

High-speed Interface Bridge LSI for 4K-video [V-by-One® HS to HS-LVDS] MN869129



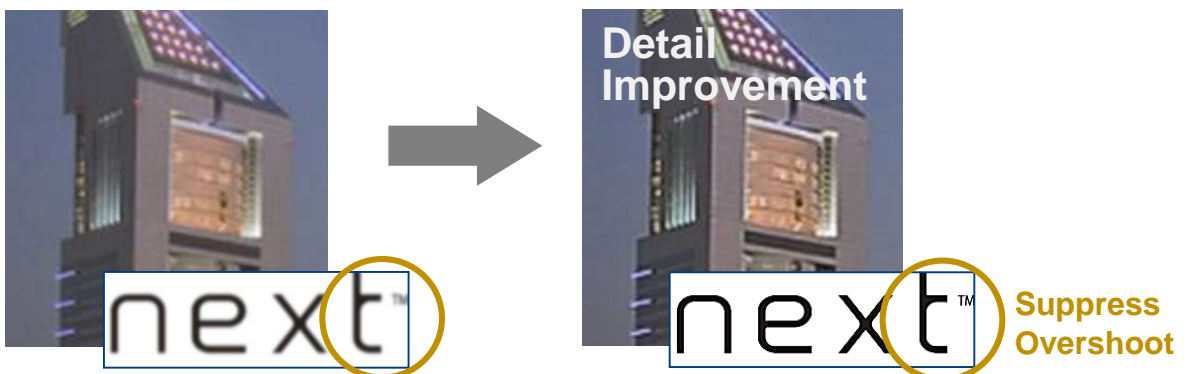
■ Overview

MN869129 is one of “HV series” that are high-speed interface bridge LSIs for 4K-video. This LSI enables to convert V-by-One® HS format to HS-LVDS format for 4K contents. This LSI supports color space conversion for input video.

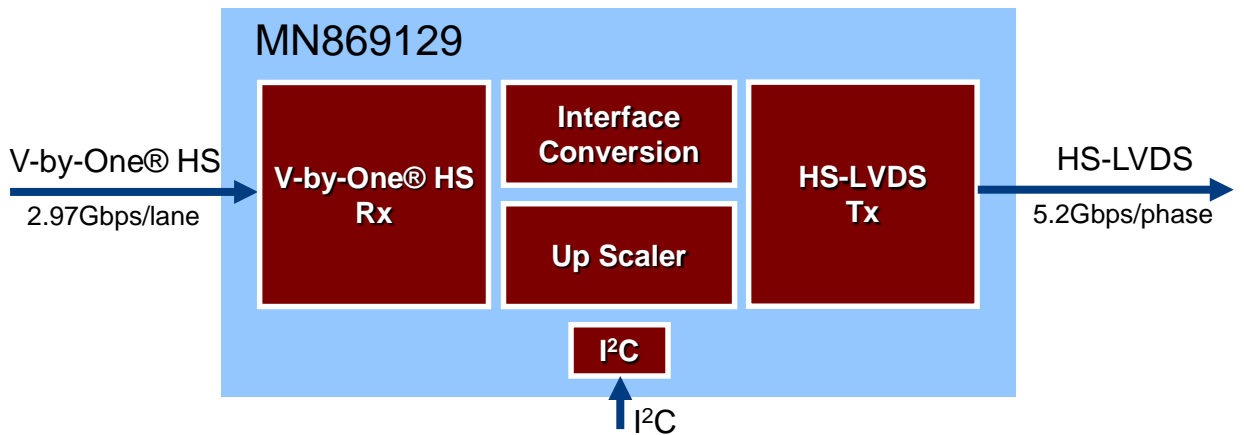
- **Input** : V-by-One® HS
- **Output** : HS-LVDS
- **Color space conversion**
- **Up-scale conversion (Option)**

* “V-by-One®” is a trademark of THine Electronics, Inc.

■ 2K to 4K Up-scale conversion with “SUPER RESOLUTION” (Option)



Internal Configuration



Specifications

Function		Specifications
Package		Type: FBGA, Size: 17mm square
I/O	V-by-One® HS input	8 lane (24Gbps)
	HS-LVDS output	4 phase (20.8Gbps)
Color Space Conversion		Refer to the following table.
Up-scale Conversion		<ul style="list-style-type: none"> • 2K to 4K Up-scale Conversion with Super Resolution (Option) * Frame Rate: 24Hz, 25Hz, 30Hz, 50Hz, 60Hz
Frame Rate Conversion		None
Audio	Input	I²Sx4(8ch), SPDIFx1
	Output	I²Sx4(8ch), SPDIFx1
Power		1.2V/ 3.3V

Color Space Conversion

Output			YCbCr / xvYCC				sRGB	
			ITU-R BT.601		ITU-R BT.709		Limit Range	Full Range
			422	444	422	444	444	444
YCbCr / xvYCC	ITU-R BT.601	422	✓	✓	✓	✓	✓	
		444	✓	✓	✓	✓	✓	
	ITU-R BT.709	422	✓	✓	✓	✓	✓	
		444	✓	✓	✓	✓	✓	
sRGB	Limit Range	444	✓	✓	✓	✓	✓	
	Full Range	444	✓	✓	✓	✓	✓	