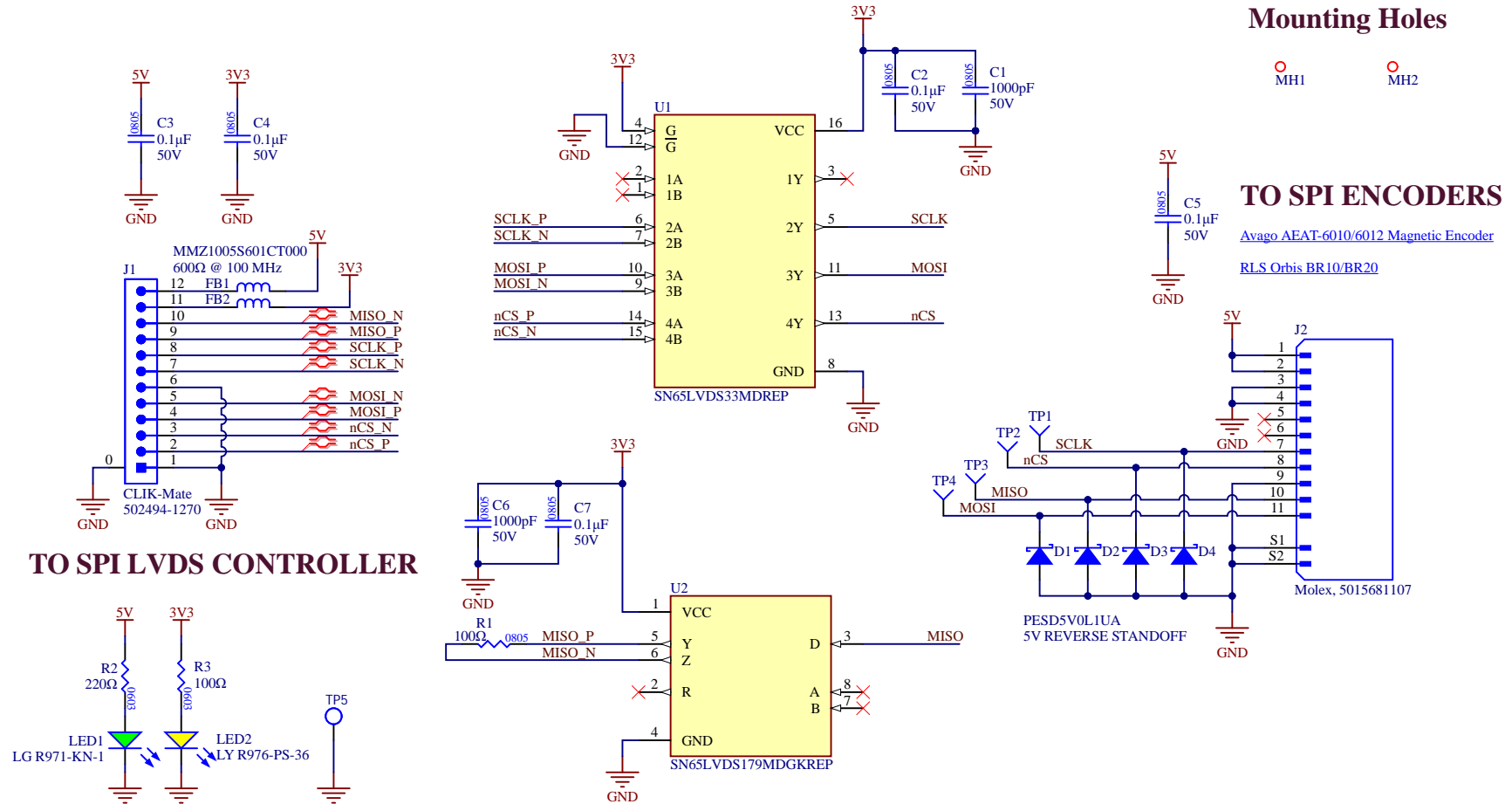


SPI LVDS Peripheral Board



ALL DIFFERENTIAL PAIRS - DIFFERENTIAL IMPEDANCE OF 100Ω

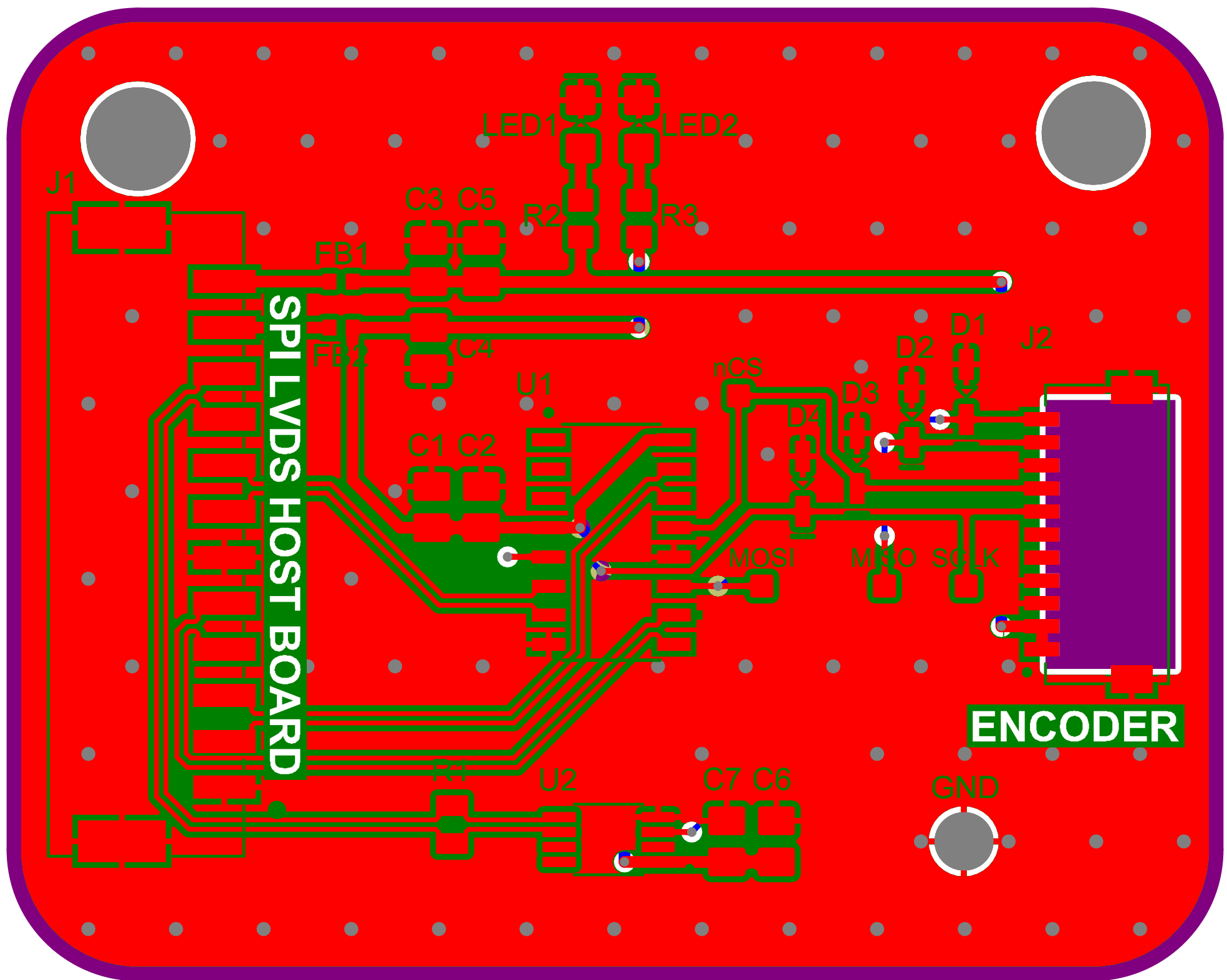
DIFFERENTIAL BUS LINES BUILT IN 12kV ESD PROTECTION

References

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

[Transmitting SPI signals over LVDS Interface](#)

UW ROBOTICS TEAM		University of Waterloo Robotics Team 200 University Ave W Waterloo, Ontario, Canada N2L 3G1	REV
PROJECT		SPI LVDS Peripheral.PrjPcb, [No Variations]	
DOCUMENT		SPI LVDS Peripheral.SchDoc	
ENGINEER		REVIEWER	MODIFIED
JGao		*	2022-05-04
		SHEET	1 OF 1



Comment	Description	Designator	Footprint	LibRef	Quantity
CAP_1000pF_50V_0805	CAP CER 1000pF 50V X7R 0805	C1, C6	CAP2012	CAP_1000pF_50V_0805	2
CAP_0.1uF_50V_0805	CAP CER 0.1uF 50V X7R 0805	C2, C3, C4, C5, C7	CAP2012	CAP_0.1uF_50V_0805	5
TVS_DIODE_UNIDIR_5V	TVS DIODE 5VWM 12VC SOD-323-2	D1, D2, D3, D4	SOD-323	TVS_DIODE_UNIDIR_5V	4
