

# PI6CB18601 EVB Use Manual

## Use PI6CB18401 EVB instead

Timing Application Engineering

### 1.1 Introduction

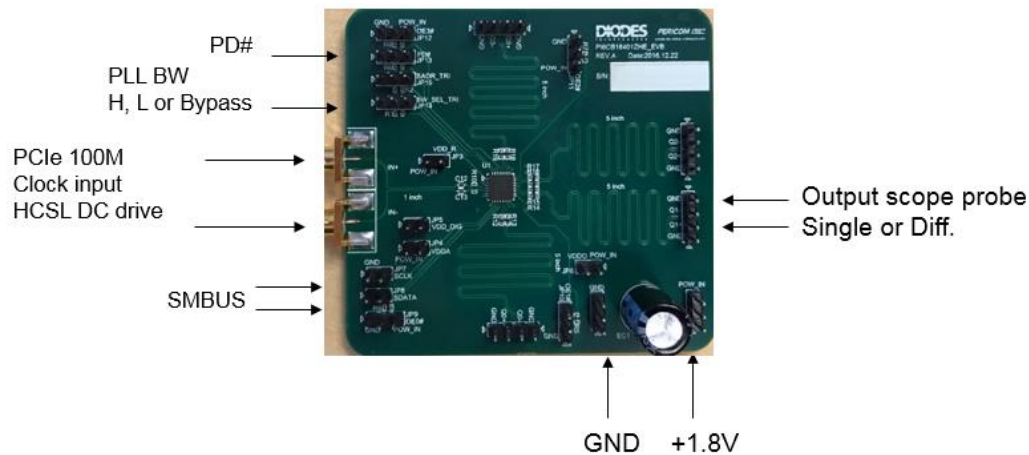
PI6CB18401/601 are 1.8V PCIe clock Zero-Delay-Buffer family products. Its low power HCSL output makes the IC has very low power consumption in high performance to comply with PCIe 2.0, 3.0, and 4.0 PCI\_SIG.org reference clock waveform and jitter specifications. This doc. is to provide the EVB use guide and test example.

### 1.2 DUT Reference

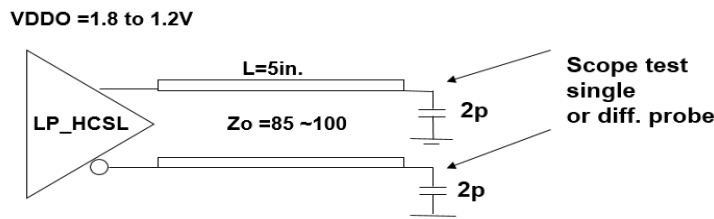
1. Datasheet
2. EVB PCB and schematic

### 1.3 EVB Photo and Test Diagram

- 1) EVB photo and connection guide



- 2) LP\_HCSL test diagram



### 1.3 Equipment

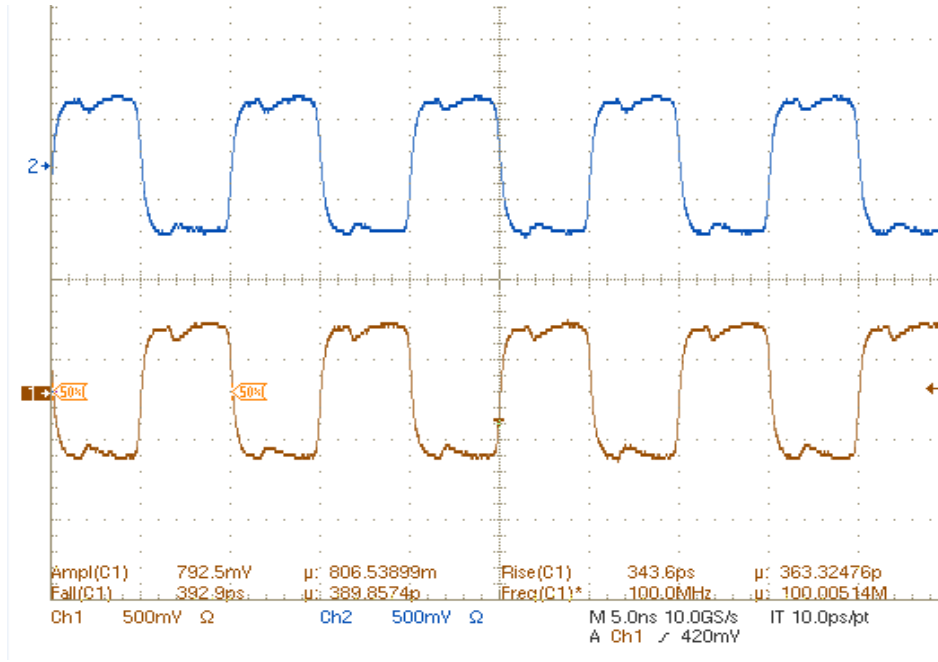
- Agilent DC supply: E3631A
- Tektronix real time scope 20G/S: TDS7404

