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PI6C557-03A PI6C557-05 EVB User Guide

Pericom Application Engineering

1.1 Introduction

The PI6C557-03A and PI6C557-05 is a spread spectrum clock generator compliance with PCI-SIG PCIe jitter requirement. These chips have output frequency at 25M 100M 125M and 200M. The EVBs are to help customers to evaluate the IC and system design.

1.2 Reference document

PI6C557-03A and PI6C557-05 datasheets:

<http://www.pericom.com/pdf/datasheets/PI6C557-03A.pdf>

<http://www.pericom.com/pdf/datasheets/PI6C557-05.pdf>

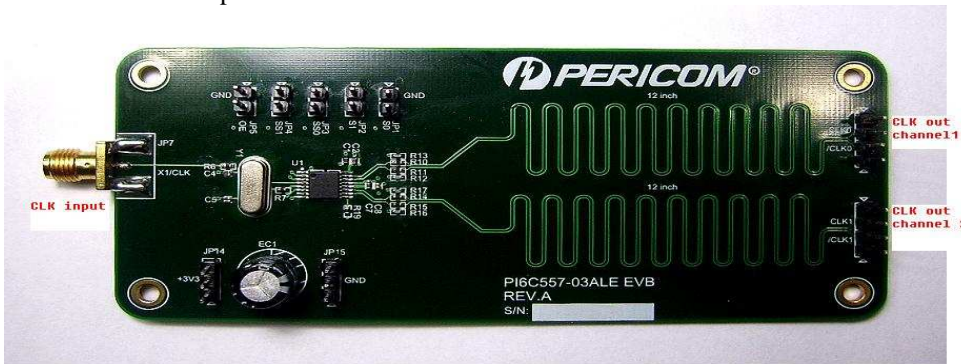
2.1 Equipment

Agilent 54855A oscilloscope

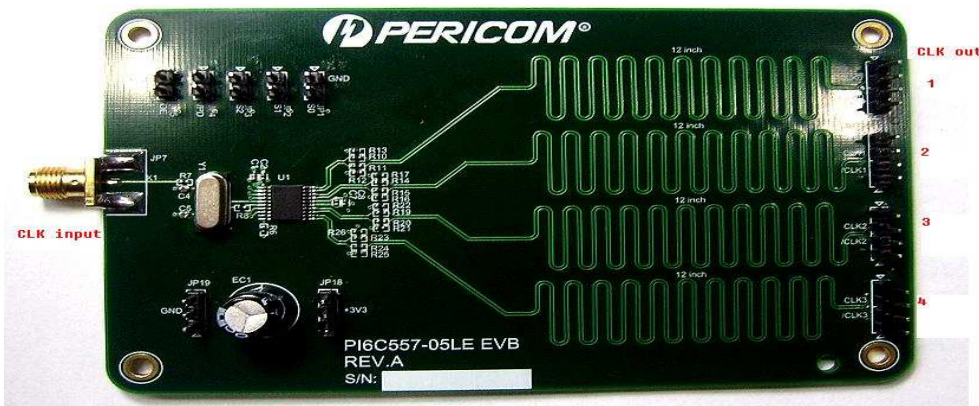
Agilent E3631A Triple output DC power supply

