**FEB2 power-up procedure**

1. **FEB2 power connector configuration.**

(No Milano mezzanine) configuration:

Set power connector input voltage on pins 2, 3, 4 to 10V. The same voltage is going to be used for LSB. Install H6 remove H5 and H7.

Set power connector input voltage on pins 7, 8, 9 to be in range 6 to 48V.

Install H2, H4. Remove H1, H3.

1. **DC-DC converter output voltages checks.**

In case of not using the regulators for LpGBT12/13 1.2V rail, change R\_76 to 8.66 kOhm

(Ask Nancy in advance to get 8.66-kOhm resistor as an optional resistor). Remove R\_2.

In case of using the LDO for LpGBT12/13 leave R\_76 as is, install R\_2, and remove R\_109.

1.4V and 2.5V DC-DC outputs should be on immediately after power on.

Remove 0-Ohm resistors at the output of DC-DC converters (5 of them for each DC-DC converter).

Before you continue, you may need to execute points 3.) 4.) 5.) .

Disable all DC-DC outputs and measure 0V at each DC-DC output.

Enable all DC-DC outputs and measure nominal voltages at each DC-DC output.

1. **Control LpGBT external configuration pins setting.**

In case that you start with control optics ready and working:

-Make sure that the mode for LpGBT12/13 is [0011] (5.12 GHz, Transceiver).

1. **Control LpGBT internal register configuration.**

A this moment it is enough to send 40MHz clocks to all data LpGBTs. Activate all connected ECLK outputs on LpGBT12 and LpGBT13.

1. **40 MHz clock checks on all data LpGBT inputs**
2. **LDO output voltages check.**

Install all 0-Ohm resistors at the output of DC-DC converters (5 of them for each DC-DC converter).

Enable all DC-DC outputs and measure nominal voltages at each DC-DC output.

Recheck all DC-DC outputs.

Check all LDO outputs.