

# TI DLP® DLPC7540 vs DLPC4422 Chipset

## Simpler design, smarter 4K UHD for Broad Market



DLPC7540 is next generation 4K UHD controller, intended for new designs featuring simplified electronics complexity, advanced features and *Solid State Illumination*.

### Simplified Complexity

DLPC7540 offers:

- Reduce size, complexity, and system power
- Eliminates the need for XPR FPGA and dual controller
- Reduced system cost (FPGA/memory, electronics)

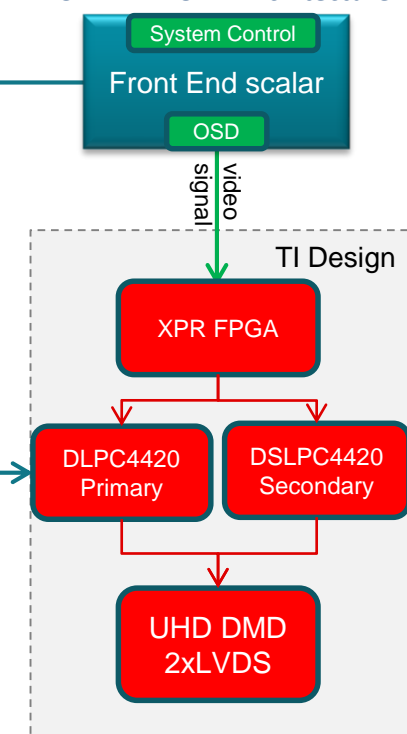
### Advanced Features

DLPC7540 supports advanced features like advanced 3D Keystone, Warping and Blending.

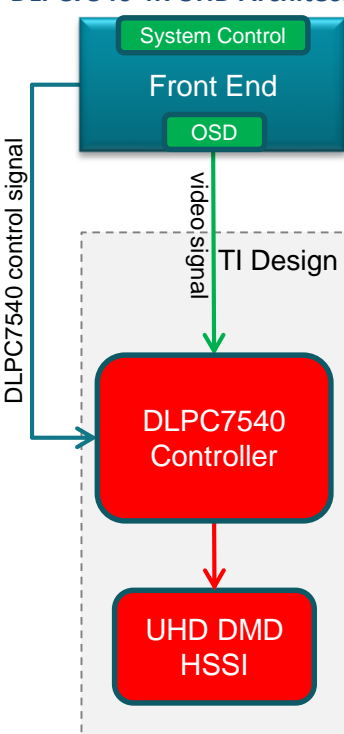
### DLP technology™

Provides the most competitive 4K technology, which is what is expected in high end **smart** boxes. The mirrors give an accurate colorful image with the interactivity customers crave

#### DLPC4422 4K UHD Architecture



#### DLPC7540 4K UHD Architecture



Features	1xDLPC4422	1xDLPC7540
Maximum Display Resolution 1xController	WUXGA	4K UHD
Number of controllers for 4K UHD resolution	2x	1x
Input Video Interface	10-bit Parallel	V-by-One HS FPD-Link
Maximum Frame Rate	120Hz	240Hz
Color Space	Rec.709 4:4:4 RGB	Rec.2020 4:4:4 RGB YCbCr 4:4:4, 4:2:2,4:2:0
Color Processing	BrilliantColor™	BrilliantColor™
Processor	ARM9, 133MHz	ARM Cortex R4, 300MHz
OSD	Not Supported	Not Supported
HDR	Not supported	HDR10(PQ) HLG
XPR	4-Position (requires FPGA)	4-Position
Advanced Keystone/Warp	1D Keystone	3D Keystone Warping Blending

#### Which DMDs does the DLPC7541 support?

- 1-chip HSSI DMDs

#### What type of design is the DLPC7541 optimized for?

- Laser TV/Smart Projector
- Smart Enterprise Projector

#### What makes the DLPC7541 different?

- DLPC4422 4K system requires a front end capable of scaling, OSD, and system control capabilities
- DLPC7541 4K systems also support scaling, OSD and system control capabilities within the DLP Controller, allowing support for cheaper front ends.