LT8618SX --- Product Brief

Low Power HDMI Transmitter

Features

● RGB Input
  ▪ Support 24-bit RGB, YUV and BT656/BT661/BT1120 Input
  ▪ Support both SDR and DDR Data Sampling
  ▪ Programmable Rising/Falling Edge Clock Input
  ▪ Support up to 148.5MHz DDR or 297MHz SDR Clock Input
  ▪ Support both 1.8V and 3.3V Input Voltage Level

● HDMI Transmitter
  ▪ Compliant with HDMI1.4 and HDCP1.4
  ▪ Resolution Up to 4K 30Hz
  ▪ Programmable output swing and pre-emphasis
  ▪ Fully hardware-controlled or optional software-controlled HDCP operations
  ▪ Pre-programmed HDCP key sets or external EEPROM stored key sets
  ▪ Integrated CEC controller
  ▪ Integrated EDID shadow RAM and embedded EDID
  ▪ 5V tolerance DDC/HPD I/Os

● Miscellaneous
  ▪ 1.8V and 3.3V Power Supply
  ▪ Support 100KHz and 400KHz I2C slave
  ▪ Support up to 8-channel Audio Input
  ▪ Temperature Range: -40°C ~ +85°C
  ▪ Pin compatible with SiI9030, ANX9030 and CAT6612
  ▪ Packaged in LQFP80 12mm x 12mm and QFN64 9mm x 9mm

Description

The LT8618SX is Lontium's low power version HDMI transmitter based on ClearEdgeTM technology. It supports the 24-bit color depth HDMI 1.4 (High Definition Multimedia Interface) specification. They are fully backward compatible with Lontium's first generation HDMI transmitter LT8618EX, and also pin compatible with Silicon Image SiI9030 and Analogix ANX9030 transmitters. LT8618SX is a high performance, low power part that are specifically designed for HD-Digital cameras, HD-Digital Video Cameras, HD-PMP/MP4 Players, Cell phones, etc. The normal operation power is less than 100mA playing 24bit 1080P content, and the standby power is less than 2mA.

Applications

● DVD, BD
● Car Video Recorder
● PTV Box
● HD Sources
Ordering Information

Table 1. Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Operating Temperature Range</th>
<th>Package</th>
<th>Packing Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>LT8618SXAx</td>
<td>-40°C to 85°C</td>
<td>LQFP80 (12*12)</td>
<td></td>
</tr>
<tr>
<td>LT8618SXB</td>
<td>-40°C to 85°C</td>
<td>QFN64 (9*9)</td>
<td></td>
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</tbody>
</table>

Figure 1. LT8618SX Typical Application Diagram
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