DIP DMA Port

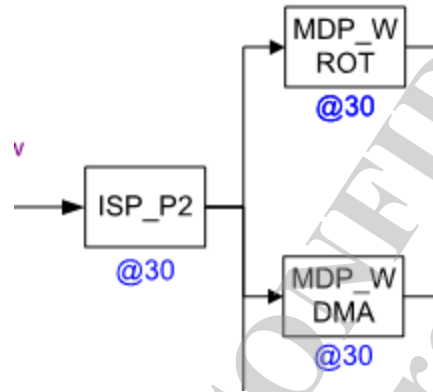**MEDIATEK**

ISP P2 DMA port

- IMGI : input DMA
- MDP_WROT : output DMA
- MDP_WDMA : output DMA

IMGI

- Resolution : 會切tile, HW 留13-bit: 0~8191
- Support format :

RAW	RAW	eImgFmt_BAYER8	eImgFmt_BAYER12
		eImgFmt_BAYER10	eImgFmt_BAYER10_MIPI
	FULL G	eImgFmt_FG_BAYER8	eImgFmt_UFO_FG_BAYER10
		eImgFmt_FG_BAYER10	eImgFmt_UFO_FG_BAYER12
		eImgFmt_FG_BAYER12	
	RAW_UNPAK	eImgFmt_BAYER8_UNPAK	eImgFmt_BAYER12_UNPAK
		eImgFmt_BAYER10_UNPAK	eImgFmt_BAYER14_UNPAK
RGB	RGB565	eImgFmt_RGB565	
	RGB888	eImgFmt_RGB888	
	RGB121212	eImgFmt_RGB48	
	ARGB8888	eImgFmt_ARGB8888	
YUV	422 format, 1 plane	eImgFmt_YUY2	eImgFmt_UYVY
		eImgFmt_YVYU	eImgFmt_VYUY
	420 format, 2 plane	eImgFmt_NV12	eImgFmt_NV21
	422 format, 2 plane	eImgFmt_NV16	
	420 format, 3 plane	eImgFmt_YV12	eImgFmt_I420

MDP_WROT

- Max resolution: 8192x8192
- Crop region is defined in source image domain; crop offsets (not width/height) can be sub-pixel.
- Scaling ratio: up to 64x; down to 1/20x
- WROT can rotate, flip
  - Rotate: 0, 90, 180, and 270 degrees
  - Flip: horizontal flip after rotation
- Support format :

Gray	Y Only	Y8	
Packed (1 Plane)	RGB565	RGB565	
		BGR565	
	RGB888	RGB888	
		BGR888	
	ARGB8888	RGBA8888	ARGB8888
		BGRA8888	ABGR8888
	YUV 4:2:2	UYVY	YUY2
		VYUY	YVYU
3 Plane	YUV 4:2:0	YV12	
		I420	
	YUV 4:4:4	YV24	
		I444	
2 Plane	YUV 4:2:0	NV12	
		NV21	
	YUV 4:2:2	NV16	
		NV61	

MDP_WDMA

- Max resolution: 8192x8192
- Crop region is defined in source image domain; crop offsets (not width/height) can be sub-pixel.
- Scaling ratio: up to 64x; down to 1/20x
- Image Format :

Gray	Y Only	Y8	
Packed (1 Plane)	RGB565	RGB565	
		BGR565	
	RGB888	RGB888	
		BGR888	
	ARGB8888	RGBA8888	ARGB8888
		BGRA8888	ABGR8888
	YUV 4:2:2	UYVY	YUY2
		VYUY	YVYU
3 Plane	YUV 4:2:0	YV12	
		I420	
	YUV 4:4:4	YV24	
		I444	
2 Plane	YUV 4:2:0	NV12	
		NV21	
	YUV 4:2:2	NV16	
		NV61	

everyday genius