

Table of Contents

| | | |
|----------|------------------------------|----------|
| 1 | Introduction | 2 |
| 2 | Overview | 2 |
| 3 | Control pins..... | 3 |
| 4 | Power connection..... | 4 |

1. Introduction

PI3DBS12212A is a 10-12Gbps high speed differential signal switch for high speed applications, such as SAS 3.0, Thunderbolt, PCIe G3, USB3.1 SuperSpeed 10Gbps, etc.

Due to the broad applications, it is not practical to make dedicate evaluation boards for each protocol-applications, but instead, a performance test board is provided as in figure-1.

2. Overview

Figure-1 is the overview of the PI3DBS12212A test board, which is for the tests of:

- Insertion loss
- Return-loss
- Eye comparison with and without PI3DBS12212A

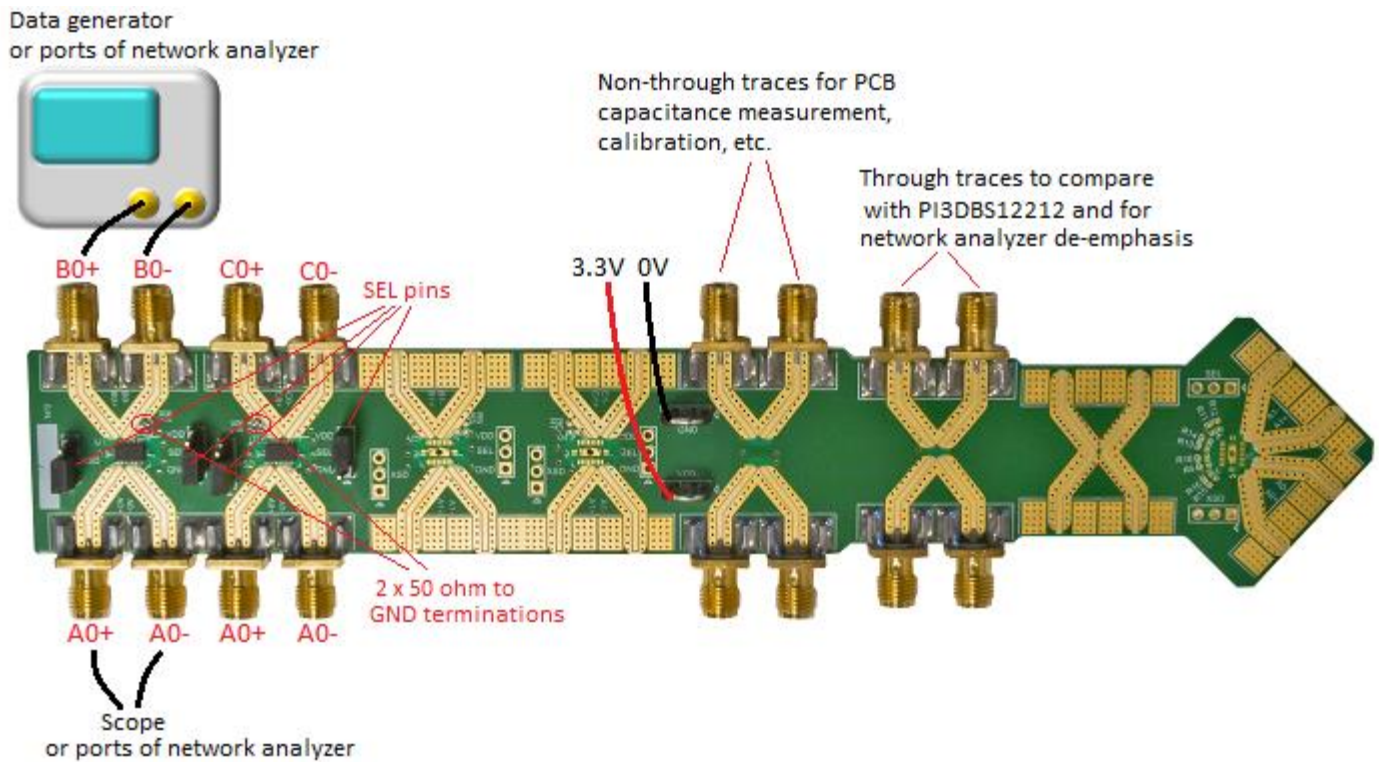


Figure-1, the performance test board of PI3DBS12212A

3. Control pins

Figure-2 shows the control pins of the PI3DBS12212A test board:

