FMC-DIO5chTTLa test procedure summary

Rev. 1.2

Always wear an anti-static wrist band when doing this procedure

1.	Place the bar-code sticker on the FMC-DIO-5chTTLa board under test. The sticker should be placed with the bar-code next to the edge.
2.	Place the FMC-DIO-5chTTLa board under test on the FMC connector of the SPEC board. **Fix the FMC-DIO-5chTTLa board to the SPEC board** using the provided screws.
3.	Connect the four LEMO-00 cables to the three LEMO-00 Y couplers forming a chain (cable-coupler-cable-coupler-cable-coupler-cable). Plug the resulting connected cables in the five LEMO-00 connectors of the FMC-DIO-5chTTLa board.
4.	Plug the SPEC board in the corresponding connector of the PCIe Extender.
5.	Switch the computer on.
6.	After the computer has finished with the booting procedure, a terminal appears automatically in the middle of the screen.
7.	Type "test" then [ENTER] to start the test program.
8.	Type the password: **baraka**
9.	The program asks for the serial number of the board. Use the bar-code reader to read the code on the sticker, then press [ENTER]. If needed, type the second serial number and press [ENTER]. If the second serial number is not needed, just press [ENTER].
10.	The software will automatically start executing tests 00 to 08.
11.	Test 04 requires the user's intervention to visually check the two board LEDs.
12.	When Test 05 asks the user to ensure that the interconnection cables are plugged, just press [ENTER]. When test 05 finishes, it asks the user to unplug these cables, after doing this press [ENTER] again. In some rare cases the user may be asked to externally measure the output activation of the board ports. This procedure can be skipped by typing [s] and [ENTER] when test 05 asks about it.
13.	Wait for the tests to finish.
14.	At the end of the tests the user will be asked if the tests should be repeated. **In case of no errors: Type [n] and then [ENTER]** to quit the test program. **In case of errors: Type [y] and then [ENTER]** to repeat the tests once.
15.	To switch the computer OFF, type [y] and then [ENTER]. To exit the test program and keep the computer ON, type [n] and then [ENTER].

Once the testing has finished all the errors that may have appeared will be listed on the screen. The log files containing more detailed information on each test will be saved in: **/home/user/pts/log_fmcdio5chttla**

Log files with detailed descriptions of the tests will have been automatically generated and archived in a .zip file called:
zip_run_<run id>_<timestamp>_FMC-DIO-5chTTLa_<serial number>.zip

If you need to repeat the tests more than two times for the same board, please report to the responsible of tests at CERN.