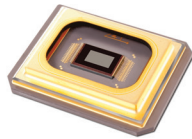
DLP3000-Q1 automotive-qualified chipset



The same powerful technology behind award-winning TI DLP Cinema® projection can be used in the car for high-brightness, interactive display systems to enhance the driving experience. The first Texas Instruments DLP® automotive chipset enables the widest field of view head-up displays (HUDs) in the industry.

How the DLP chipset works

TI offers a dedicated DLP automotive-qualified chipset which consists of the DLP 0.3" WVGA digital micromirror device (DMD) and DLPC120 digital controller. The complete chipset can be combined with optical systems and mechanical structures to meet a variety of design applications.



Industry's widest field of view

- High brightness enables wide field of view image
 - Up to 12° wide field of view (FOV), more than 2X larger than existing solutions today
- Sun spot tolerance enables long virtual image distance
 - 2-20 m depth perception allows augmented reality or contact analog capabilities

Outstanding color accuracy

- Proven reliability of deep, accurate colors
 - Consistent, high contrast >1,000:1 at 15K cd/m²
- Over 400,000 digitally programmable micromirrors
 - The exact wavelength of light you illuminate onto the DMD is the same that is reflected to the display, resulting in accurate color
- DLP technology projects unpolarized light, which allows for an image to be viewed when wearing polarized sunglasses

Scalable designs to deliver variety of development options

- Light source agnostic
 - Flexibility to use laser or LED light sources
- Modify optical design to provide options for fitting into Instrument Panel (IP)
- Picture Generating Unit (PGU) can be paired with windshield or combiner HUD
- Customizable to support a range of FOVs

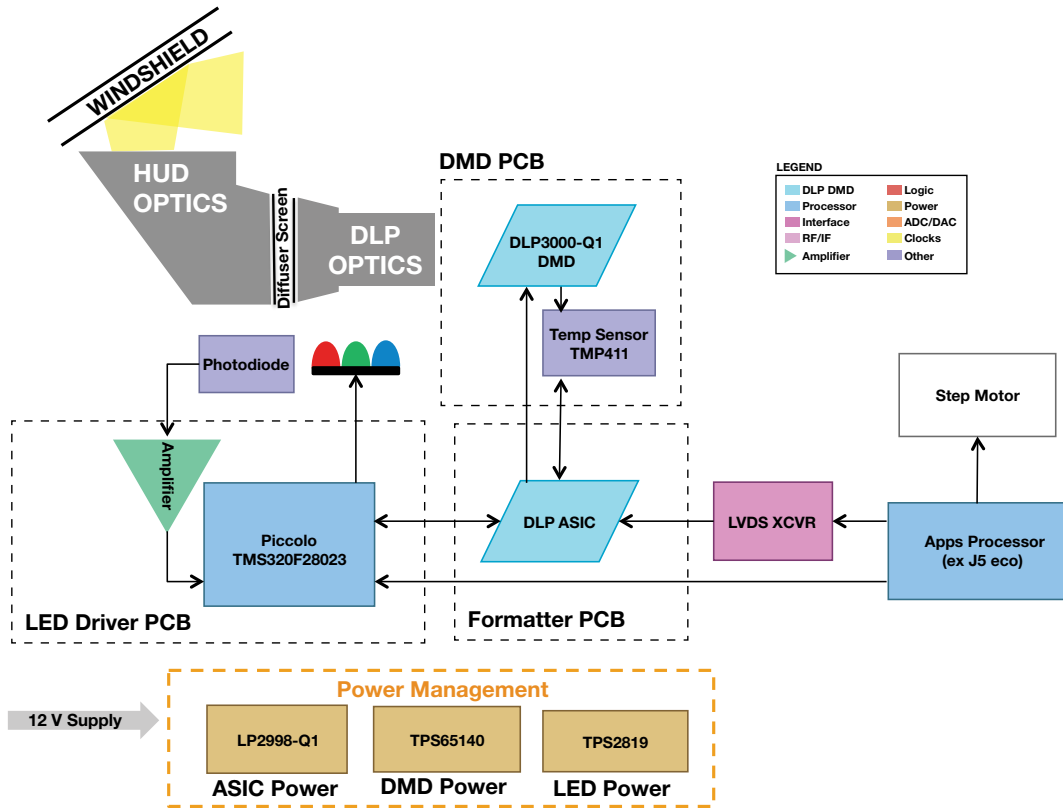
Visit TI.com/dlpHUD for more information.



TI DLP technology for HUD

Flexible development options

Evaluation module (EVM) options are available to get your development started quickly with the DLP3000-Q1 chipset.



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