

# High-speed Interface Bridge LSI for 4K-video [ V-by-One® HS to V-by-One® HS ]      MN869128



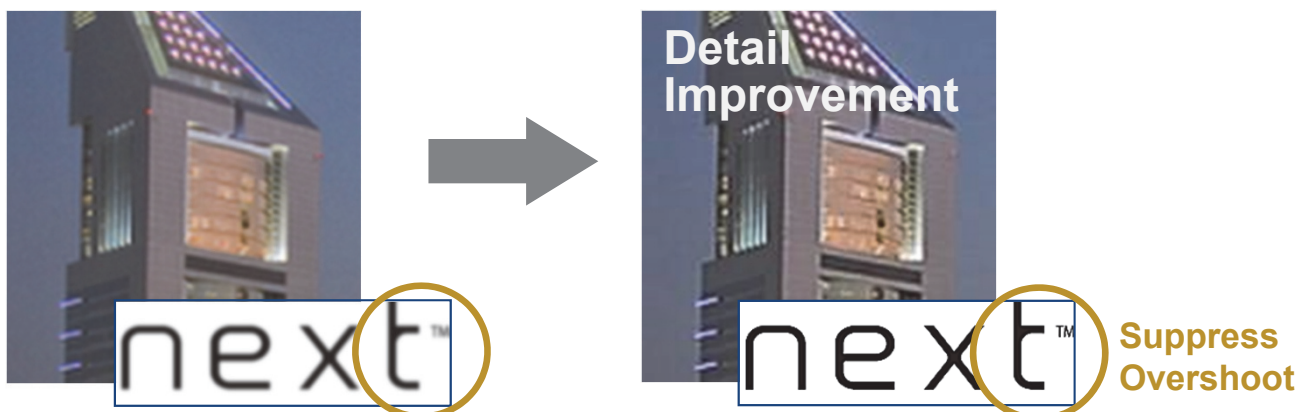
## ■ Overview

MN869128 is one of “HV series” that are high-speed interface bridge LSIs for 4K-video. This LSI supports color space conversion for input video.

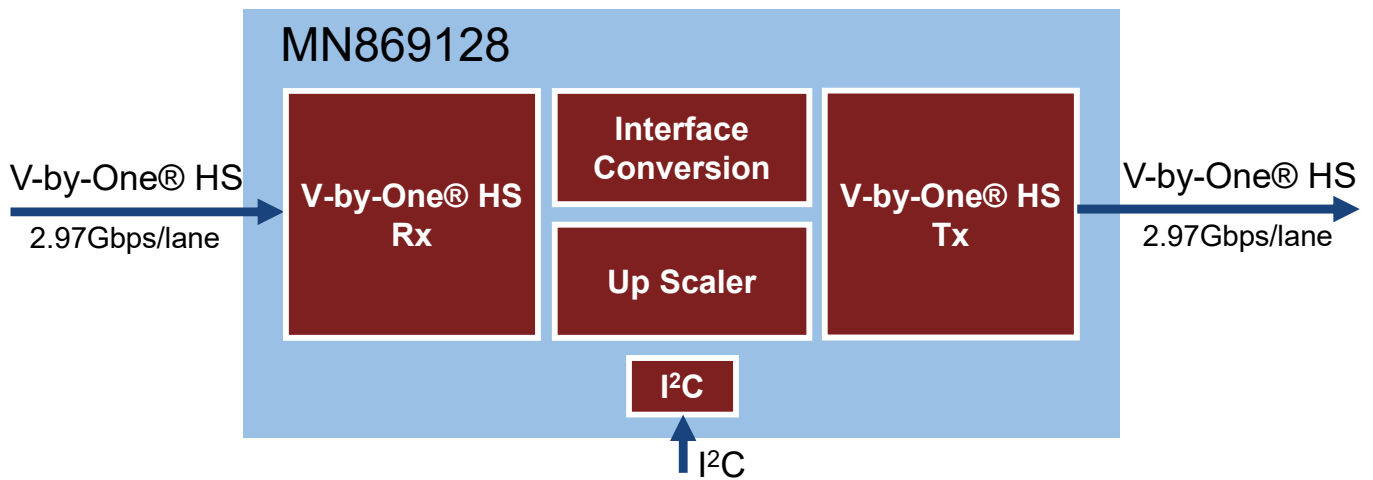
- **Input** : V-by-One® HS
- **Output** : V-by-One® HS
- **Color space conversion**
- **Up-scale conversion**

\* “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
<b>Package</b>		Type: FBGA, Size: 17mm square
<b>I/O</b>	<b>V-by-One® HS input</b>	8 lane (24Gbps)
	<b>V-by-One® HS output</b>	8 lane (24Gbps)
<b>Color Space Conversion</b>		Refer to the following table.
<b>Up-scale Conversion</b>		<ul style="list-style-type: none"> <li>• 2K to 4K Up-scale Conversion with Super Resolution</li> <li>* Frame Rate: 24Hz, 25Hz, 30Hz, 50Hz, 60Hz</li> </ul>
<b>Frame Rate Conversion</b>		None
<b>Audio</b>	<b>Input</b>	I <sup>2</sup> Sx4(8ch), SPDIFx1
	<b>Output</b>	I <sup>2</sup> Sx4(8ch), SPDIFx1
<b>Power</b>		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		
<b>YCbCr / xvYCC</b>	<b>ITU-R BT.601</b>	422	✓	✓	✓	✓	✓	
		444	✓	✓	✓	✓	✓	
	<b>ITU-R BT.709</b>	422	✓	✓	✓	✓	✓	
		444	✓	✓	✓	✓	✓	
<b>sRGB</b>	<b>Limit Range</b>	444	✓	✓	✓	✓	✓	
	<b>Full Range</b>	444	✓	✓	✓	✓	✓	

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AD04-00066-2E May 2018  
Edited : Visual Solution Business Unit

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