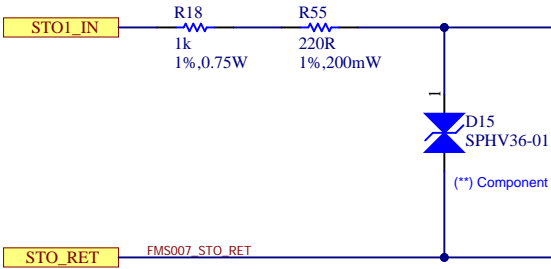


CHANNEL A (Acts on low side power stage transistors)

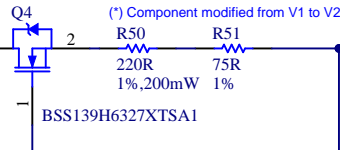
Input Surge and EFT protection

In case of failure of transistor in short these resistors limit current

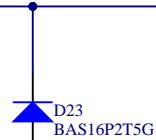


Current limiter

Based on depletion MOSFET  
Imax = 4.5 mA

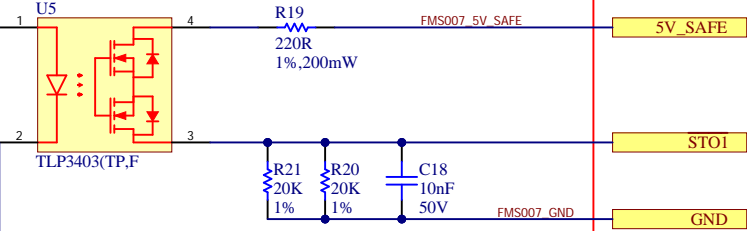


Reverse polarity protection



SSR isolator

Max heat dissipation 100 mW

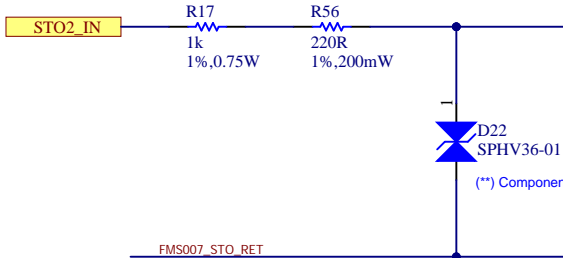


This 5V must be fully protected against overvotlages, overcurrent and limit power to < 100 mW

CHANNEL B (Acts on high side power stage transistors)

