Low-voltage differential signaling Driver and Receiver

MODULE

3DLV3304VS1374

3V Quad Driver and Receiver, based on Quad

Features

- >400 Mbps (200 MHz) switching rates
- ±450 mV differential signalling
- 3.3 V power supply
- Ultra low power dissipation
- 0.6 ns maximum differential skew (Driver)
- 4.5 ns maximum propagation delay (Driver)
- 0.2 ns differential skew -typical (Receiver)
- 6 ns maximum propagation delay (Receiver)
- Compatible with IEEE 1596.3 SCI LVDS standard
- Conforms to ANSI/TIA/EIA-644 LVDS standard
- Integrated 110-Ω Line Termination Resistors
- Cold sparing all I/O pins
- Variable Temperature range
  - 0°C to 70°C
  - -40°C to +85°C
  - -55°C to +125°C
- Available screening option for high reliability application

General description

The 3DLV3304VS1374 is Quad CMOS differential line driver and Quad CMOS differential line receiver, designed for applications requiring ultra low power dissipation and high data rates. The device is designed to support data rates in excess of 400 Mbps (200 MHz) utilizing Low Voltage Differential Signaling (LVDS) technology.

The Quad driver accepts LVTTL/LVCMOS input levels and translates them to low voltage (450 mV) differential output signals, and the Quad receiver accepts low voltage (350 mV typical) differential input signals and translates them to 3V CMOS output levels.

The 3DLV3304VS1374 provides a new alternative to high power pseudo-ECL devices for high speed point-to-point interface applications.
LVDS Driver and Receiver MODULE
4 Lines-SOP

Low-voltage differential signaling Driver and Receiver MODULE

3DLV3304VS1374
3V Quad Driver and Receiver, based on Quad

Mechanical Drawing

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Min</th>
<th>Max</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply Voltage</td>
<td>VDD</td>
<td>3.0</td>
<td>3.6</td>
<td>V</td>
</tr>
<tr>
<td>Supply Voltage(D)</td>
<td>Vin</td>
<td>-0.5</td>
<td>VDD+</td>
<td>V</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>Tstg</td>
<td>-65</td>
<td>150</td>
<td>°C</td>
</tr>
</tbody>
</table>

Note:
Permanent device damage may occur if "ABSOLUTE MAXIMUM RATINGS" are exceeded.
Functional operation should be restricted to recommended operating condition.
Exposure to higher than recommended voltage for extended periods of time could affect device reliability.

3DLV3304VS1374
Temperature Range
C = 0°C ~ +70°C
I = -40°C ~ +85°C
S = -55°C ~ +125°C

Quality Level
N = Commercial Grade
B = Industrial Grade
S = Space Grade
C = Custom

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LVDS Module

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