

FmcAdc100m14b4cha modifications

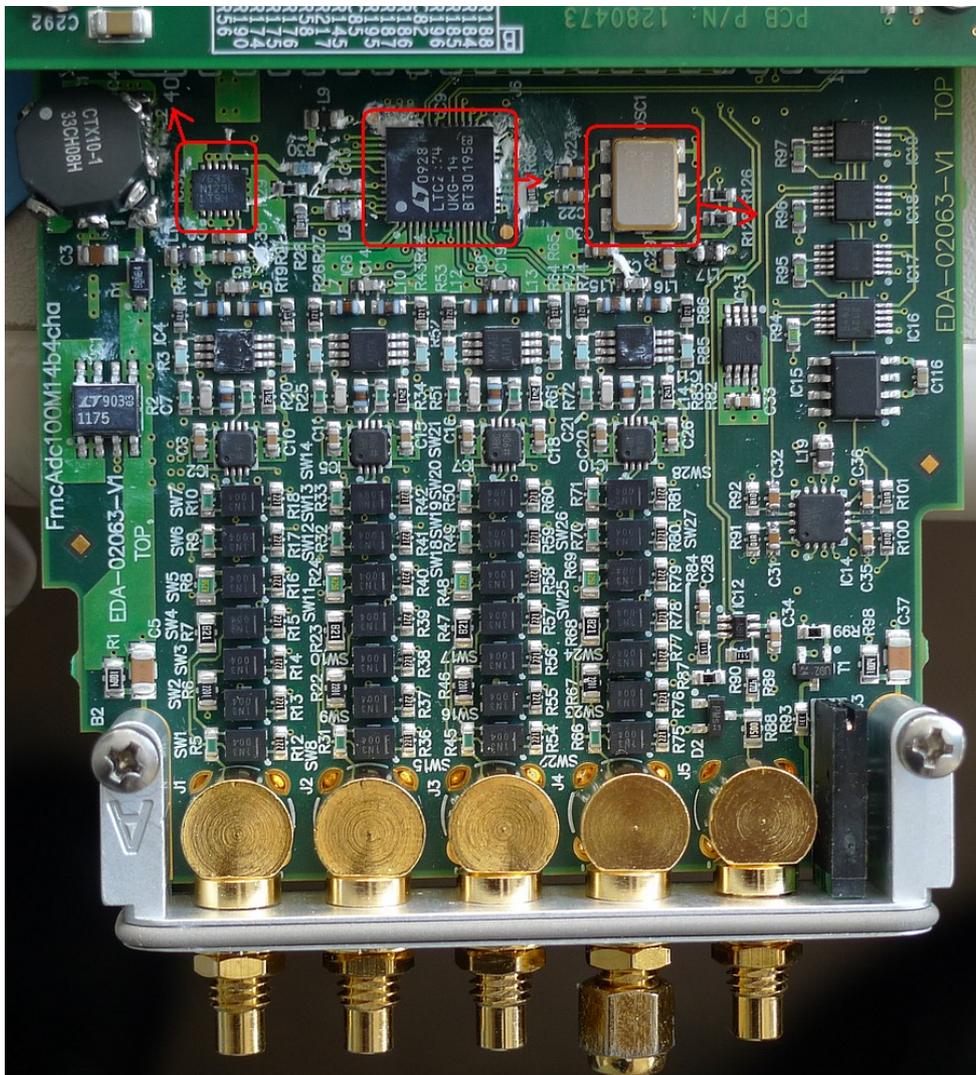
1. Output data lines of the ADC need to be connected in a different way as follows:

DCO+ / DCO-	they stay connected with the CLK0_M2C (as now)
OUT1A OUT1B OUT2A OUT2B OUT3A OUT3B OUT4A OUT4B FR+ / FR- (previously CLK1_M2C)	All the lines MUST be connected to the LA_02 ... LA_16 (it's no matter about sequence)

2. Some changes on the schematic. Different way of connecting front panel to the ground.
3. Resistors in series with LT3080 6 V linear regulator. Two 47 Ohm, 2512 size resistors connected in parallel (to have 23.5 Ohm). Don't forget about the decoupling capacitors at the input of the regulator.
4. LT3080 needs to be moved to less warmed up side of the board:



5. 47 Ohm & 56 Ohm resistors (matching input impedance to 50 Ohm, right behind the SMC connectors) in 2512 package (available in Farnell for ex.)
6. Vishay diode has been changed (same package & parameters).
7. !! Coupled coil has been changed into the CTX10-1 type. Switching regulator has been replaced (LT1931 instead of the LT1931A – now, the switching frequency is lower: 1.2 Mhz, instead of 2.2 MHz) !!
8. The most hot components need to be spread out:



9. MCP9801 should be located in the hottest area, somewhere close to the LT1763 & LT1931 regulators.

10. Resistors being part of the feedback (1 kOhm, previously connecting the RFB pin of the MAX5442 and the ADA4004 output) are now removed.
11. Two capacitors are added (ADC.SchDoc): C5, C37
12. The values of the R113, R116, R121 & R127 have been changed (from 1 kOhm to 100 Ohm).
13. R91, R92, R100 & R101 are changed to 22 Ohm (previously 100 Ohm).
14. C31, C32, C35, C36 are changed to 100 pF (previously 1 nF).
15. Four new 330 kOhm resistors have been added: R94, R95, R96, R97.
16. L3, L6, L11 & L14 are replaced by 1 uH coils in 805 package.
17. L4, L5, L7, L10, L12, L13, L15, L16 had incorrect values (previously 390 R @ 100MHz). They are replaced by 390 nH coils in 603 package.
18. C8, C14, C19, C27 are changed to 22 pF (previously 47 pF).