

# GSV1201D

DisplayPort 1.2 to HDMI 1.4 Converter with Embedded MCU

May, 2023

**Preliminary Product Specification** 

### 1. General Description

#### 1.1 General Information

Gscoolink GSV1201D is a high-performance, low-power, USB Type-C Alternate Mode DisplayPort 1.2 to HDMI 1.4 converter. By integrating enhanced microcontroller and flash, GSV1201D has created a cost-effective solution that provides time-to-market advantages. The DisplayPort Receiver supports up to 21.6Gbps (HBR2, 4-lane) and HDMI Transmitter supports up to 9Gbps (TMDS, 3G3Lane). Integrated Power Delivery 3.0 controller handles Type-C CC interface for USB power management and DisplayPort mode entry. The superior architecture of GSV1201D provides economical smaller footprint solutions using QFN48, targeting application of Type-C Hub.

GSV1201D supports all DisplayPort SDP packets pass-through to HDMI output. HDCP 1.4 is implemented in GSV1201D for both DisplayPort Rx and HDMI Tx. Color Space Conversion, 444/422-420 Converter are supported at HDMI Tx in TMDS mode.

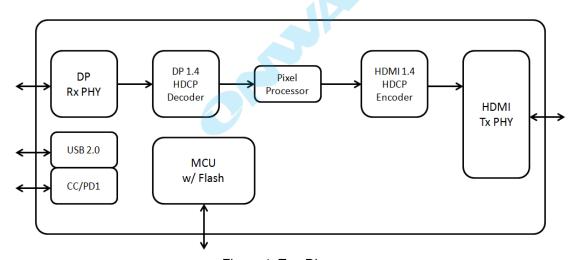


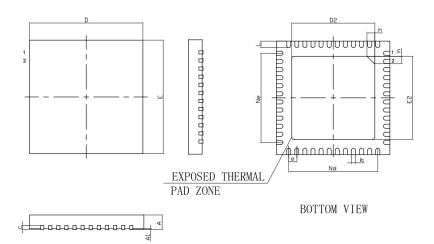
Figure 1. Top Diagram

The supported audio formats are listed in Table 1

Table 1. Supported Audio Format

	Packet Type	Sampling Frequency (KHz)		
Packet ID		32/44.1/48/88.2/	256/352.8/384/	64/128
		96/176.4/192	512/705.6/768	
0x02	Audio Sample Packet	V		Y
	(LPCM and Compressed Audio)	Ť		
0x07	One Bit Audio Sample Packet	Y		

## 4. Package Information



SYMBOL	MILLIMETER			
SIMBOL	MIN	NOM	MAX	
A	0.70	0.75	0.80	
A1	_	0.02	0.05	
b	0.15	0.20	0. 25	
с	0.18	0.20	0. 23	
D	5. 90	6.00	6.10	
D2	4.10	4.20	4. 30	
e	0. 40BSC			
Ne	4. 40BSC			
Nd	4. 40BSC			
E	5. 90	6.00	6. 10	
E2	4.10	4.20	4. 30	
L	0.35	0.40	0.45	
h	0.30	0.35	0.40	
L/F裁体尺寸 (MIL)	177*177			

Figure 7. Package Dimensions (QFN48)



## 5. Ordering Guide

Table 6. Ordering Information

Part Number.	Temperature Range	Package Description	Packing Type
GSV1201D	−20°C to +85°C	QFN48	Tray

