

# How TI DLP® Pico™ Display Technology in Commercial Gaming Applications Can Enhance User Experience

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TI DLP® Pico™ projection display technology offers advantages for commercial gaming applications, including enhanced experience for players as well as improved scalability for manufacturers. [DLP Pico chipsets](#) in particular are a great fit because they offer robust free-form high resolution and high brightness display in a compact size.

Pachinko machines and Pachislot (also called Okislot) games, electro-mechanical arcade games similar to pinball machines, are two examples of such applications. Parlors where these two games are played present unique environmental requirements and you can [learn more about how DLP technology is enabling both](#).



## Immersive Gaming Experience

As video games become increasingly complex, elaborate visuals that enhance the entertainment factor of the games become not only desirable but necessary. Creating an immersive experience is a chief desire for game developers -- including bright, colorful and detailed visual displays. DLP technology supports this trend by providing both flexibility of display shape and the incorporation of multiple peripheral displays driven from one optical engine. This allows for separate but integrated displays for scoring, storyline videos and additional visual effects.

## Ease of Integration and Interactivity

It is possible to design the input interface for a DLP projection subsystem so that it's similar to a standard liquid crystal display (LCD). This facilitates the easy interchange or replacement of different display modules without rework or redesign of the platform. Switches, knobs, joysticks and other control elements present considerable challenges for robustness, cleanliness, vulnerability to liquid spills and dust entry. Multi-touch surfaces and optically interfaced re-positionable controls eliminate these problems as the graphical elements of the controls are dynamically projected beneath the control surface.

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## Unique Requirements of Gaming Applications

DLP display technology is uniquely suited for gaming applications where realistic visuals are paramount. More than eight out of ten digital cinema screens worldwide already use DLP technology, and DLP Pico chipsets take the same core MEMS technology and transform it into a micro-display that creates stunning displays from compact and portable devices. Game systems are evolving, adding more features, providing visual enhancements, offering more functionality, achieving more robustness and engaging the user further.

In summary, here are just a few of the enhancements DLP projection technology offers gaming applications:

### Excellent Image Quality and Immersive User Experience

- DLP technology is a highly versatile imaging technology
- HD image projection, including freeform, curved surfaces

### Scalability and Re-configurability

- DLP Pico technology offers a range of chipsets up to [Full HD 1080p resolution](#)
- DLP technology provides flexibility in design to differentiate on brightness and size
- One common projection system could be used to enable multiple size and shapes of displays across product lines, thus reducing development, production and inventory cost

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