

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

MN869125



■ Overview

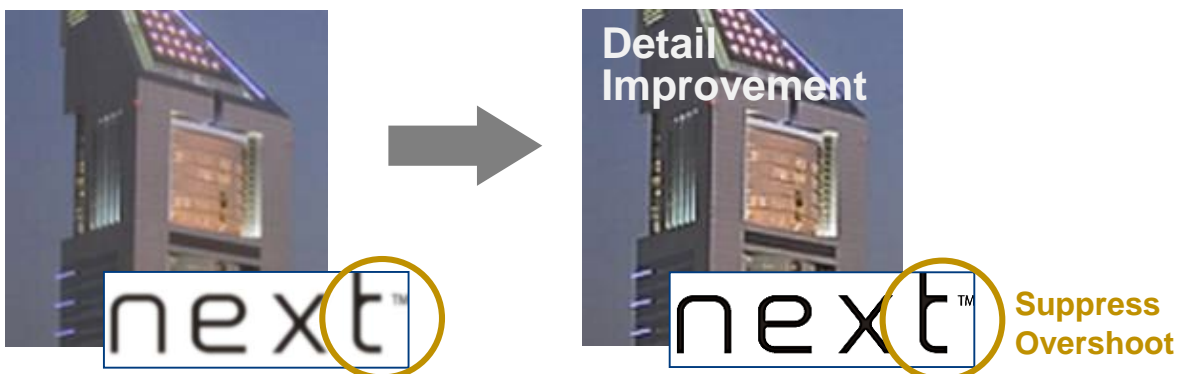
MN869125 is one of “HV series” that are high-speed interface bridge LSIs for 4K-video. This LSI enables to convert HDMI format to V-by-One® HS format for 4K contents. HDMI inputs support HDMI2.0/1.4 with HDCP2.2/1.4 contents protection.

- **Input** : HDMI2.0/1.4 (max. 60Hz), HDCP2.2/1.4 support
- **Output** : V-by-One® HS
- **Color space conversion**
- **Up-scale conversion (Option)**

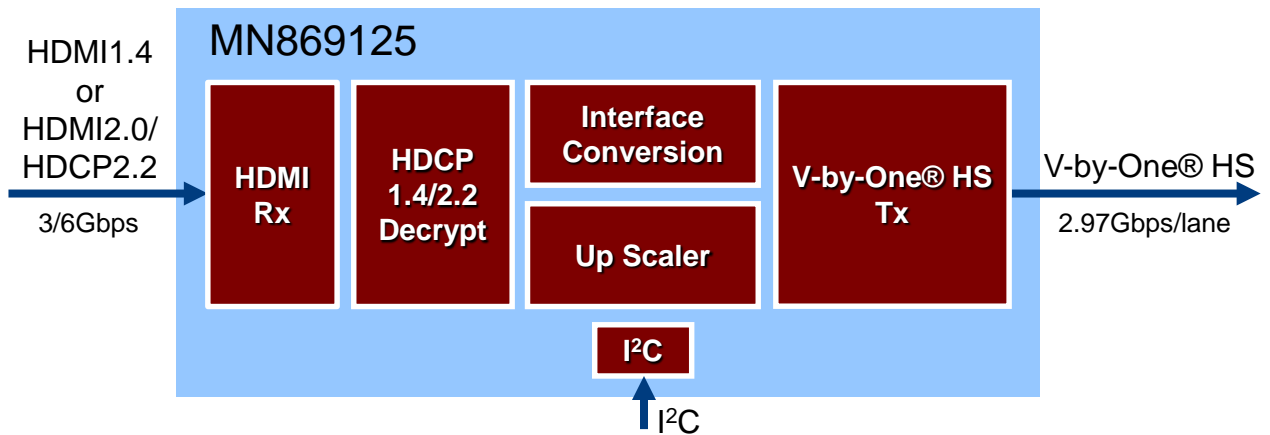
* 'HDMI' is a trademark or registered trademark of HDMI Licensing, LLC.

* “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	HDMI input	4 ports (HDMI2.0/1.4, HDCP2.2/1.4)
	V-by-One® HS output	8 lane (24Gbps)
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	I ² Sx4(8ch), SPDIFx1
	Output	I ² Sx4(8ch), SPDIFx1
Power		1.2V/ 3.3V

Color Space Conversion

Input \ 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	420 (4K only)	✓	✓	✓	✓	✓	
		422	✓	✓	✓	✓	✓	
		444	✓	✓	✓	✓	✓	
sRGB	Limit Range	444	✓	✓	✓	✓	✓	
	Full Range	444	✓	✓	✓	✓	✓	

The Products and product specifications described in this document are subject to change without notice for modification and/or improvement. At the final stage of your design, purchasing, or use of the products, therefore, ask for the most up-to-date Product Standards in advance to make sure that the latest specifications satisfy your requirements. All company names, brand names and trademarks herein are property of their respective owners.

Copyright 2015 Socionext Inc.
AD04-00063-1E July 2015
Edited : Visual System Business Unit

Socionext America

2811 Mission College Blvd., 5th Floor
Santa Clara, CA 95054
Toll Free +1-844-680-3453
Main Office +1-408 550-6861
www.socionextus.com