2.2 Test demo board

PI6C557-03A EVB photo

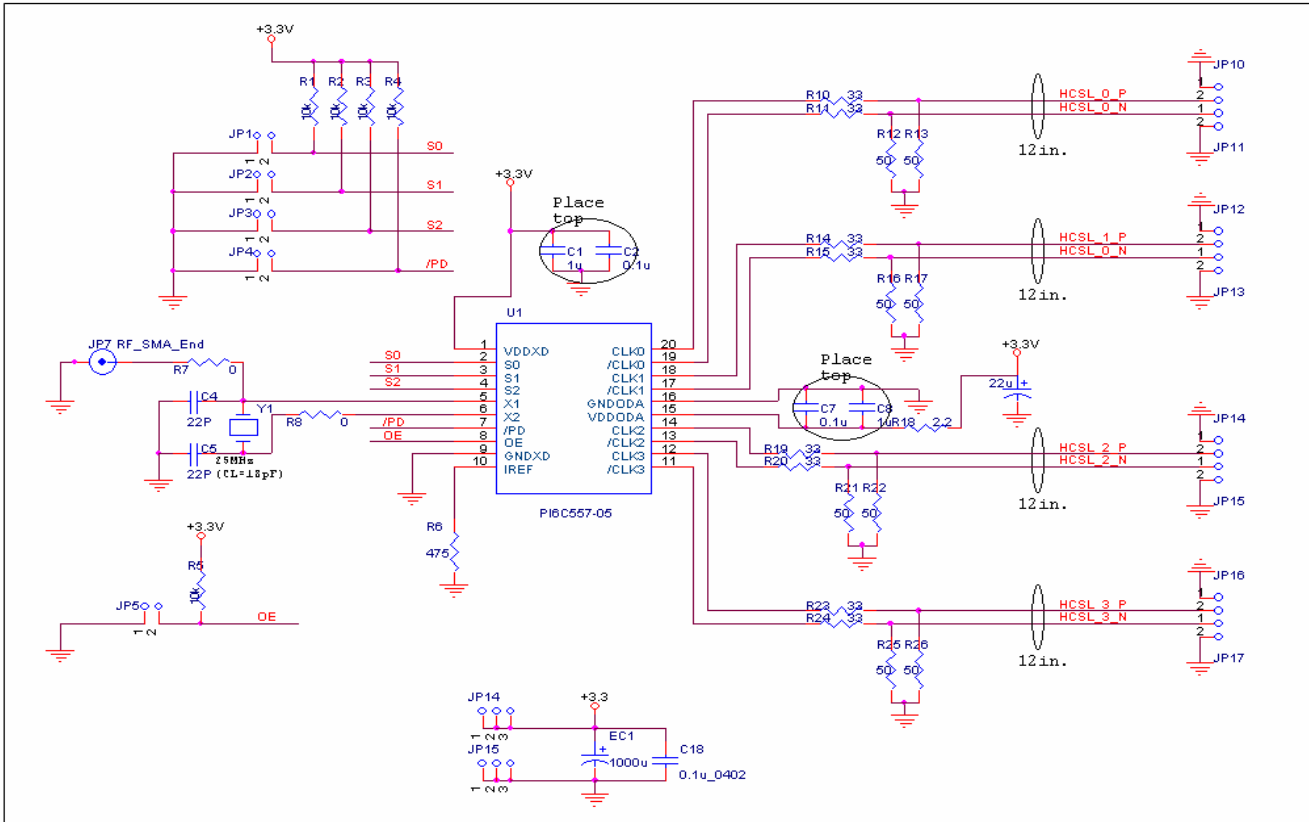


PI6C557-05 EVB photo



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PI6C557-05 EVB Schematic



PI6C557-05 user guide

Note:

- 1) Put Vdd 0.1uF decoupling cap. in comp. side, all GNDs on one solid GND plane
- 2) Leave un-used CLKx and /CLKx open
- 3) For output frequency and SSCG setting, please refer to the datasheet

Table 2: Spread Selection Table

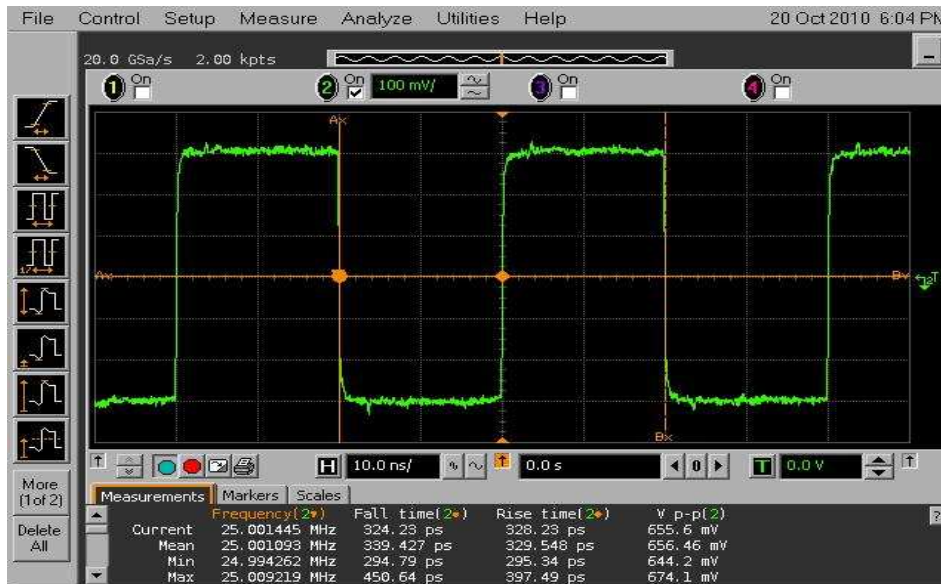
S2	S1	S0	Spread %	Spread Type	Output Frequency
0	0	0	-0.5	Down	100
0	0	1	-1.0	Down	100
0	1	0	-1.5	Down	100
0	1	1	No Spread	Not Applicable	100
1	0	0	-0.5	Down	200
1	0	1	-1.0	Down	200
1	1	0	-1.5	Down	200
1	1	1	No Spread	Not Applicable	200

