

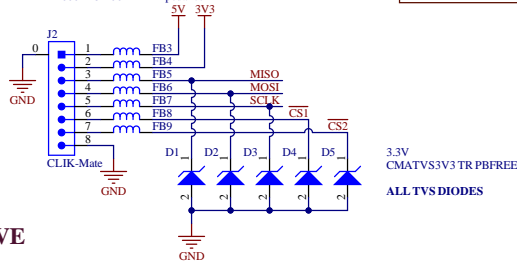
# SPI Low Voltage Differential Signaling (LVDS) Breakout Board

TO ODRIVE

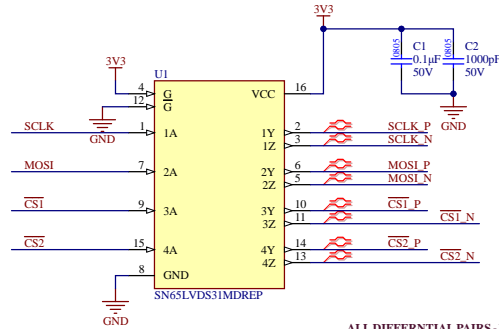
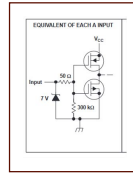
QDrive

ALL FERRITE BEADS

MMZ100SS601CT000  
600Ω @ 100 MHz Impedance



1A - 4A have internal pull-down resistors:

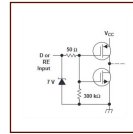


ALL DIFFERENTIAL PAIRS - DIFFERENTIAL IMPEDANCE OF 100Ω

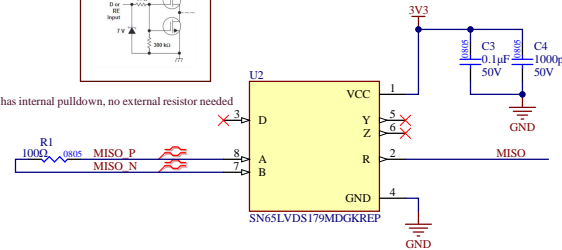
DIFFERENTIAL BUS LINES BUILT IN 12kV ESD PROTECTION

3.3V  
CMATVS3V3 TR PBFREE

ALL TVS DIODES



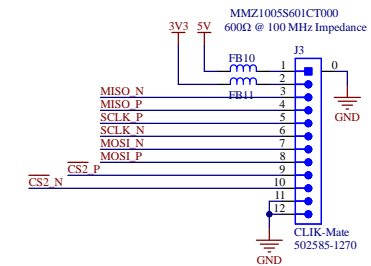
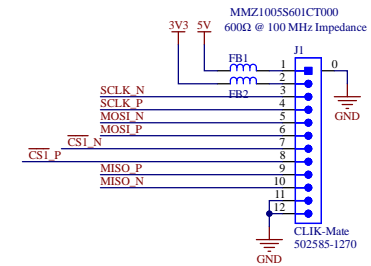
D has internal pulldown, no external resistor needed



TO SPI ENCODERS

[Avago AEAT-6010/6012 Magnetic Encoder](#)

[RLS Orbis BR10/BR20](#)



## References

[Low Voltage Differential Signaling \(LVDS\) Application Notes](#)

[Transmitting SPI signals over LVDS Interface](#)

		University of Waterloo Robotics Team 200 University Ave W Waterloo, Ontario, Canada N2L 3G1	REV 1.0
PROJECT SPI LVDS Master.PrjPcb, [No Variations]			
DOCUMENT SPI LVDS Master.SchDoc		MODIFIED 2022-01-16	
ENGINEER JGao	REVIEWER	SHEET 1 OF 1	

