



# GSV2011

HDMI2.0 Repeater with TTL/LVDS  
Input/Output and Audio Extraction/Insertion

September, 2019

## PRODUCT SPECIFICATION

ONWA

# 1 General Information

## 1.1 General Information

The GSV2011 is a HDMI1.4/2.0 compatible TRX transceiver with LVDS/TTL data bus, and supports HDCP 1.4/2.2. For audio extraction and insertion, GSV2011 can support up to 8-channel I2S/2-channel S/PDIF/TDM.

The HDMI input 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 8-channel 192K Hz for non-compression timing.

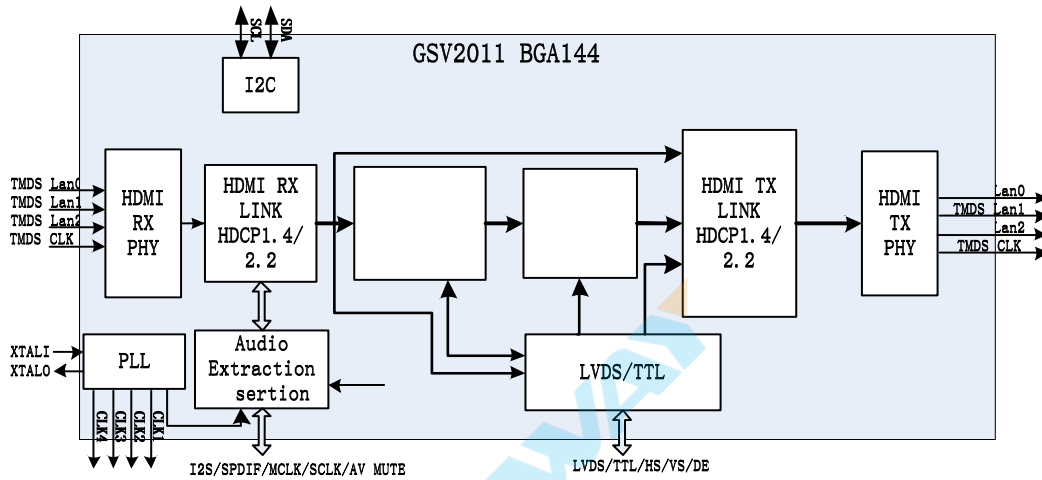


Figure 1. Top Diagram

Internal video processing supports CSC/ Dither/ 420<->444 conversion/ Downscaler/ Deinterlacer/ LVDS and TTL Pin Mapping. Figure 2 is its diagram.

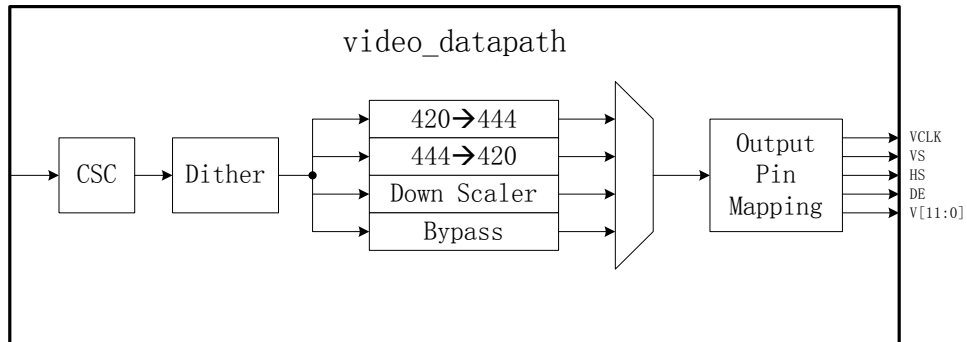


Figure 2. Video Datapath

# 5 Package Information

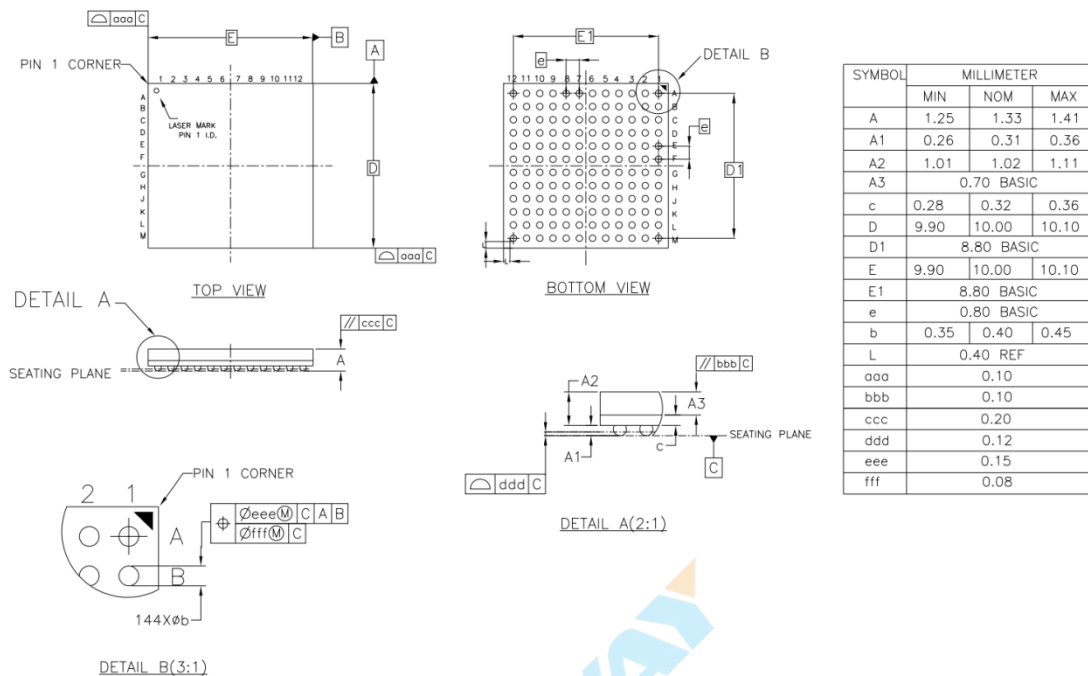


Figure 28. Package Dimensions (BGA144)

## 6 Ordering Guide

Table 42. Ordering Information

| Part Number. | Temperature Range | Package Description                                 | Packing Type |
|--------------|-------------------|---|--------------|
| GSV2011      | -20 °C to +85 °C  | BGA144, 0.8 mm ball pitch,<br>10 mm x 10 mm outline | Tray         |

The ONWAY logo is a light blue, stylized, slanted text with a small orange triangle above the 'Y'.