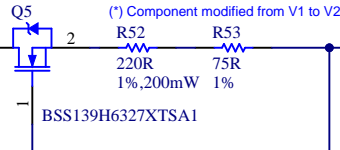
Input Surge and EFT protection

In case of failure of transistor in short these resistors limit current

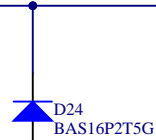


Current limiter

Based on depletion MOSFET  
Imax = 4.5 mA

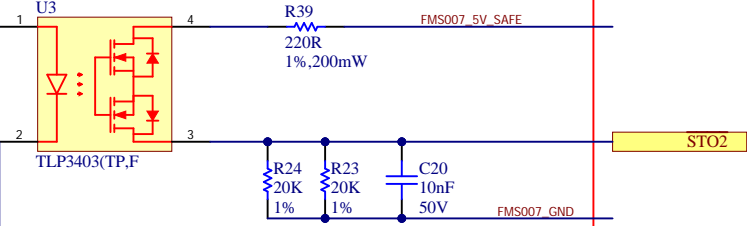


Reverse polarity protection



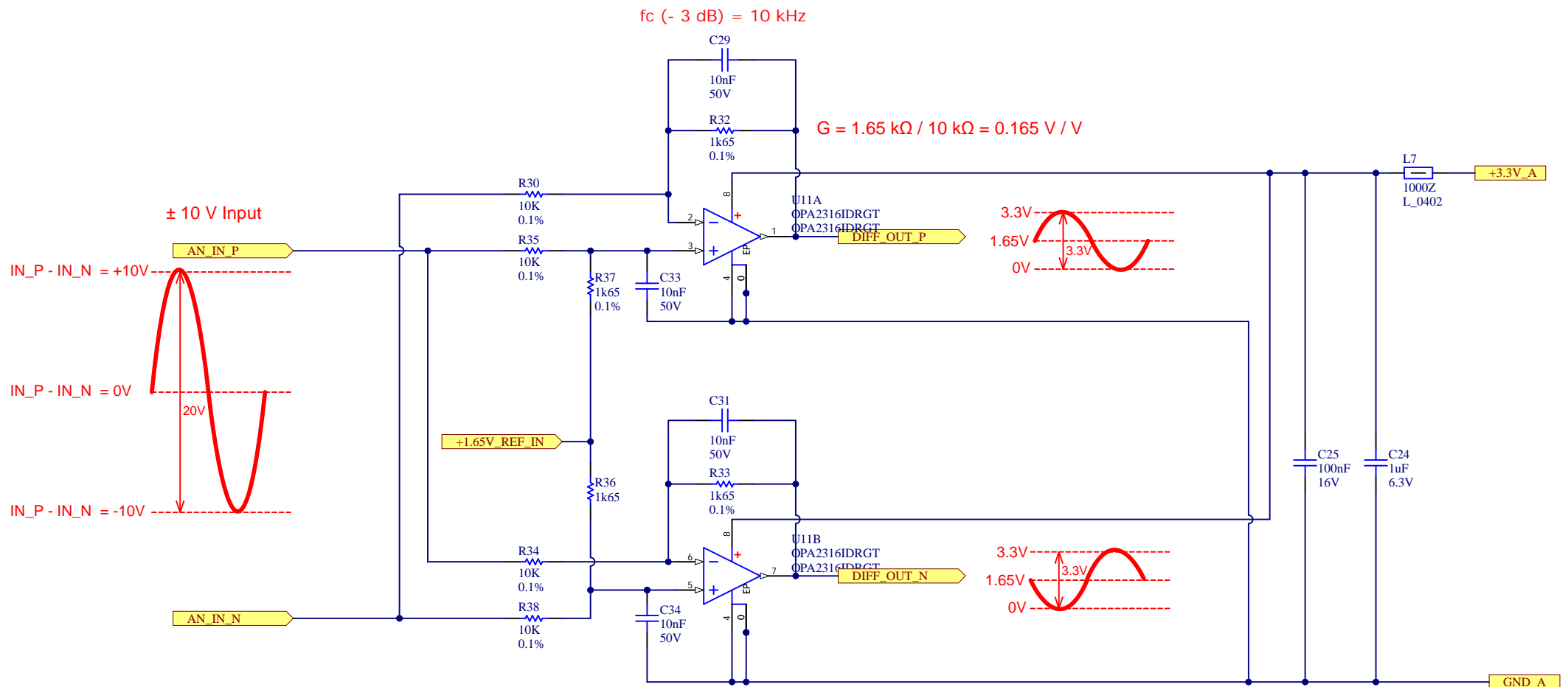