### 2.1 Summary

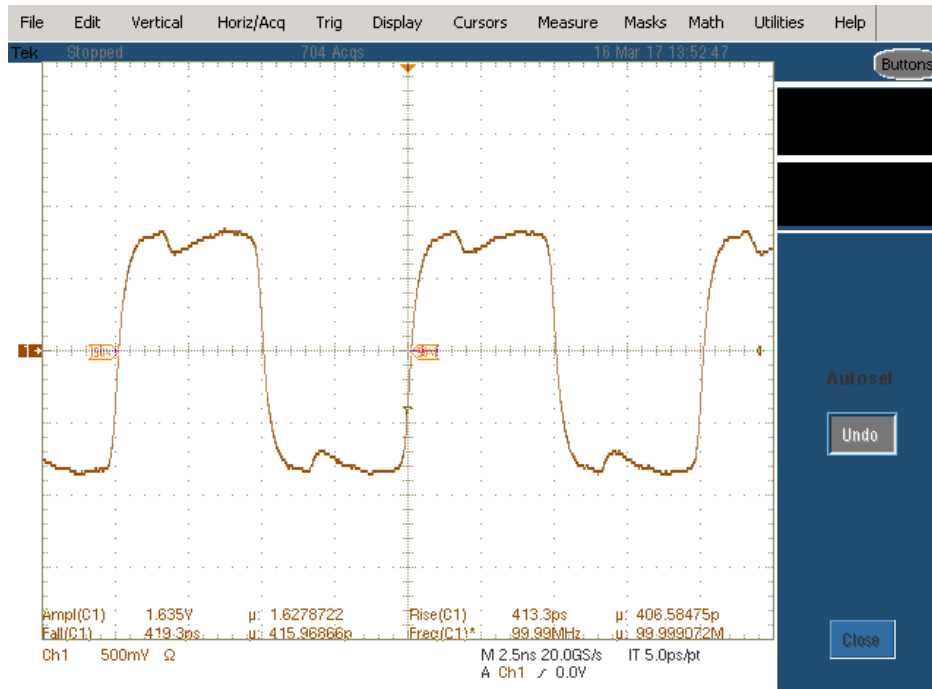
- i) The single output waveform  $T_r/T_f = 363/389ps$ ;  $V_{amp} = 806mV$
- ii) differential output waveform  $T_r/T_f = 406/415ps$ ;  $V_{amp} = 1.62V$
- iii) The EVB meets design spec.

### 3.1 Test Reference Waveform

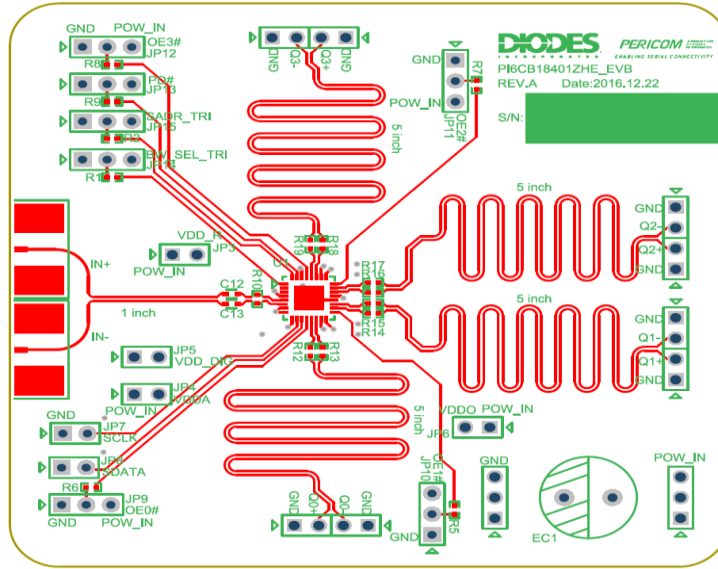
1) Tek scope single end probe waveform



2) Tek scope differential probe waveform



### 3.2 PI6CB18401 EVB PCB Layout Example



### 3.3 PI6CB18401 EVB Schematic

