



## PI6C49S1510B EVB User Guide

**High-Performance Differential Fanout Buffer** 

### **General Description**

The PI6C49S1510B is a high-performance fanout buffer device supporting up to 1.5G frequency. The device integrates a unique feature of having user-configurable output signaliing standards on a per bank basis, which provides a great level of flexibility to users.

Notes: 1. No purposely added lead. Fully EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant.

- 2. See https://www.diodes.com/quality/lead-free/ for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
  - 3. Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

### **References**

- PI6C48S1510B EVB
- Agilent 54855A oscilloscope
- Agilent E3631A Triple Output DC Power Supply

## Test Demo Board

The PI6C49S1510B EVB test connection is shown below. Please refer to the input and output selection logic in the <u>PI6C49S1510B</u> datasheet.





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## Test EVB Reference Schematic



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 PI6C49S15102DE EVB

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### **EVB Reference Test Data**

LVPECL	125M	156.25M	312.5M	Unit
Tr	322	321	357	ps
Tf	331	327	359	ps
LVDS/Tr	311	304	475	ps
Tf	334	329	521	ps
HCSL/Tr	614	625	525	ps
Tf	637	647	541	ps



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### **EVB Output Test Waveforms**

1. QA Port3 output 125M HCSL



2. QA Port2 output 156.25M LVDS





### EVB Output Test Waveforms (continued)

3. QA Port3 output 312.5M LVPECL





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