# GSV1008 SPECIFIATION

2019-12-16

**GSCOOLINK** 

# 1. General Description

#### 1.1 General Information

The GSV1008 is HDMI1.4/2.0 compatible, HDCP 1.4 supported, configurable 4-in-2-out repeater device. All 4 inputs are identical on receiver capability and all 2 outputs are identical on transmitter capability. GSV1008's 2 HDMI outputs can be independently routed from any HDMI input port.

The HDMI input and output maximum processing pixel clock frequency is 600MHz which means the video resolution can support up to 4kx2k@60Hz 4:4:4 8-bit. The maximum processing audio sample frequency is 192K Hz for non-compression timing. GSV1008 supports HDR10 and Dolby Vision HDR as input and output.

For audio insertion and extraction, 2 versatile TTL pin buses of GSV1008 can be configured as either input mode or output mode regarding platform requirement. GSV1008 can support up to 8-channel I2S, 2-channel S/PDIF, 3D and multi-stream audio. In TDM mode, each audio pin supports up to 8 channels.

Internal Scaler and Color Space Converter enables the input and output to be timing format independent and capable of long distance transmission.

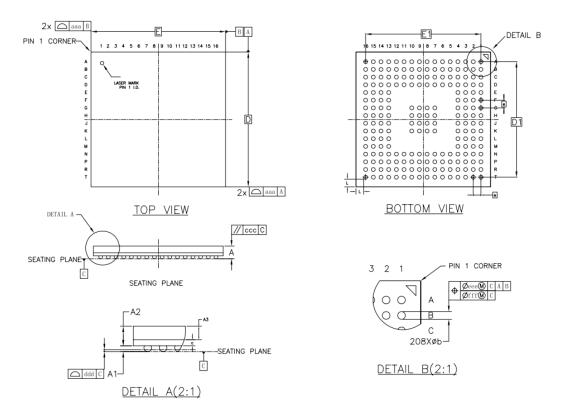
With powerful HDMI Rx equalizer and Tx pre-emphasis capability, GSV1008 can cascade itself (or GSV2000 series chips) with at least 7 stages for all HDMI 1.3/1.4/2.0 timings.

# 6. Packaging

## **6.1 Packaging Description**

The GSV1008 device is packaged in a 208-pin, 14mmx14mm LFBGA package.

### **6.2 Package Dimensions**



SYMBOL	MILLIMETER		
	MIN	NOM	MAX
Α			1.40
A1	0.25	0.30	0.35
A2	0.97	1.02	1.07
С	0.28	0.32	0.36
A3	0.70 BASIC		
D	13.90	14.00	14.10
D1	12.00 BASIC		
E	13.90	14.00	14.10
E1	12.00 BASIC		
e	0.80 BASIC		
b	0.35	0.40	0.45
L	0.80 REF		
aaa	0.10		
ccc	0.20		
ddd	0.08		
eee	0.15		
fff	0.08		

Figure 12. GSV1008 Package Dimensions