



GSV1201S

DisplayPort 1.2 to HDMI 1.4 Converter with
Embedded MCU

May, 2023

Preliminary Product Specification

1. General Description

1.1 General Information

Gschoolink GSV1201S 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, GSV1201S has created a cost-effective solution that provides time-to-market advantages. The DisplayPort Receiver supports up to 10.8Gbps (HBR2, 2-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 GSV1201S provides economical smaller footprint solutions using QFN48, targeting application of Type-C Hub, Type-C Dongle, Cable.

GSV1201S supports all DisplayPort SDP packets pass-through to HDMI output. HDCP 1.4 is implemented in GSV1201S for both DisplayPort Rx and HDMI Tx. Color Space Conversion, 444/422-420 Converter are supported at HDMI Tx in TMDS mode.

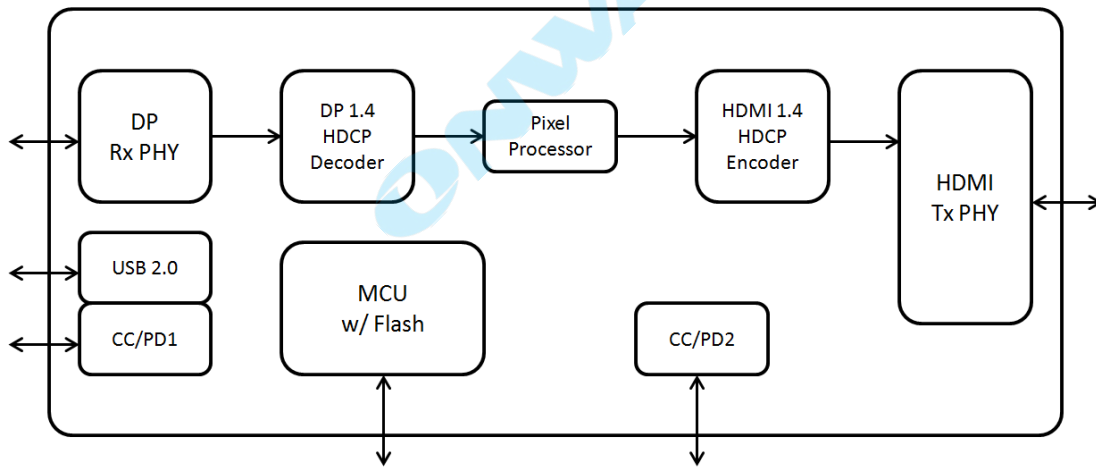


Figure 1. Top Diagram

The supported audio formats are listed in Table 1

Table 1. Supported Audio Format

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

4. Package Information

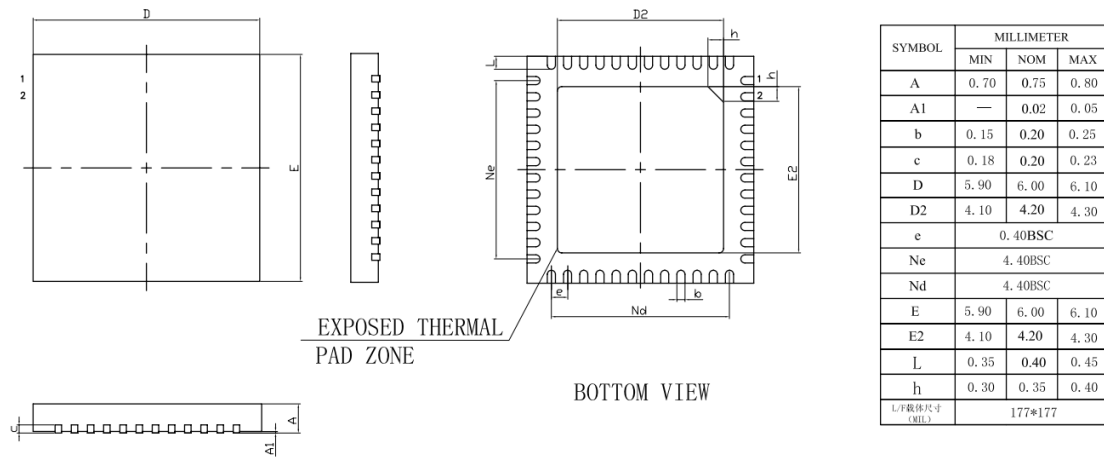


Figure 7. Package Dimensions (QFN48)



5. Ordering Guide

Table 6. Ordering Information

| Part Number. | Temperature Range | Package Description | Packing Type |
|--------------|-------------------|---------------------|--------------|
| GSV1201S | 0°C to +70°C | QFN48 | Tray |

