FG660_87x_QuenchProtCard_Interface
TESTING PROCEDURE STEP BY STEP

Contents

1   Revision

| Version	Date	Name	Comment
1.0	17.02.2021	D. Rodomonti	Startup version

1   Revision

2   Introduction

This document describes step by step the testing procedure for all FG660_87x_QuenchProtCard_Interface.

NOTE!!: Before starting the test, please pay attention to the Electrostatic Discharge Protection (ESD) equipment.

- Be sure that your Device Under Test (DUT) lays always over a dissipative work surface.
- Don't forget to connect yourself to ground through the Wrist Strap device.

Your testing area should look like the picture below.
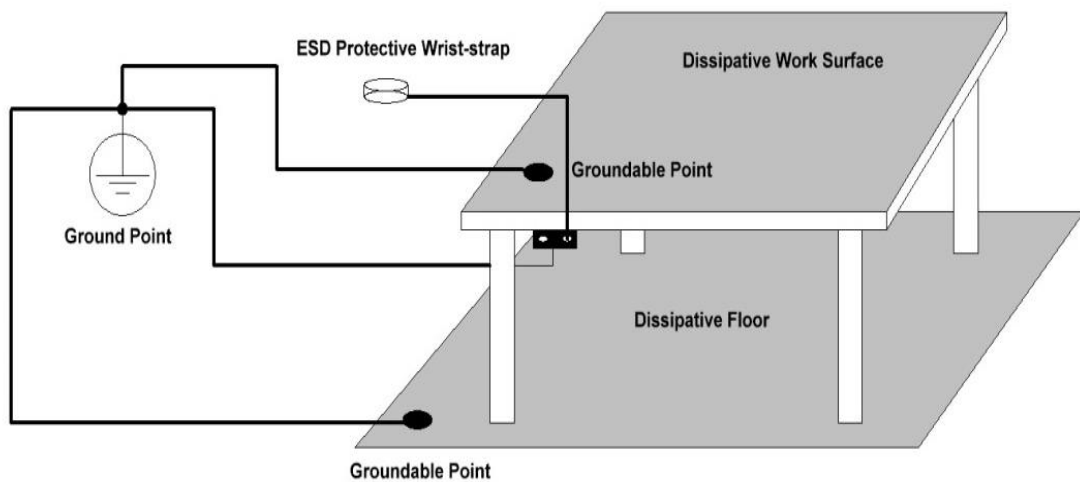
3 Step description