SSR isolator

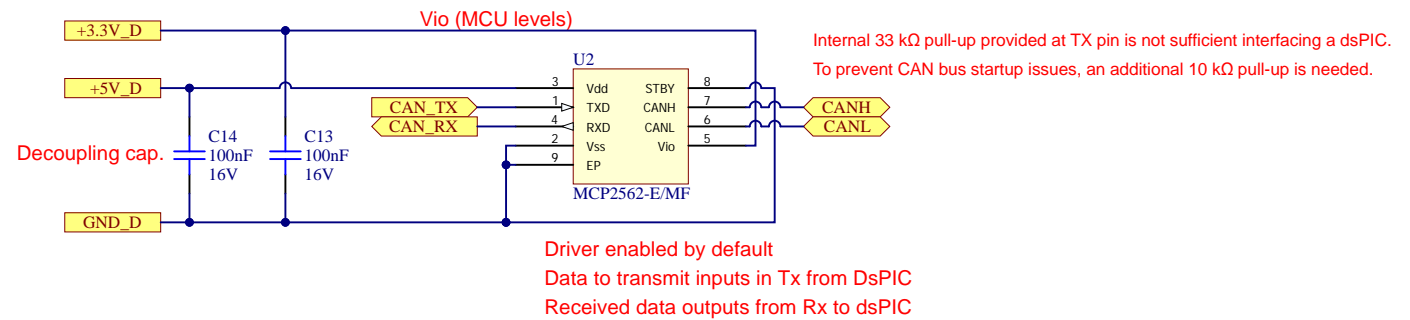
Max heat dissipation 100 mW



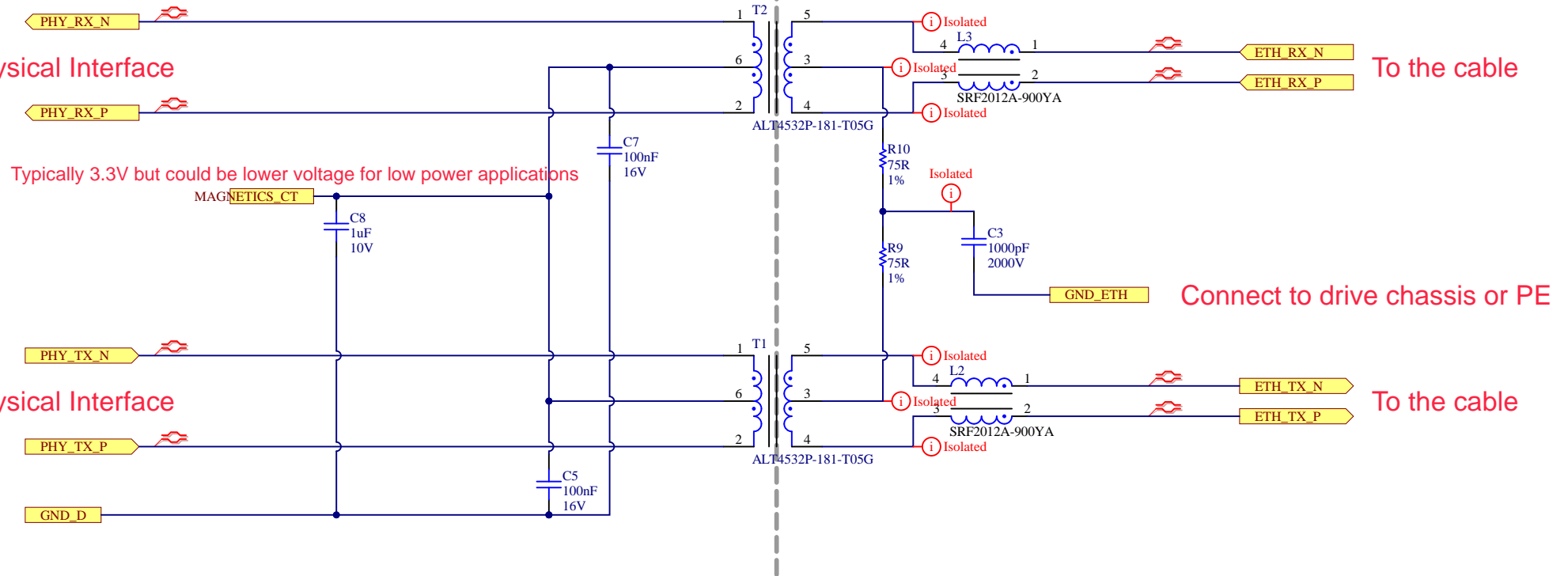
REVISION HISTORY:

V1 - 11/03/2019 - Initial Release Version  
V2 - 29/01/2020 - Current limiter resistors (\*) changed from 120Ω and 120Ω to 220Ω,200mW and 75Ω; Input TVS (\*\*) changed from SPHV24-01 to SPHV36-01



