

Comparison of MDIN 6XX Series

ITEM		MDIN-640/640R1	MDIN-620/620R1	MDIN-C604
HDMI Input/Output	Number of HDMI Receiver	4	2	4
	Number of HDMI Transmitter	4	2	4
	HDMI 1.4/2.0	○	○	○
	HDCP 1.4/2.2/2.3	○	○	○
	Resolution	Up to 4096x2160@60Hz	Up to 4096x2160@60Hz	Up to 4096x2160@60Hz
	Color Depth per Color Component	8/10/12-bit	8/10/12-bit	8/10/12-bit
	Static HDR Metadata(SMPTE 2084)	○	○	X
	On-chip EDID RAM	○	○	X
Digital Video Input/Output	Number of Ports	36-bit x 4 Ports	36-bit x 2 Ports	X
	Max. Pixel Rate	600MHz / 300 MHz(*)	600 MHz / 300MHz(*)	X
	Resolution	Up to 4096x2160@60Hz / 30Hz(*)	Up to 4096x2160@60Hz / 30Hz(*)	X
	Color Space	BT.601/709/2020 etc	BT.601/709/2020 etc	X
	Sync Type	Separate or Embedded Sync	Separate or Embedded Sync	X
	Color Depth	8/10/12-bit	8/10/12-bit	X
	Chroma Sub-sampling	RGB 4:4:4,YCbCr 4:4:4/2:2/4:2:0	RGB 4:4:4,YCbCr 4:4:4/2:2/4:2:0	X
	Single/Dual-Pixel, Single/Dual-Edge Clock	○	○	X
UVC Controller I/F	Compressed or Uncompressed Video	Up to 4K	Up to 4K	X
Digital Audio Input/Output	Number of Ports(I ² S & SPDIF)	8	4	8
	Programmable Audio Delay Control	○	○	X
3DLUT : 17x17x17 Cube		○	○	○
Format Conversion : Independent Horizontal & Vertical Scaling		Scaling with Arbitrary Ratio	Scaling with Arbitrary Ratio	Downscaling Only : Hx1/2, Vx1/2
2D Video Transformation : Rotation, Warping		○	○	X
Flexible Frame Rate Conversion		3~250Hz	3~250Hz	X
Keying : Upstream Key & Downstream Key		○	○	X
Noise Reduction		○	○	X
Motion Adaptive 3D Deinterlace		○	○	X
PIP, POP & Video and Video Blending		○	○	X
Overlap Area Edge Blending		○	○	X
Monitor Function: Waveform, Vectorscope, Histogram		○	○	X
Font OSD : Number of Channels		4 Ch	2 Ch	4 Ch
Bitmap OSD : Number of Channels & OSD Layer		4 Ch, 2 or 6 OSD Layers	2 Ch, 2 or 6 OSD Layers	X
Embedded SDRAM		4Gbit LPDDR3	2Gbit LPDDR3	X
Embedded MCU		32-bit EISC Core	32-bit EISC Core	32-bit EISC Core
Host Control Interface		I ² C, SPI	I ² C, SPI	I ² C, SPI
Package		937 BGA, 35x35mm	784 BGA, 29x29mm	576 BGA, 25x25mm

(*) Applicable for MDIN-640 and MDIN-620 Digital Video Output only