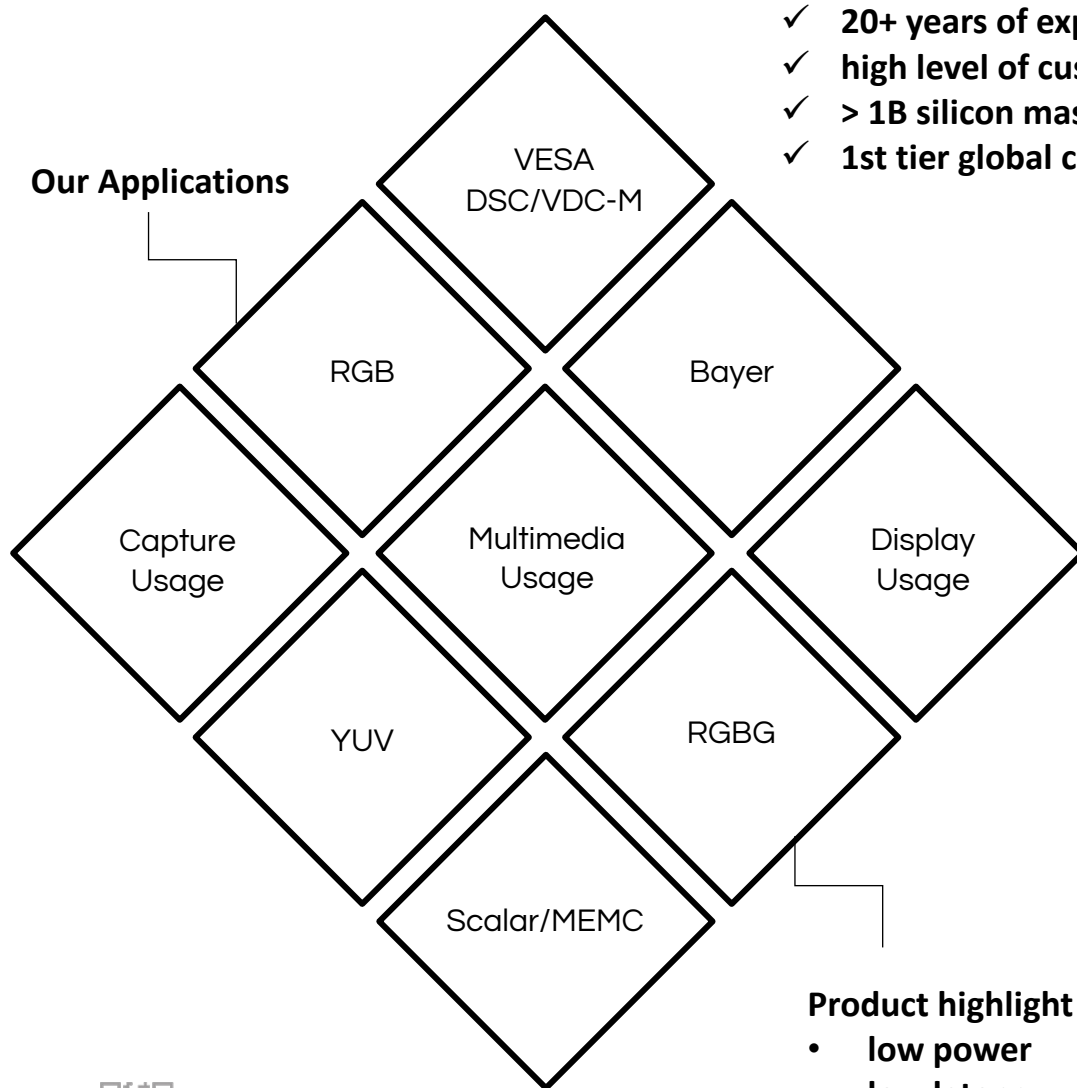


# TITC

## Image Compression IP specialist

- ✓ 20+ years of experience
- ✓ high level of customization
- ✓ > 1B silicon mass produced
- ✓ 1st tier global customers

### Our Applications



### Product highlight features:

- low power
- low latency
- small area



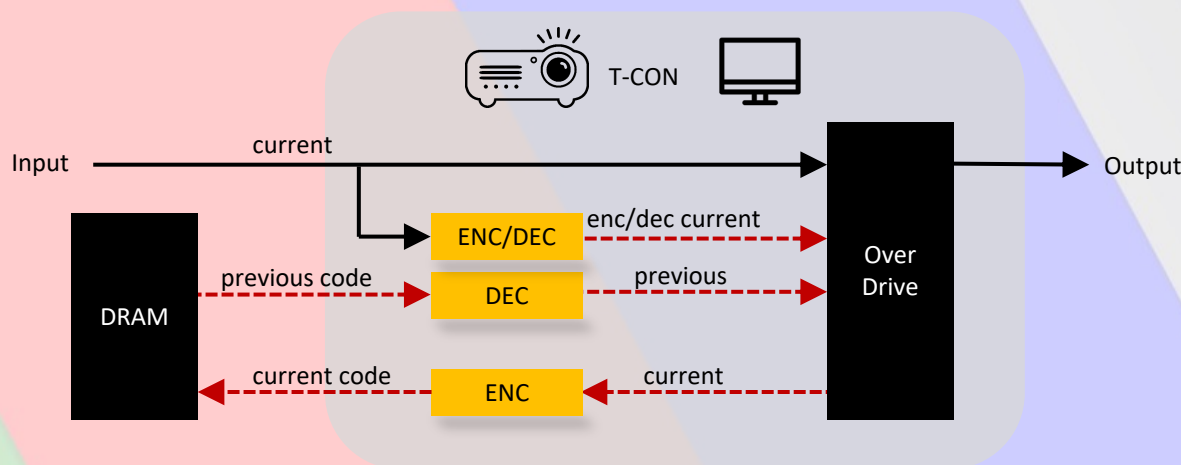
Tel: +886-3-5829011  
☺ [www.titc-usa.com](http://www.titc-usa.com)

# TITC O-Series IP

## RGB for Over-Drive

Over-Drive technology is used to compensate the LCD reaction speed, which was not fast enough in high refreshing frame rate. Over drive provides higher level of voltage than the usual when the pixel's bright level gap between current and previous frame is large. Previous frame should be stored in memory to be the reference. Memory cost and bandwidth is considered from system's point of view.

Reference frame data of over drive do not necessarily visual lossless. Higher lossy level may be acceptable. Therefore, FPGA for moving picture quality check is needed when adopting this IP. TITC proposed several types of compression, from small block 2x2 to 4x4 to slice-based, from RGB to Y-only, from compression ratio 2 to 12. Customization is possible.



### ➤ TITC O-Series IP

Usage / Series		multimedia / O-series	
IP Name		OD v1	OD v2
Data	Type	RGB	Y-only
	Bit-Depth	8-bit	8-bit
Compression	Type	Lossy	Lossy
	Ratio(Lossy)	2.28X	4X
	Unit	H2V2	H4V4
Performance	Throughput	4-pix (per T)	16-pix (per T)
Note		* light resource	* high throughput * for DDI