



GSV2016

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

September, 2019

PRODUCT SPECIFICATION

ONWA

1 General Information

1.1 General Information

The GSV2016 is a HDMI1.4/2.0 compatible TX transmitter with LVDS/TTL data bus, and supports HDCP 1.4/2.2. For audio extraction and insertion, GSV2016 can support up to 8-channel I2S/2-channel S/PDIF/TDM.

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

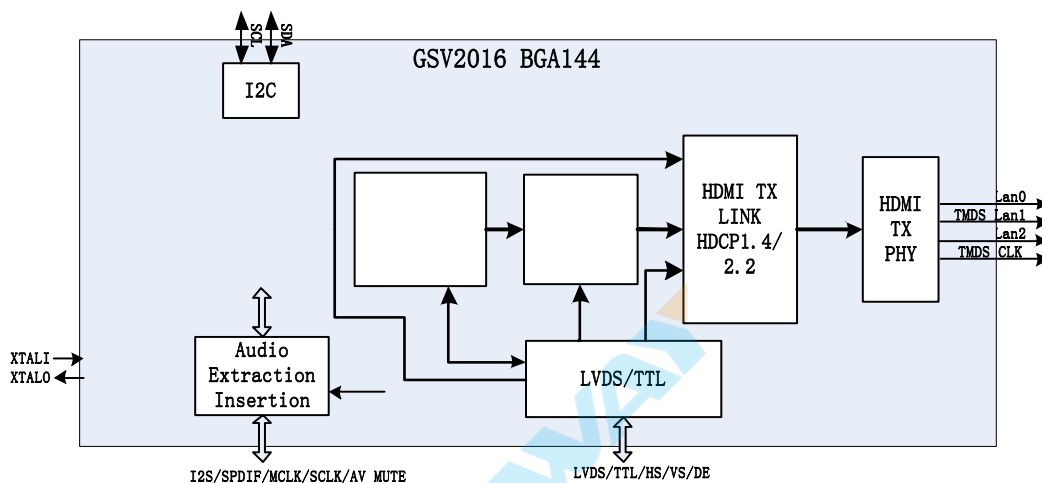


Figure 1. Top Diagram

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

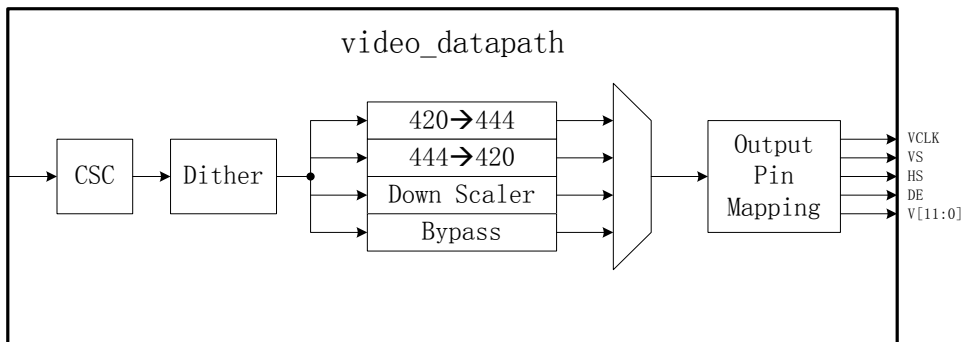


Figure 2. Video Datapath

5 Package Information

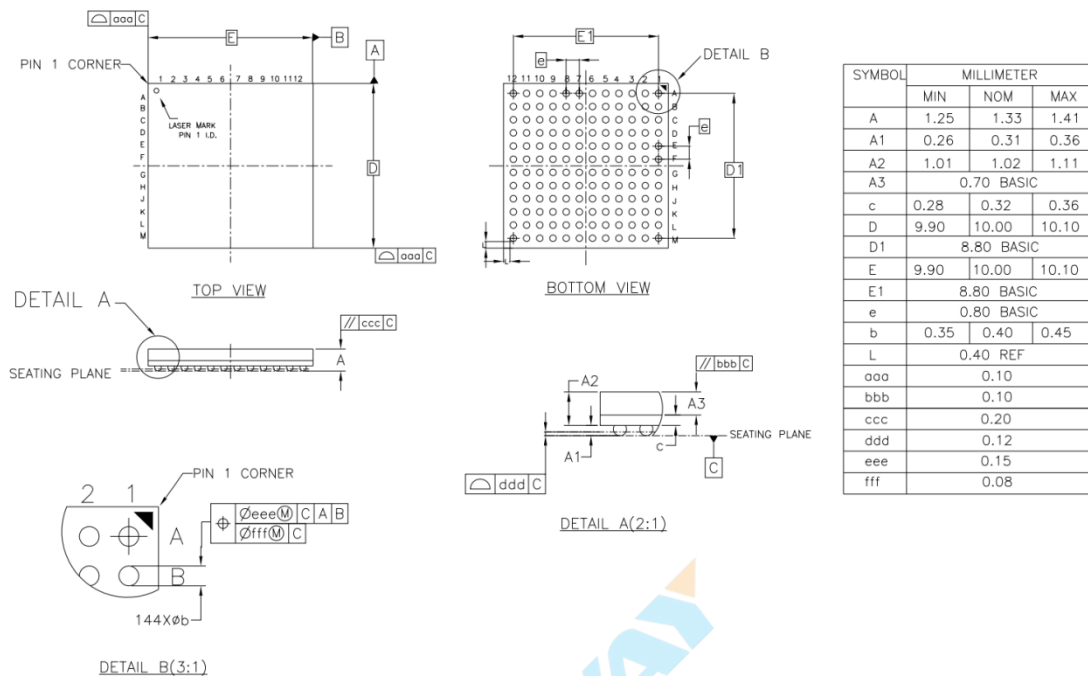


Figure 24. Package Dimensions (BGA144)

6 Ordering Guide

Table 34. Ordering Information

Part Number.	Temperature Range	Package Description	Packing Type
GSV2016	-20 °C to +85 °C	BGA144, 0.8 mm ball pitch, 10 mm x 10 mm outline	Tray

The ONWAY logo is displayed diagonally in the center of the page. It consists of the word "ONWAY" in a bold, blue, sans-serif font. The letter "O" is stylized with a circular element. A small orange triangle is positioned above the letter "Y".