

High-speed Interface Bridge LSI for 4K-video [HDMI to HS-LVDS]

MN869126



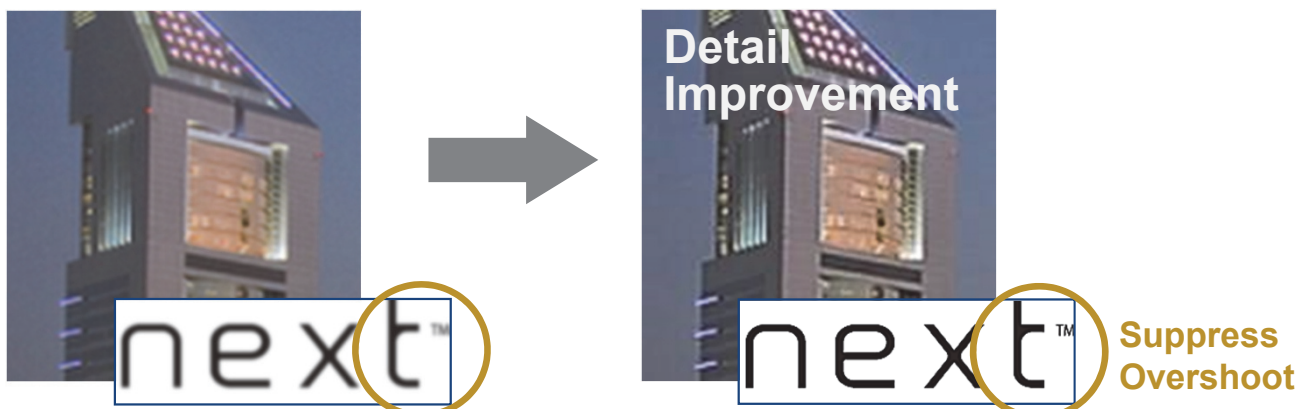
■ Overview

MN869126 is one of “HV series” that are high-speed interface bridge LSIs for 4K-video. This LSI enables to convert HDMI format to HS-LVDS format for 4K contents. HDMI inputs support HDMI2.0/1.4 with HDCP2.2/1.4 contents protection.

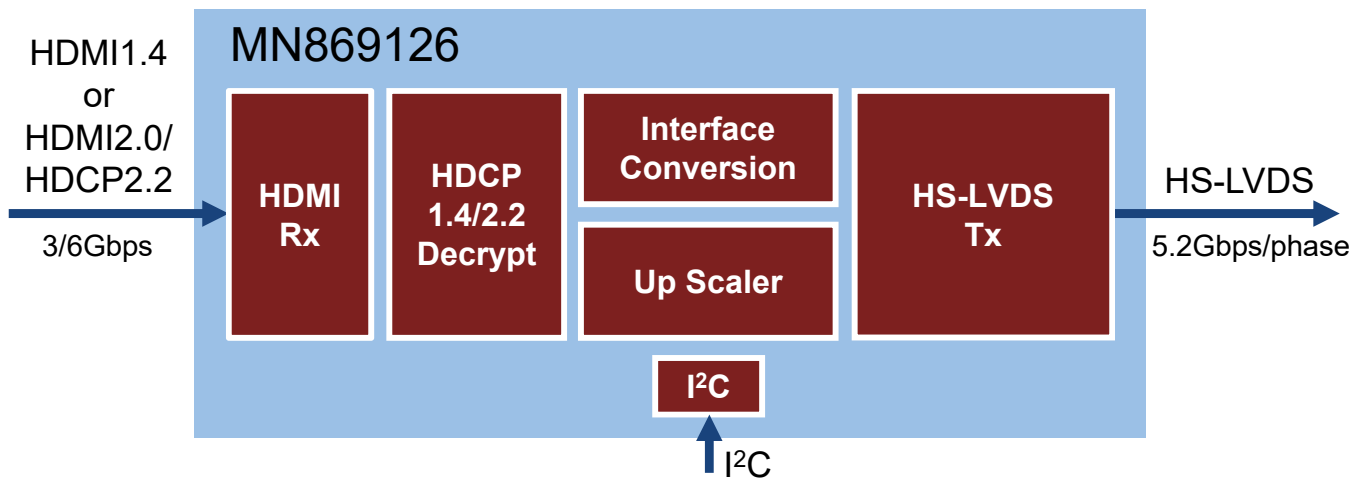
- **Input** : HDMI2.0/1.4 (max. 60Hz), HDCP2.2/1.4 support
- **Output** : HS-LVDS
- **Color space conversion**
- **Up-scale conversion**

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

■ 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)
	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 * 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		
YCbCr / xvYCC	ITU-R BT.601	422	✓	✓	✓	✓	✓	
		444	✓	✓	✓	✓	✓	
	ITU-R BT.709	420 (4K only)	✓	✓	✓	✓	✓	
		422	✓	✓	✓	✓	✓	
		444	✓	✓	✓	✓	✓	
	sRGB	Limit Range	444	✓	✓	✓	✓	✓
Full Range		444	✓	✓	✓	✓	✓	