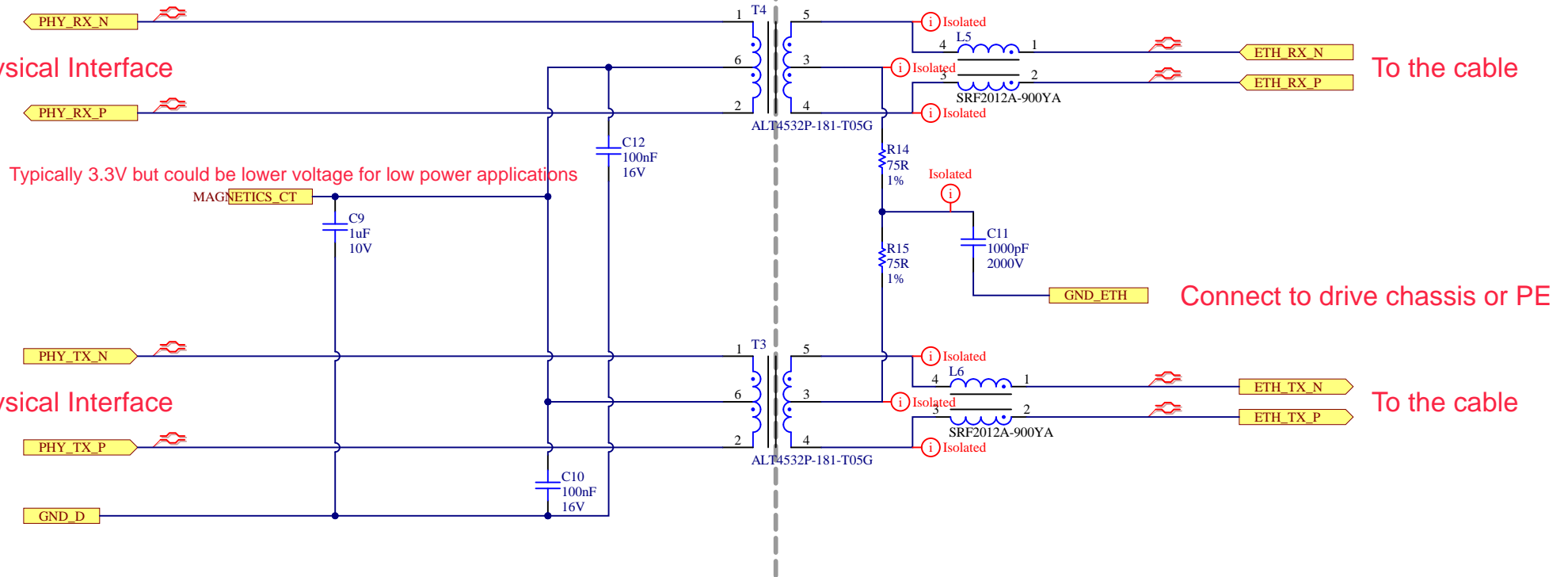


To Physical Interface



To Physical Interface

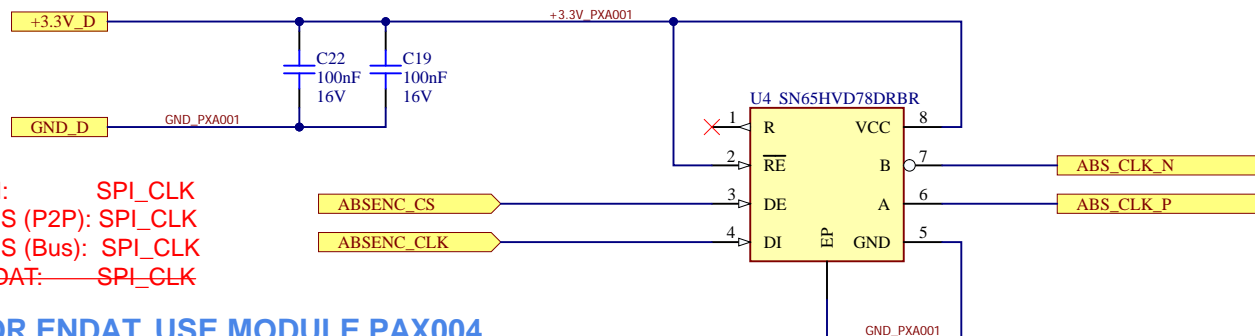
To Physical Interface



To Physical Interface



3.3V NOT 5V

