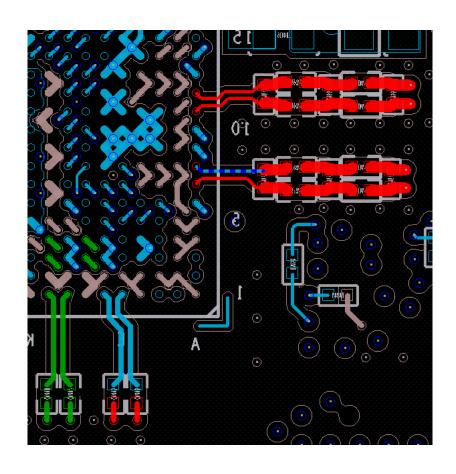
Title: 4T2R Layout Review(AFE79XX)

Date: 08/14/2020

Texas Instruments



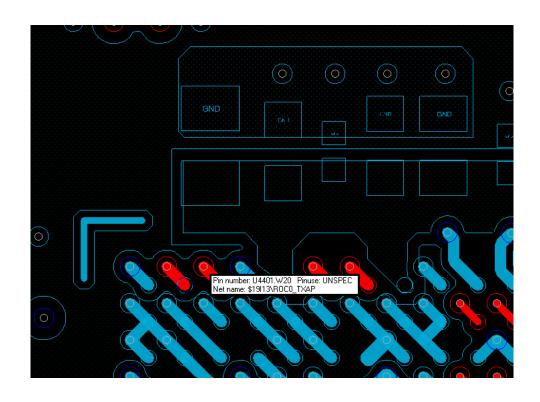
Both RX and Serdes lanes to be routed 100 Ohm differential. The trace widths are different. Ensure that impedance is 100 Ohm Diff.



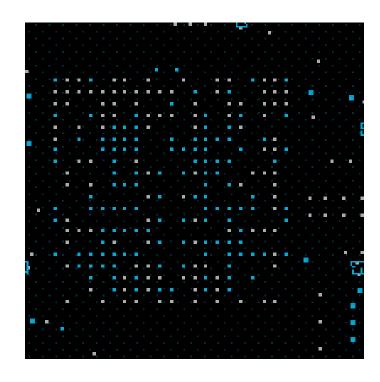
The first matching element for TX is significantly far from the balls. Suggest to move the matching components near the device.

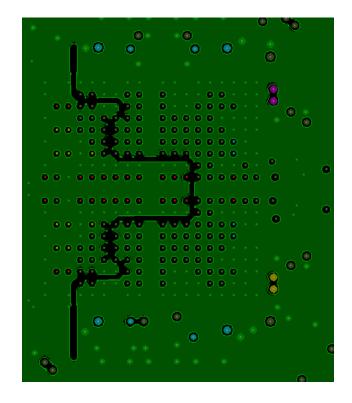


TXA and TXB balls are swapped. TXA is close to reference clock. In 2T mode TXB and TXD are supposed to be used.



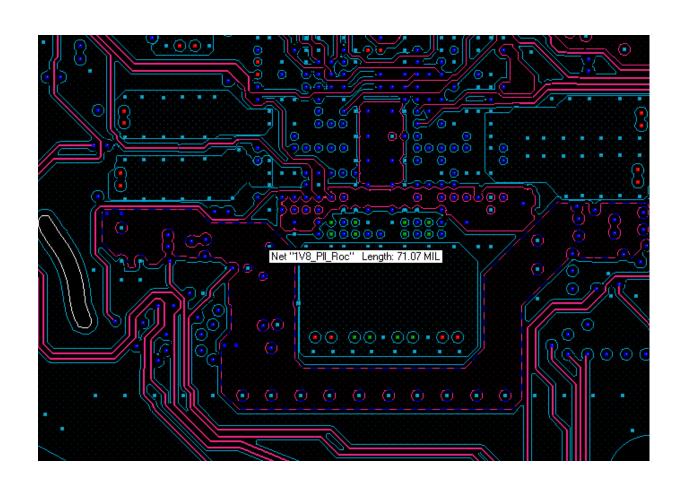
Add ground slotting to reduce the coupling from digital to RF





TI EVM

PLL supply is routed close to serdes lane routing and overlaps serdes balls(supply/gnd) (VDDA/VDDT and VSST)



Supplies VDD1p2, VDD1p8RX, VDD1p8FB and VDD1p8CLK have overlap with digital supply/gnd balls. Avoid overlap of digital power/gnd and analog power/gnd