FERRITE_BEAD_6000HM_0402	FIXED IND 1uH 3.8A 33 MOHM SMD	FB1, FB2	RES0402	FERRITE_BEAD_6000HM_0402	2
CON_12M_SM_RA_2mm	2.00mm Pitch CLIK-Mate Wire-to-Board PCB Receptacle, Single Row, Right-Angle, 12 Circuits	J1	MOLEX-5024941270	CON_12M_SM_RA_2mm	1
CON_12M_SM_RA	CONN HEADER SMD RIGHT ANGLE 1MM PITCH	J2	MOLEX-5015681107	CON_11M_SM_RA	1
LED_GREEN	LED GREEN DIFFUSED 0805 SMD	LED1	LED_0805_GREEN	LED_GREEN	1
LED_YELLOW	LED YELLOW DIFFUSED 0805 SMD	LED2	LED_0805_YELLOW	LED_YELLOW	1
RES_100Ω_0805_1%	RES 100 OHM 1% 1/8W 0805	R1	RES0805	RES_100Ω_0805_1%	1
RES_220Ω_0603_5%	RES 220 OHM 5% 1/10W 0603	R2	RES0603	RES_220Ω_0603_5%	1
RES_100Ω_0603_1%	RES 100 OHM 1% 1/10W 0603	R3	RES0603	RES_100Ω_0603_1%	1
TESTPOINT_LOOP	TESTPOINT THRUHOLE	TP5	TESTPOINT_LOOP	TESTPOINT_LOOP	1
SN65LVDS33MDREP	IC RECEIVER 0/4 16SOIC	U1	SOIC127P600X175-16N	SN65LVDS33MDREP	1
SN65LVDS179MDGKREP	Enhanced Product High-Speed Differential Line Drivers And Receivers 8-VSSOP -55 to 125	U2	SOP65P490X110-8N	SN65LVDS179MDGKREP	1