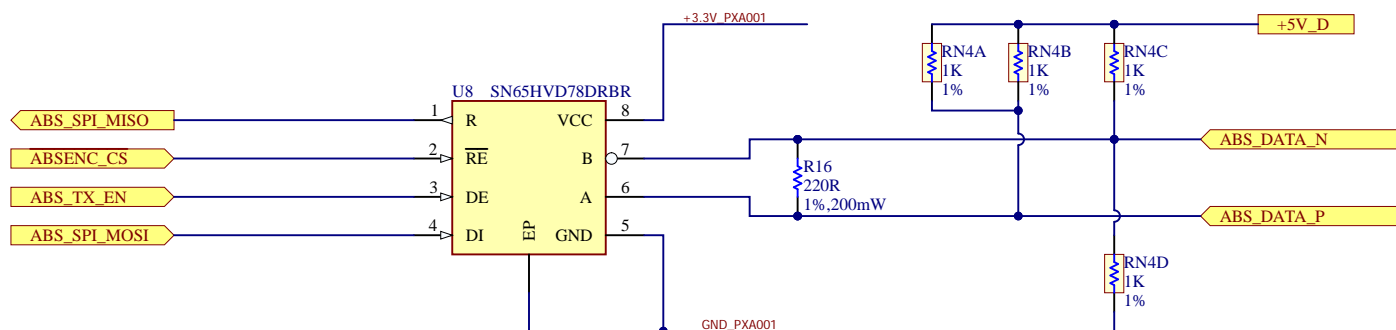


SSI: SPI\_CLK  
BiSS (P2P): SPI\_CLK  
BiSS (Bus): SPI\_CLK  
~~EnDAT: SPI\_CLK~~

SSI: Clock (Out)  
BiSS (P2P): MA (Out)  
BiSS (Bus): MA (Out)  
~~EnDAT: Clock (Out)~~