- SEL = GND for An to Bn test
- SEL = VDD for An to Cn test

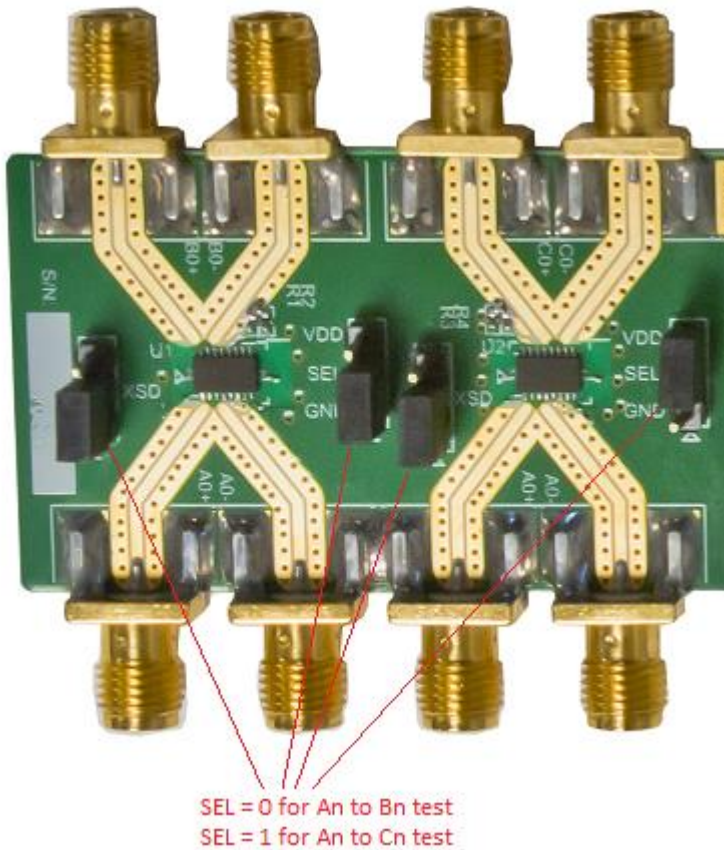


Figure-2, the SEL control pin setting of the PI3DBS12212A test board

4. Power connection

Figure-3 shows the power connection of the PI3DBS12212A test board.

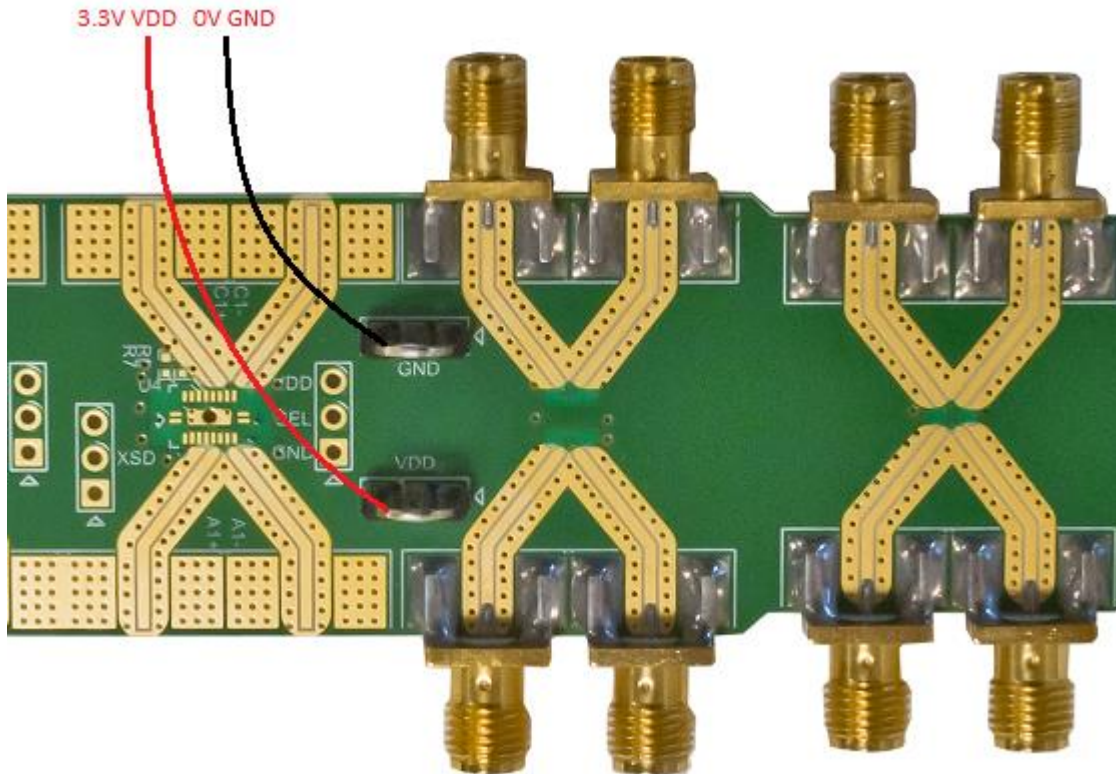


Figure-3, the power connection of the PI3DBS12212A test board

5. Differential insertion loss

Figure-4 is the differential insertion loss of PI3DBS12412A (reference for PI3DBS12212A)



Figure-4, the -1.2493db /5.646Ghz (11.2Gbps) differential insertion loss of PI3DBS12412A (reference for PI3DBS12212A)