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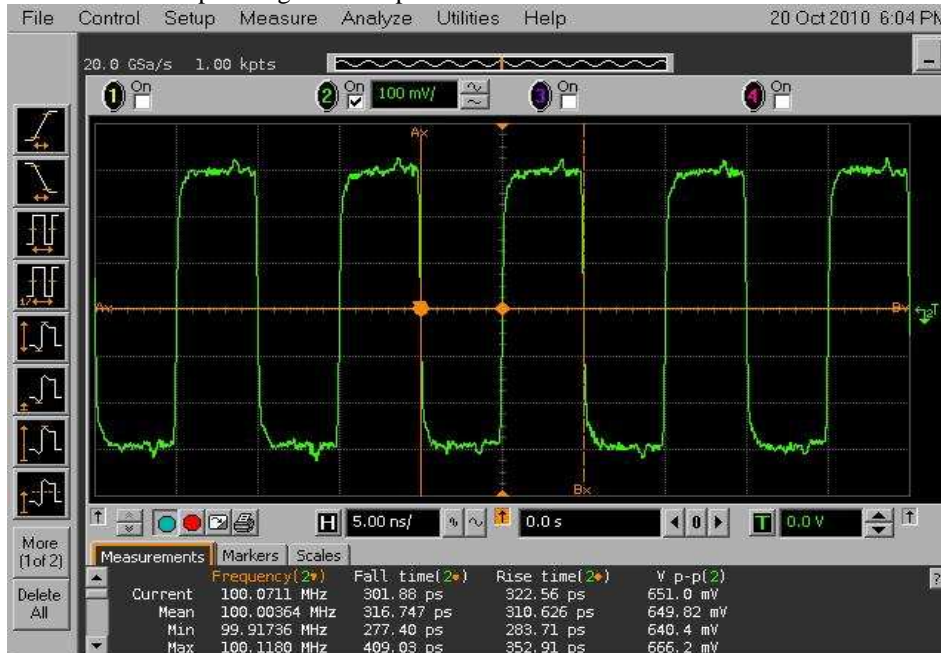
3.1 EVB Test Items and Result

	25M	100M	125M	200M	Unit
Tr	328	322	308	307	ps
Tf	324	301	304	312	ps

i) EVB 25M HCSL diff. pair single end output waveform

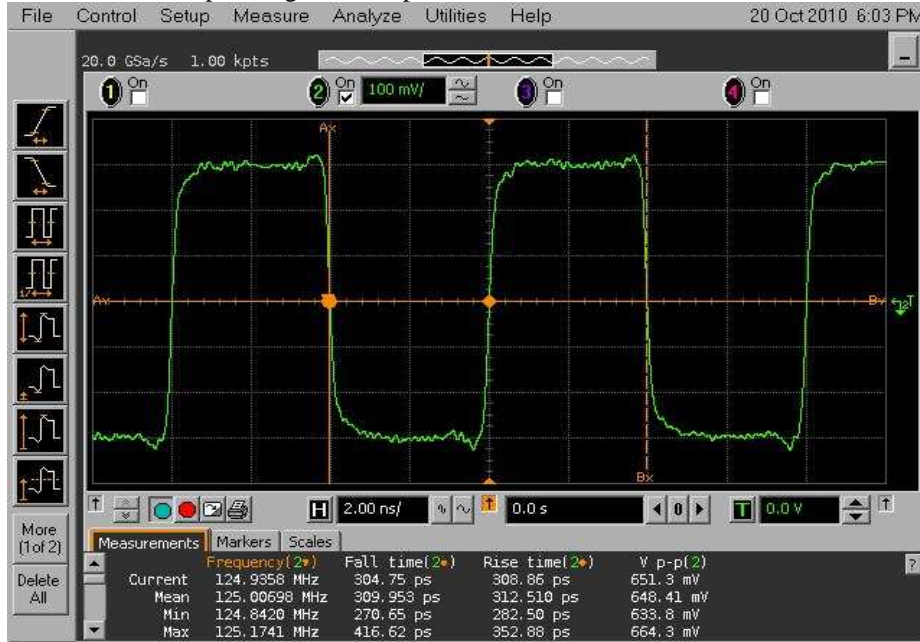


ii) EVB 100M HCSL diff. pair single end output waveform



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iii) EVB 125M HCSL diff. pair single end output waveform



iv) EVB 200M HCSL diff. pair single end output waveform

