LVDS Deserializer 3360Mbps Automotive 48-Pin WQFN EP T/R

Manufacturer:	Texas Instruments, Inc
Package/Case:	WQFN-48
Product Type:	Drivers
RoHS:	RoHS Compliant/Lead free
Lifecycle:	Active

Images are for reference only

Inquiry

General Description

The DS90UB924-Q1 deserializer, in conjunction with a DS90UB921-Q1, DS90UB925Q-Q1, DS90UB927Q-Q1, DS90UB929-Q1, DS90UB949-Q1, or DS90UB947-Q1 serializer, provides a solution for distribution of digital video and audio within automotive infotainment systems. The device converts a high-speed serialized interface with an embedded clock, delivered over a single signal pair (FPD-Link III), to four LVDS data/control streams, one LVDS clock pair (OpenLDI), and I2S audio data. The serial bus scheme, FPD-Link III, supports high-speed forward channel data transmission and low-speed full duplex back channel communication over a single differential link. Consolidation of audio, video data and control over a single differential pair reduces the interconnect size and weight, while also eliminating skew issues and simplifying system design.

Adaptive input equalization of the serial input stream provides compensation for transmission medium losses and deterministic jitter. EMI is minimized by the use of low voltage differential signaling.

Key Features

Qualified for Automotive Applications AEC-Q100
Device Temperature Grade 2: –40°C to
+105°C Ambient Operating Temperature
Range

Device HBM ESD Classification Level ±8 kV

Device CDM ESD Classification Level C6

5-MHz to 96-MHz Pixel Clock Support

Bidirectional Control Channel Interface with I^2C-
Compatible Serial Control Bus

Low EMI OpenLDI Video Output

Supports High Definition (720p) Digital Video

RGB888 + VS, HS, DE and I2S Audio Supported

Up to 4 I2S Digital Audio Outputs for Surround
Sound Applications

4 Bidirectional GPIO Channels With 2 Dedicated Pins

Single 3.3-V Supply With 1.8-V or 3.3-V
Compatible LVCMOS I/O Interface

DC-Balanced and Scrambled Data with
Embedded Clock

Adaptive Cable Equalization

Internal Pattern Generation

Backward Compatible Modes

Recommended For You

AVAQ SEMICONDUCTOR CO., LIMITED

SN65LVDS3486D

Texas Instruments, Inc

SOP-16

SN65LVDS3487D

Texas Instruments, Inc

SOP16

DS90C032TM

Texas Instruments, Inc

SOP16

DS90C031BTM

Texas Instruments, Inc

SOP16

SN65LVDS31PW

Texas Instruments, Inc

TSSOP-16

SN65LVDS33D

Texas Instruments, Inc

SOP-16

SN65LVDS32D

Texas Instruments, Inc

SOP-16

SN65LVDS31D

Texas Instruments, Inc

SOP

SN65LVDS32PW

Texas Instruments, Inc

TSSOP16

DS90UB954TRGZTQ1

Texas Instruments, Inc

QFN48

DS90UB954TRGZRQ1

Texas Instruments, Inc

VQFN48

SN65DSI83TPAPRQ1

Texas Instruments, Inc

HTQFP-64

DS90UB947TRGCTQ1

Texas Instruments, Inc

VQFN-64

DS90LV011AQMF/NOPB

Texas Instruments, Inc

SOT23-5

SN65LVDS9638DR

Texas Instruments, Inc

SOP-8