

TWR-PROTO Module Errata

Issue:

The following issue has been discovered with the secondary PCI edge connector on the TWR-PROTO Rev. A boards. The Power Sense signal on the secondary side of the edge connector is tied directly to the 3.3V signals on both the primary and secondary edge connectors. The Power Sense Signal is located on Pin B4 on both the Primary and Secondary edge connectors.

The Power Sense signal is also connected to B4 and D4 on the TWR-PROTO Primary and Secondary Connector Signal Access areas. The D4 (Secondary Connector Signal Access) is connected directly to the 3.3V signals.

Impact:

This issue has the potential of connecting the 5V Power Sense signal to the 3.3V power supply if the TWR-PROTO module's secondary edge connector is inserted into a functional TWR-ELEV.

The following cases will cause the issue to manifest and should be avoided:

- 1) The TWR-PROTO module will inserted backwards into a basic Tower system, consisting of at minimum a TWR-PROTO and TWR-ELEV's (Functional and Dummy). In this scenario "backwards" is defined at the TWR-PROTO module's secondary edge connector being inserted into the functional elevator and the primary edge connector being inserted into the dummy elevator.
- 2) The TWR-PROTO module is used with two function elevators. To fully utilize all functions of certain MCU and MPU Tower module two functional elevators can be used to expand the secondary backplane to all Tower modules in the Tower System. The TWR-PROTO Rev A. board should not be used in a Tower System with dual functional elevators.

Solution:

The Power Sense signal on the secondary edge connector should be cut. This will isolate the 3.3V rail from the 5V Power Sense signal. Note that D4 in the Secondary Connector Signal Access will no longer be connected to the Power Sense signal and should be considered a 3.3V signal.

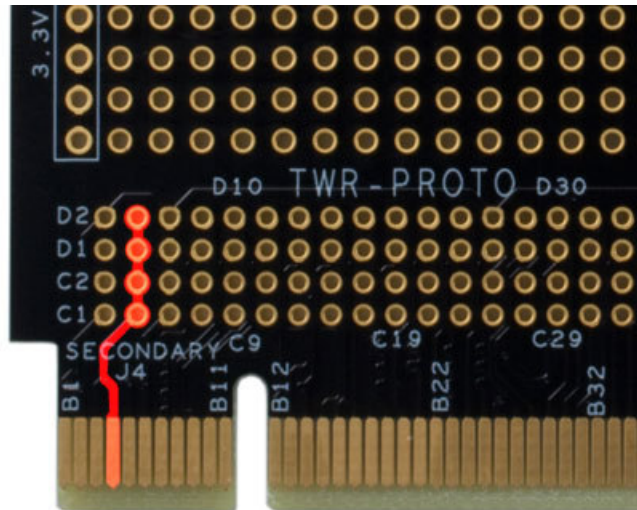


Figure 1 - TWR-PROTO - Impacted Area

Figure 1 shows the impacted area of the TWR-PROTO module. The B4 edge connector pin on the secondary side is connected to B3 edge connector pin and C3, C4, D3, D4 of the Secondary Connector Signal Access.

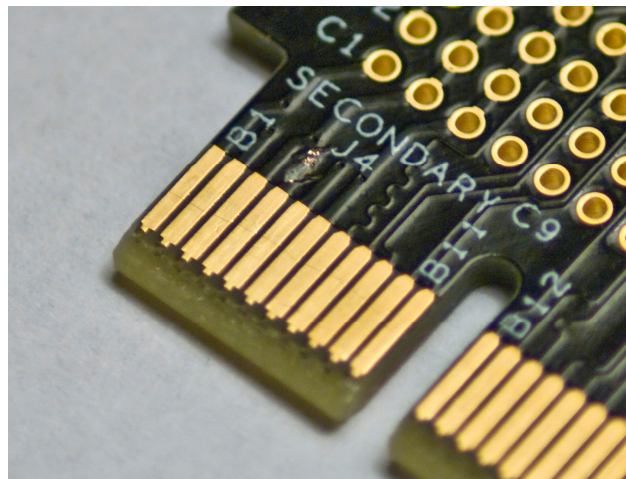


Figure 2 - TWR-PROTO - Modified Board Image

Figure 2 show a TWR-PROTO board that has been correctly modified to isolate the B4 edge connector pin from 3.3V signals.