

PI6CB18401 EVB Use Manual

Timing Application Engineering

1.1 Introduction

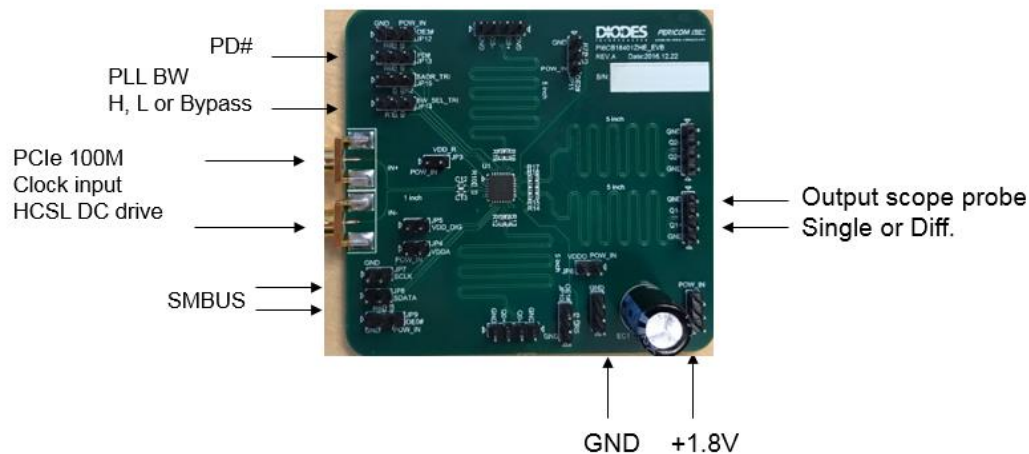
PI6CB18401 is 1.8V PCIe clock Zero-Delay-Buffer family product. Its low power HCSL output makes the IC has very low power consumption in high performance to comply with PCIe 2.0, 3.0, and 4.0 PCL_SIG.org reference clock waveform and jitter specifications. This doc. is to provide the EVB use guide and test example.

1.2 DUT Reference

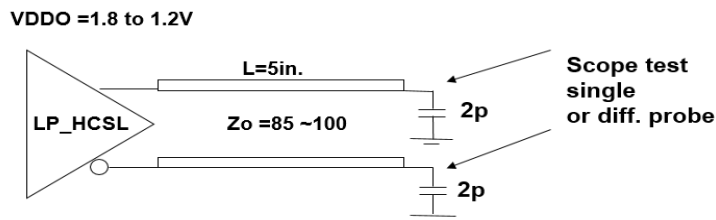
1. Datasheet
2. EVB PCB and schematic
3. Device application circuit

1.3 EVB Photo and Test Diagram

- 1) EVB photo and connection guide



- 2) LP_HCSL test diagram



1.3 Equipment

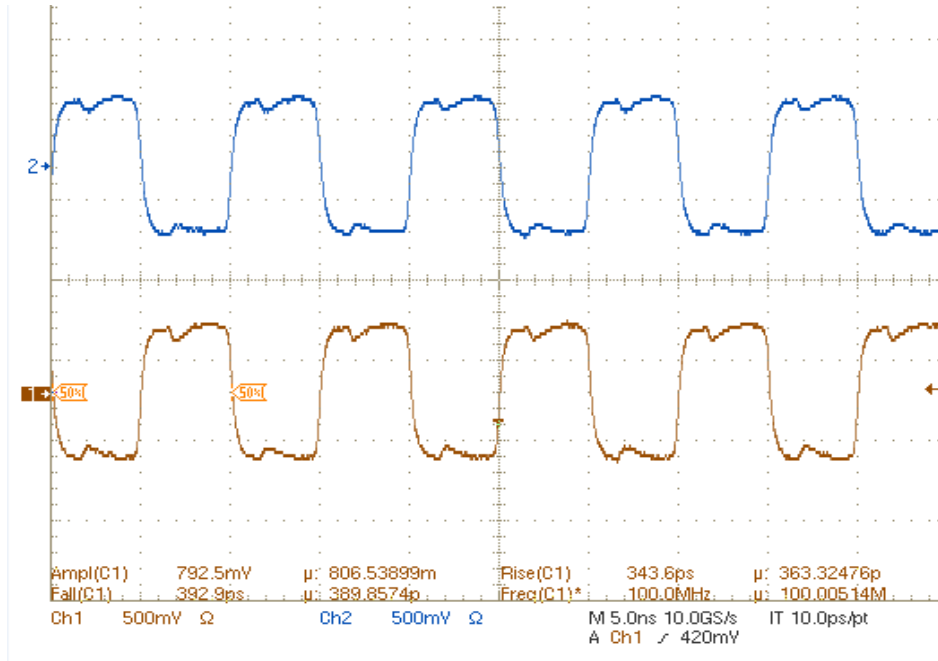
Agilent DC supply: E3631A
Tektronix real time scope 20G/S: TDS7404

