

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



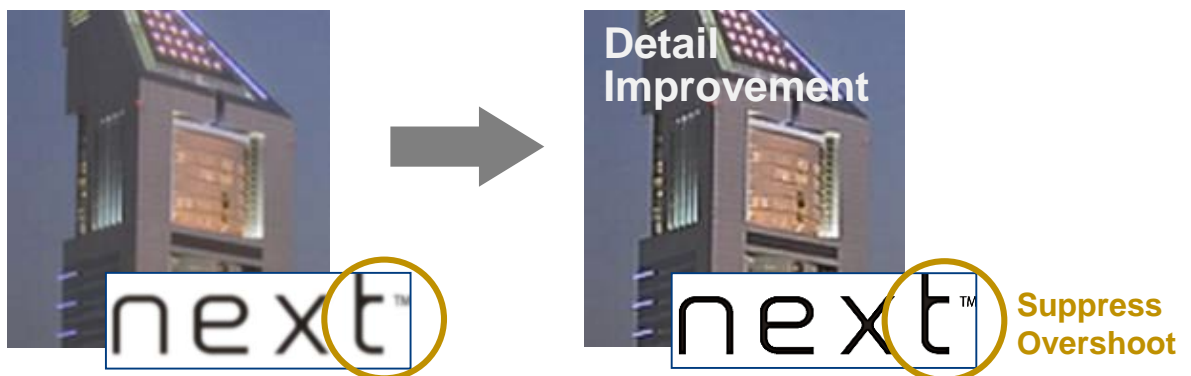
■ Overview

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.

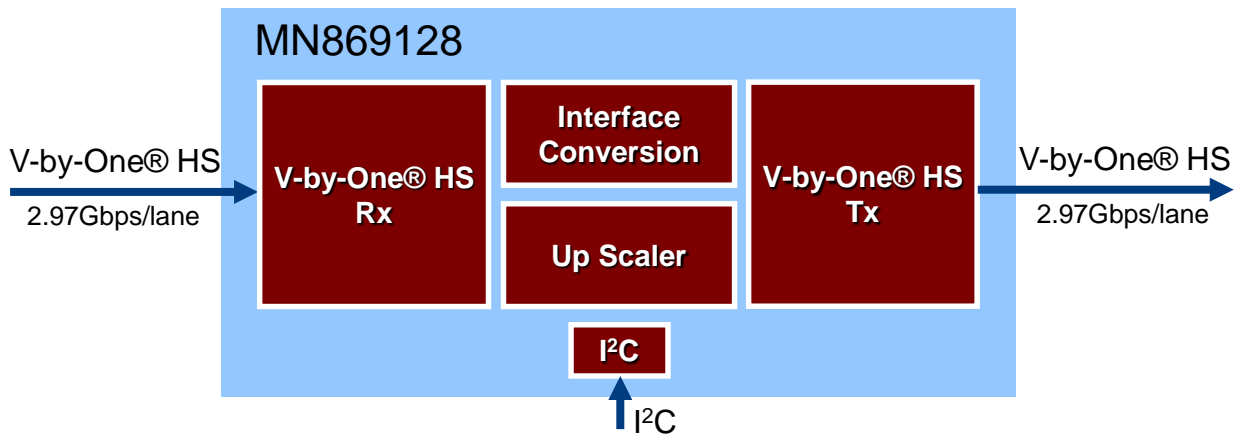
- **Input** : V-by-One® HS
- **Output** : V-by-One® HS
- **Color space conversion**
- **Up-scale conversion (Option)**

* “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) |
| | 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

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

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AD04-00066-1E July 2015
Edited : Visual System Business Unit

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