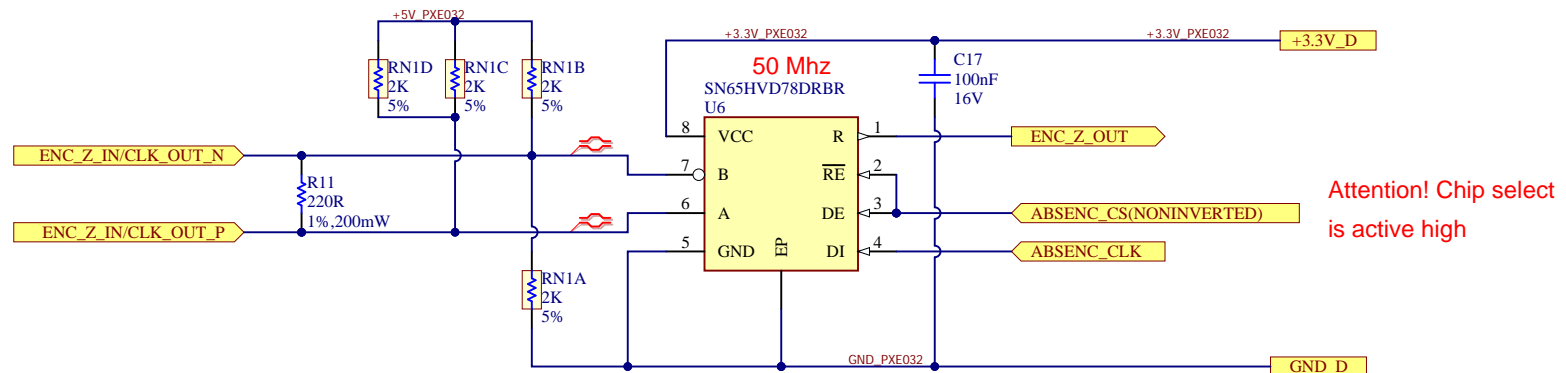
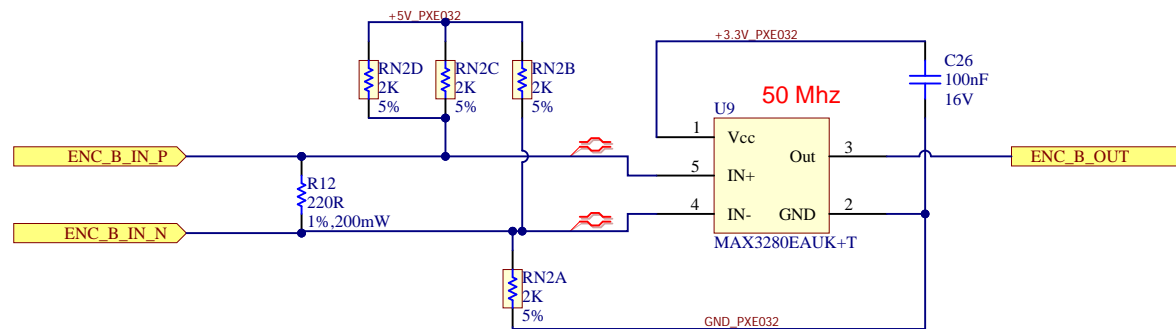
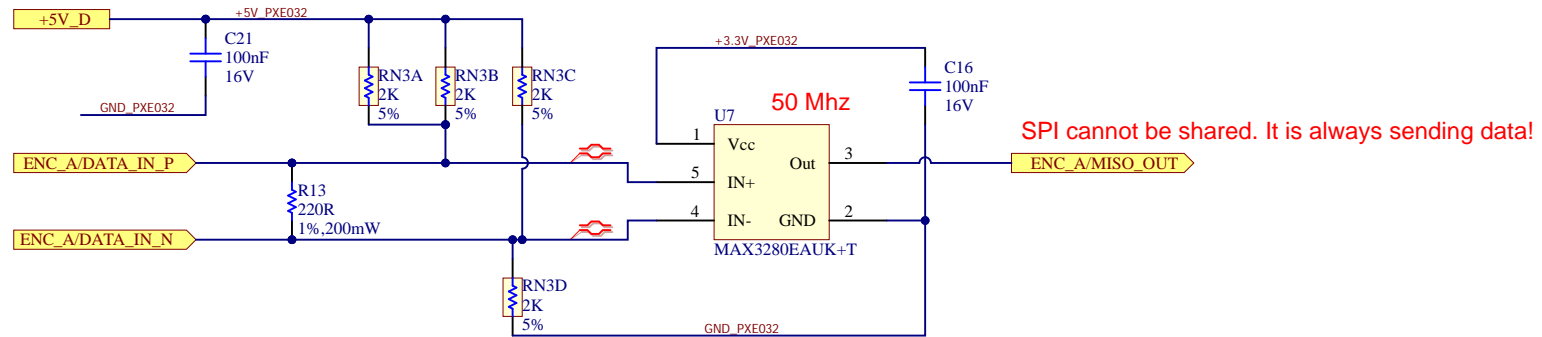
**FOR ENDAT, USE MODULE PAX004**

TVS with high capacitance at the output (<100 pF) are acceptable and provide decoupling



Quadrature: ENC\_B  
SSI: SPI\_SDI  
BiSS (P2P): SPI\_SDI  
BiSS (Bus): SPI\_SDI  
EnDAT: ~~SPI\_SDI / SDO~~

SSI: Data (In)  
BiSS (P2P): SL (In)  
BiSS (Bus): SL (In)  
~~EnDAT: Data (In/Out)~~





# REVISION HISTORY:

V1 - 11/03/2019 - Initial Release Version