2.1 Summary

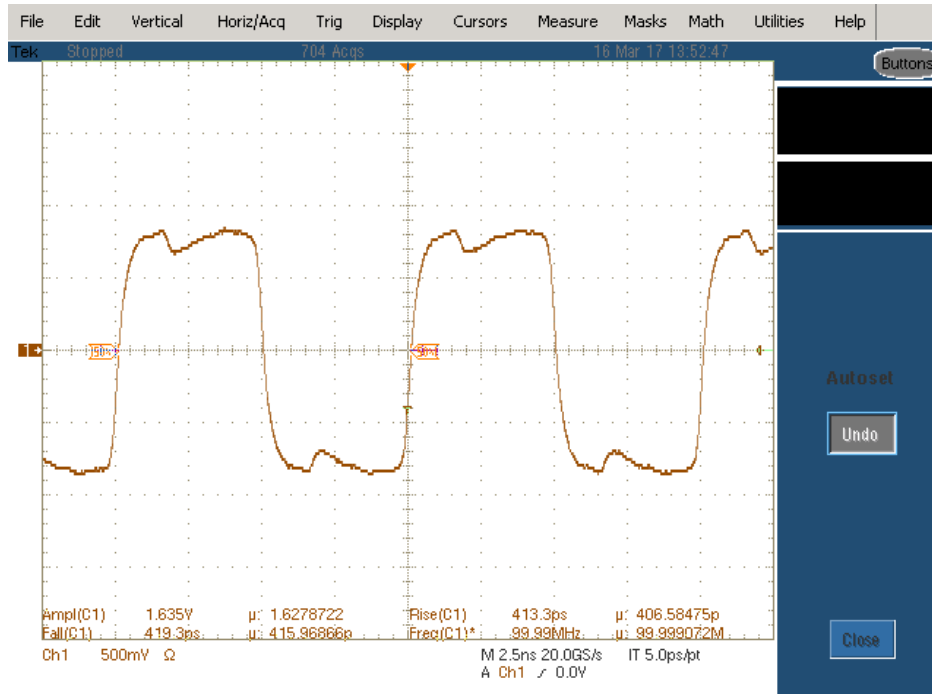
- i) The single output waveform $Tr/Tf = 363/389ps$; $V_{amp} = 806mV$
- ii) differential output waveform $Tr/Tf = 406/415ps$; $V_{amp} = 1.62V$
- iii) The EVB meets design spec.

3.1 Test Reference Waveform

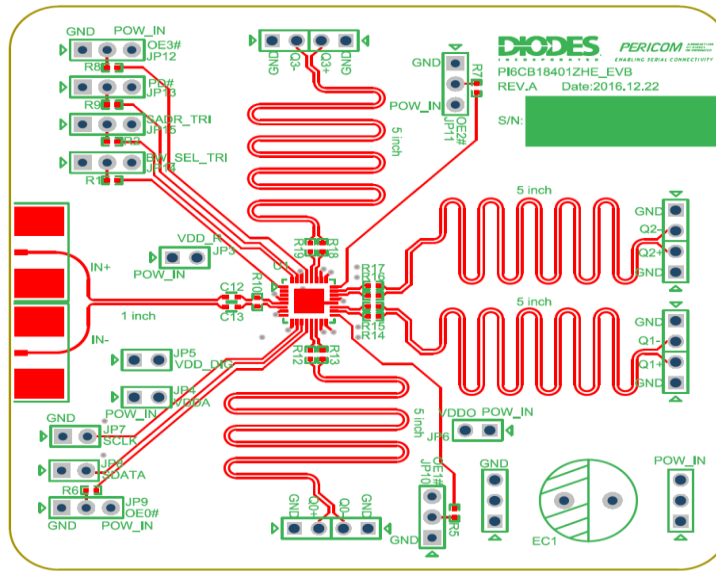
1) Tek scope single end probe waveform



2) Tek scope differential probe waveform



3.2 EVB PCB Layout Example



3.3 PI6CB18401 EVB Schematic

