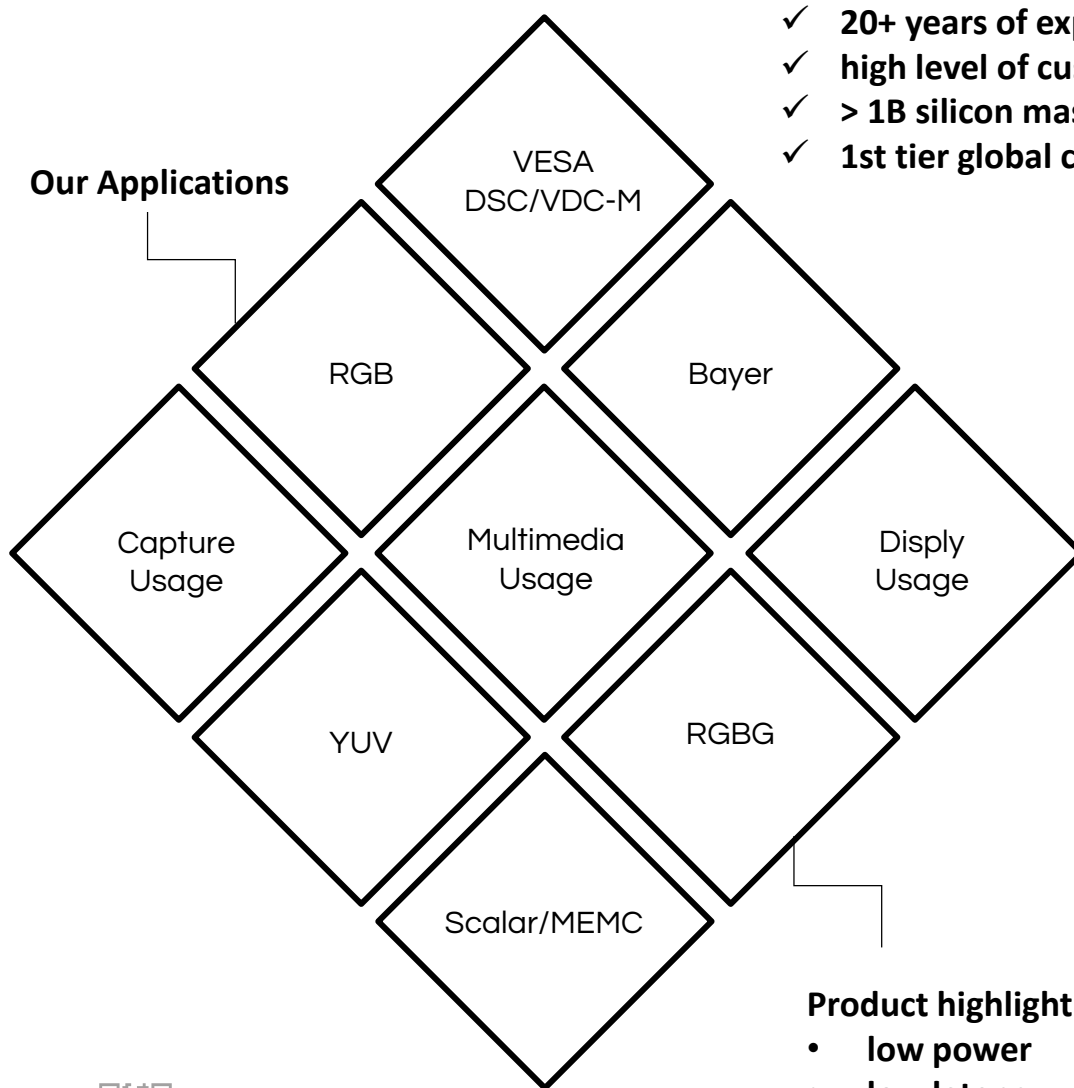


TITC

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



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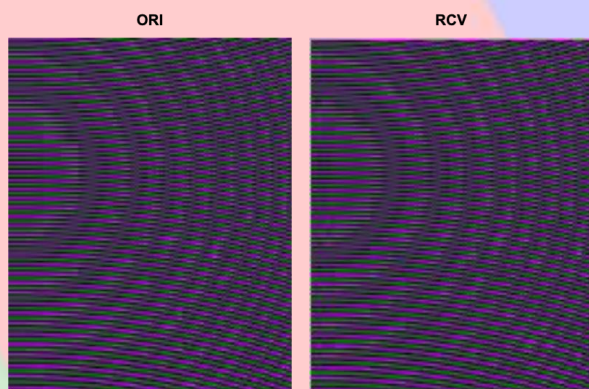
TITC S-Series IP

RGB/YUV for FRC & Scalar

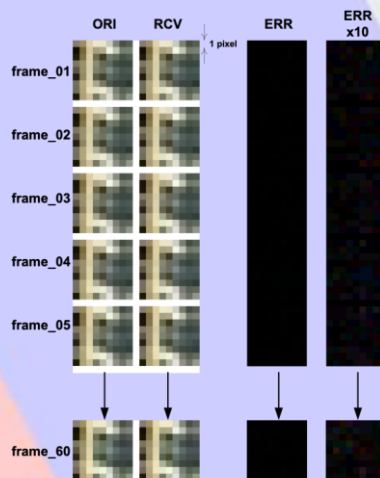
Frame Rate Conversion(FRC) and Scalar have been long developed in multimedia. FRC techniques generate pseudo image frames between at least two consecutive frames, usually by the technique of Motion Estimation and Motion Compensation (MEMC) to get better motion picture qualities. At least one frame picture stored in memory. Scalar techniques as well generate pseud image lines between at least two consecutive lines. Several image lines are required to be in memory. Both techniques need high memory i/o bandwidth when image resolution get higher.

TITC proposed segment-based or block-based, fixed-ratio, visual-lossless compression in RGB/YUV format. This mass production proven technique can ease the pain point of i/o bandwidth hunger. Supporting bit depth up to 12 meets mainstream requirement. Compression unit and bit depth can also be customized.

YUV422 / 3X (20->7 bit)



RGB / 3X (30->10 bit)



➤ TITC S-Series IP

Usage / Series		multimedia / S-series
IP Name		FRV v1
Data	Type	RGB/YUV444/YUV422
	Bit-Depth	10/12-bit
Compression	Type	Lossy
	Ratio(Lossy)	2~3X
	Unit	H64V1 / H64V2
Performance	Throughput	2-pix (per T)
Note		* compression unit can be customized

