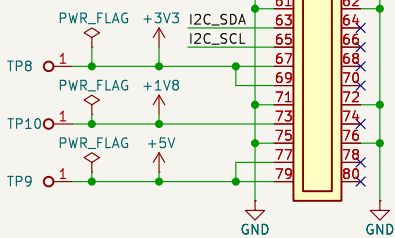


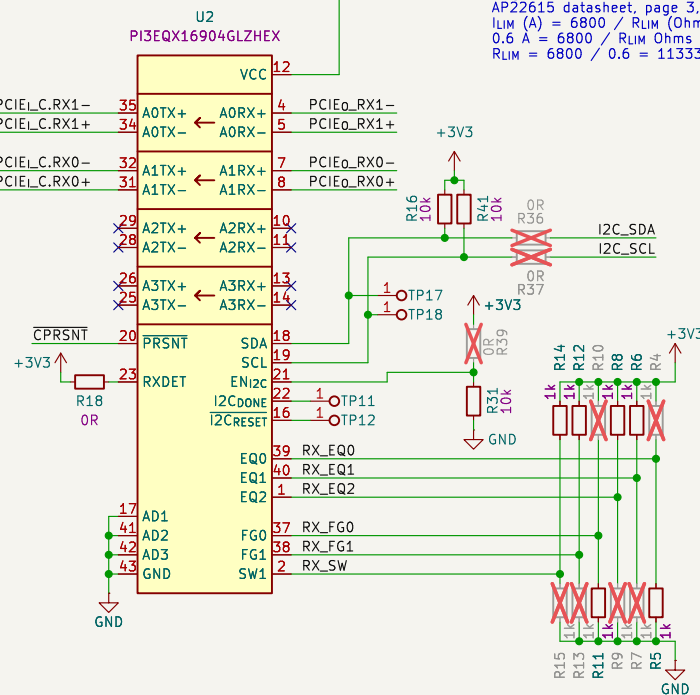
FR4 loss  $\approx$  7.9dB/m/GHz;  
31.6 dB/m @ 4GHz  
JOB avg PCIe2 TX trace length  $\approx$  51.0 mm  
JOB connector to redriver trace length  $\approx$  60.7 mm  
for 111.7 mm loss = 3.53 dB  
EQ[2:0] = 2'b010 gives 3.9 dB EQ @ 4 GHz  
FG[1:0] = 2'b10 for -0.5 dB (aiming for 0dB)  
SW1 = 1 for 1200 mVp-p swing



Logo N1 oshw\_logo  
Logo N2 antmicro\_logo  
Logo N3 oshw\_logo  
Logo N4 antmicro\_logo

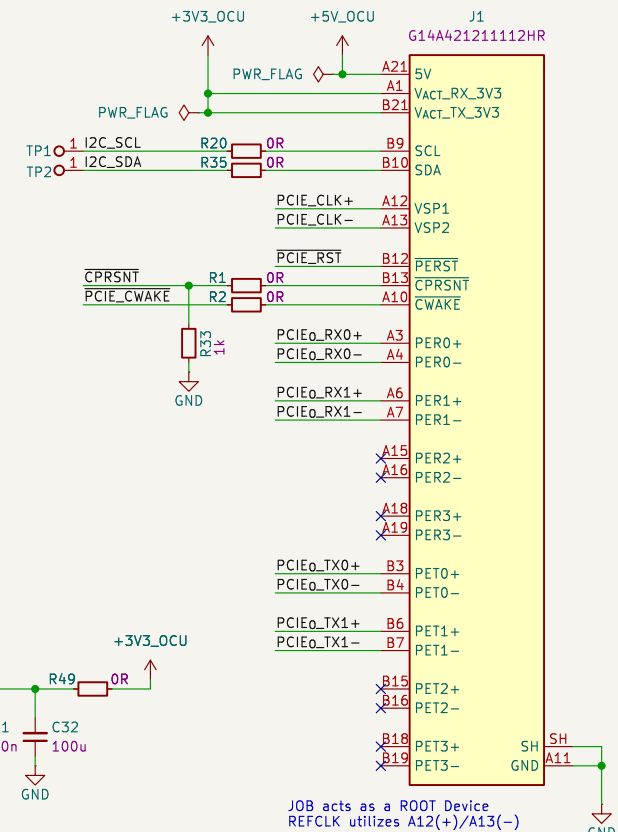


FR4 loss  $\approx$  7.9dB/m/GHz;  
31.6 dB/m @ 4GHz  
OCuLink 1m cable loss  $\approx$  6.0 dB @ 4.5 GHz  
OCuLink connector to redriver trace length  $\approx$  47.5 mm  
for 47.5 mm loss = 1.5 dB  
6.0 dB + 1.5 dB = 7.5 dB  
EQ[2:0] = 6'b110 gives 7.8 dB EQ @ 4 GHz  
FG[1:0] = 2'b10 for -0.5 dB (aiming for 0dB)  
SW1 = 1 for 1200 mVp-p swing



ISET resistor value:  
target current limit = 1.2 A (2x peak OCuLink pin current)  
AP22615 datasheet, page 3, ISET pin description  
 $I_{lim}(A) = 6800 / R_{lim}(\text{Ohms})$   
 $1.2 A = 6800 / R_{lim}(\text{Ohms})$   
 $R_{lim} = 6800 / 1.2 = 5666 \text{ Ohms} \approx 5.6 \text{ kOhms}$   
real current limit  $\approx$  1.214 A

ISET resistor value:  
target current limit = 0.6 A (peak OCuLink pin current)  
AP22615 datasheet, page 3, ISET pin description  
 $I_{lim}(A) = 6800 / R_{lim}(\text{Ohms})$   
 $0.6 A = 6800 / R_{lim}(\text{Ohms})$   
 $R_{lim} = 6800 / 0.6 = 11333 \text{ Ohms} \approx 11.3 \text{ kOhms}$



JOB acts as a ROOT Device  
REFCLK utilizes A12(+)/A13(-)

