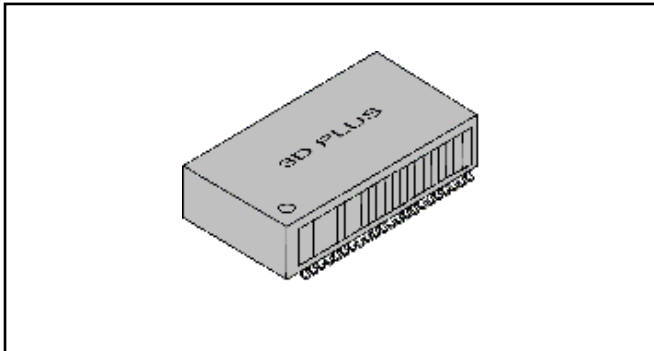


Low-voltage differential signaling Driver MODULE

3DLV3104VS1617

4-channel Driver, 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
- 4.5 ns maximum propagation delay
- Compatible with IEEE 1596.3 SCI LVDS standard
- Conforms to ANSI/TIA/EIA-644 LVDS standard
- Footprint compatible with 16 lead flatpack
- Cold sparing all I/O pins
- Available Temperature range
 - 0°C to 70°C
 - -40°C to +85°C
 - -55°C to +125°C
- Radiation tolerance
 - TID: >100 Krad(Si)
 - SEL LET threshold: >80 MeV-cm²/mg
- Space Qualified
- Available screening option for high reliability applications

General description

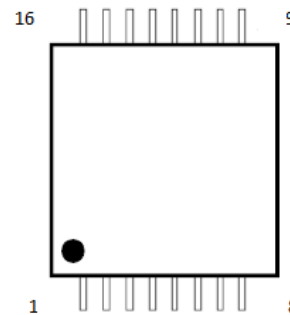
The 3DLV3104VS1617 consists of four CMOS differential line driver designed for applications requiring ultra low power dissipation and high data rates. The device is designed to support data rates in excess of 400 Mbps (200 MHz) utilizing Low Voltage Differential Signaling (LVDS) technology.

The 3DLV3104VS1617 accepts LVTTTL/LVCMOS input levels and translates them into low voltage (450 mV) differential output signals.

The 3DLV3104VS1617 and companion line receiver (3DLV3204VS1618) provide a new alternative to high power pseudo-ECL devices for high speed point-to-point interface applications.

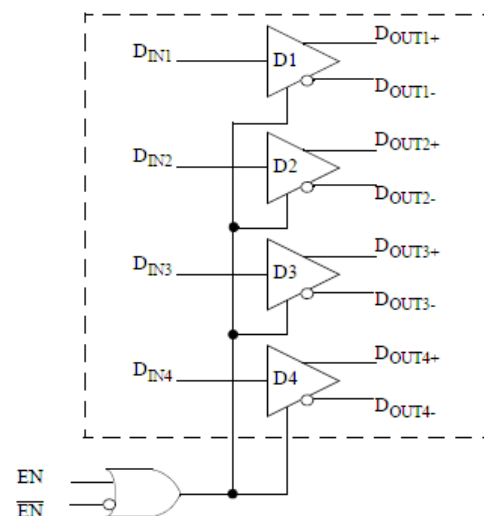
Pin Assignment (Top View)

SOP 16 (Pitch : 1.27 mm)



1	Din1	9	Din3
2	Dout1+	10	Dout3+
3	Dout1-	11	Dout3-
4	EN	12	#EN
5	Dout2-	13	Dout4-
6	Dout2+	14	Dout4+
7	Din2	15	Din4
8	GND	16	Vdd

FUNCTIONAL Block Diagram

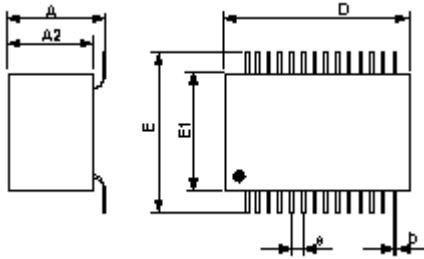


Low-voltage differential signaling Driver
MODULE

3DLV3104VS1617

4-channel Driver, based on Quad

Mechanical Drawing



	Min	Max
A	4.00	4.70
A2	2.90	3.30
D	12.50	12.90
E	15.90	16,10
E1	5.40	5.60
b	0.35	
e	1.27	
Dimension (mm)		
Max. weight : 1.5 g		

DC OPERATING CONDITIONS

Parameter	Symbol	Min	Max	Unit
Supply Voltage	V_{DD}	3.0	3.6	V
Input High Voltage	V_{IH}	2.0	V_{DD}	V
Input Low Voltage	V_{IL}	GND	0.8	V

ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
Supply Voltage	V_{DD}	-0.5 to 4.0	V
Input Voltage (Din)	V_{in}	-0.5 to $V_{DD} + 0.5$	V
Storage temperature	T_{stg}	-65 to 150	°C

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

DC Characteristics

Parameter	Symbol	Max	Unit
Differential Output Voltage	V_{OD1}	450	mV
Offset Voltage	V_{OS}	1.375	V

3DLV3104VS1617

Temperature Range

C = 0°C ~ +70°C

I = -40°C ~ +85°C

M = -55°C ~ +125°C

Quality Level

N = Commercial Grade

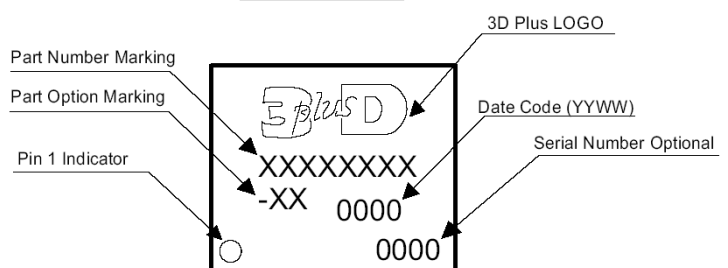
B = Industrial Grade

S = Space Grade

C = Custom

X X

MODULE MARKING



Main Sales Office

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