3.1 Supply

a. Connect 24V power supply to X1(in gold) and proceed with a board visual inspection in order to find out some missing components or damaged ones.
b. Check if the LEDs (in red) H2 (24V power supply) and H3 (5V power supply) are on. If they are not, please check the 24V power supply and/or exchange the DC-DC converter D7(in blue).
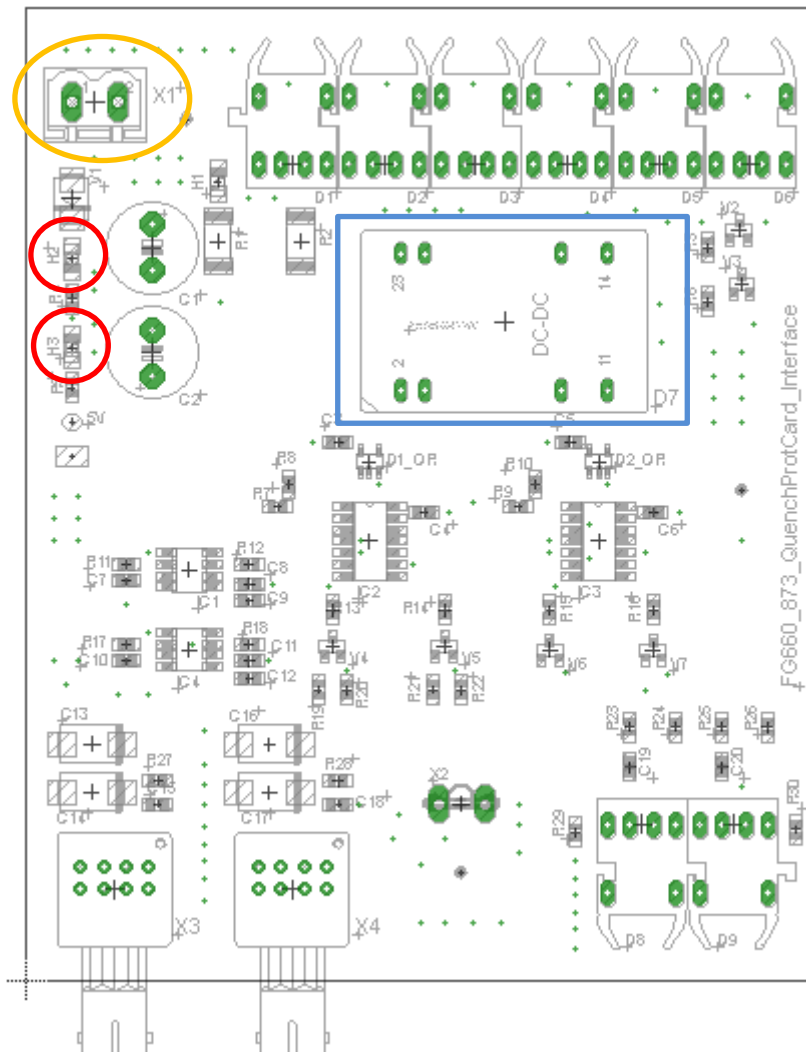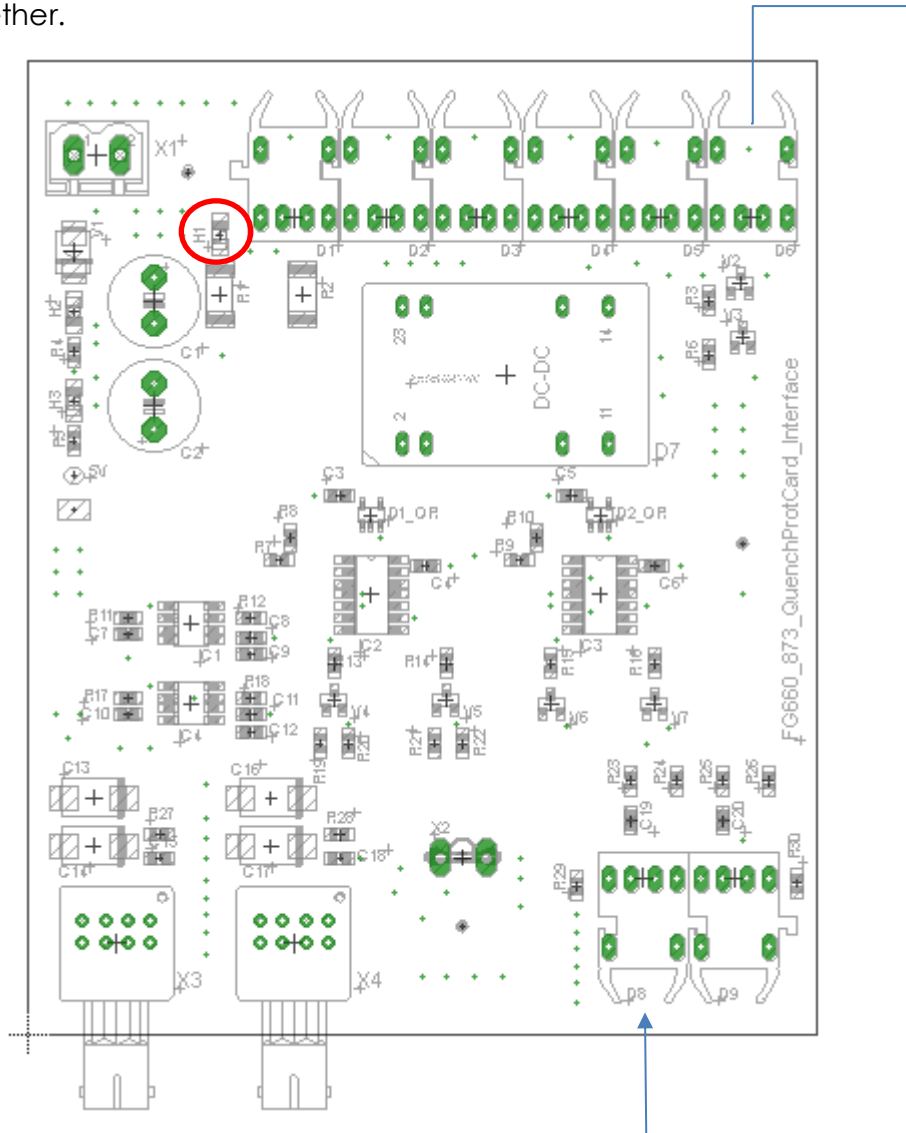
3.2 Test bench connections

a) Loop back, with a plastic optical fiber cable, one of the eight outputs (D1 to D8) to the D8 input.

b) If a powerful led lamp to fire the X3 input is not available, it is possible to use the X3 output of FG660_393_USI_FiberToRJ45Converter board as source signal. This solution will require additional connection (USI to MFU for example), a glass optical fiber cable and no trip-line on the MFU.

3.3 Test sequence

a. Power up the board without any light on X3. All the outputs (D1 to D8) and H1 (in red) have to be on for some seconds before going off all together.

b. Power off and on the board, this time firing the X3 input in one of the two ways explained in the Test bench connections paragraph. In this condition, all the outputs and H1 have to be on permanently.

c. From the test condition above, remove the signals on X3 and check if all the outputs and H1 are going off simultaneously

d. From the test condition of the step b above, disconnect the plastic optical fiber cable on D8. Also in this case the result has to be the one expected on the point c above.

3.4   Print out label

If all the tests above are giving the expected results, print a label as shown in the example below and apply it on the PCB:

3.4   Print out label

FOR ANY DOUBT, EVEN THE SMALLEST ONE, PLEASE CONTACT YOUR SUPERVISOR!