

# /Users/jop/git/daydream/hw/vektor.sch

2019 July 11, Thursday 22:21:55

Eeschema (5.1.2-1)-1

**Component Count:259**

Designator	Qty	Name	Description	Manufacturer	Part Number
C1, C2, C3, C5, C6, C9, C10, C11, C12, C17, C19, C20, C21, C23, C24, C27, C28, C29, C30, C35, C37, C38, C39, C41, C42, C45, C46, C47, C48, C53, C57, C58, C60, C62, C63, C64, C67, C68, C69, C70, C74, C78, C80, C82, C83	45	C0603_100n_50Vdc_X7R	Ceramic Capacitor 0.10uF, 50Vdc, ±10%, X7R	Murata	GRM188R71H104KA93
C4, C7, C13, C22, C25, C31, C40, C43, C49	9	C0805_1u_50Vdc_X7R	Ceramic Capacitor 1.0uF, 50Vdc, ±10%, X7R	Murata	GRM21BR71H105KA12
C8, C14, C26, C32, C44, C50	6	C0805_10u_35Vdc_X5R	Ceramic Capacitor 10uF, 35Vdc, ±10%, X5R	Murata	GRM21BR6YA106KE43
C15, C33, C51, C85	4	PCAP_120u_2	120μF, ±20%, 35V, 24 mOhm, 3000 Hrs @ 105°C, -55°C ~ 105°C, 3.7A	Nichicon	PCV1V121MCL2GS
C16, C18, C34, C36, C52, C54	6	C0603_1n1_50Vdc_X7R	Ceramic Capacitor 1100pF, 50Vdc, ±5%, X7R	Murata	GRM188R71H112JA01
C55, C56, C66, C79, C103, C104, C105, C106, C108, C109, C110, C112	12	C0805_10u_6.3Vdc_X7R	Ceramic Capacitor 10uF, 6.3Vdc, ±10%, X7R	Murata	GRM21BR70J106KE76
C59	1	C0603_10n_50Vdc_X7R	Ceramic Capacitor 10000pF, 50Vdc, ±10%, X7R	Murata	GRM188R71H103KA01
C61, C65, C71, C76, C81, C86, C87, C88, C89, C90, C91, C92, C93, C94, C98, C99, C100, C101	18	C0603_1u_16Vdc_X7R	Ceramic Capacitor 1.0uF, 16Vdc, ±10%, X7R	Murata	GRM188R71C105KE15
C72	1	C0603_5n6_25Vdc_C0G	Ceramic Capacitor 5600pF, 25Vdc, ±2%, C0G	Murata	GRM1885C1E562GA01
C73, C77	2	C0603_22p_50Vdc_C0G_2	Ceramic Capacitor 22pF, 50Vdc, ±2%, C0G	Murata	GRM1885C1H220GA01
C75	1	C0603_150p_50Vdc_C0G_2	Ceramic Capacitor 150pF, 50Vdc, ±2%, C0G	Murata	GRM1885C1H151GA01

			50Vdc, ±2%, C0G		
C84, C95	2	C0805_10u_25Vdc_X7R	Ceramic Capacitor 10uF, 25Vdc, ±10%, X7R	Murata	GRM21BZ71E106KE15
C96	1	C0603_47p_50Vdc_C0G_2	Ceramic Capacitor 47pF, 50Vdc, ±2%, C0G	Murata	GRM1885C1H470GA01
C97	1	C0805_100n_25Vdc_X7R	Ceramic Capacitor 0.10uF, 25Vdc, ±10%, X7R	Murata	GRM219R71E104KA01
C102	1	C0603_18p_50Vdc_C0G_2	Ceramic Capacitor 18pF, 50Vdc, ±2%, C0G	Murata	GRM1885C1H180GA01
C107, C111	2	C0603_470p_50Vdc_C0G_2	Ceramic Capacitor 470pF, 50Vdc, ±2%, C0G	Murata	GRM1885C1H471GA01
F1	1	1206SFS200F_63-2	Fuse	Littlefuse	1206SFS200F/63-2
FB1, FB2, FB3, FB4, FB5, FB6, FB7, FB8, FB9, FB10, FB11, FB12, FB13, FB14, FB15, FB16	16	BL0603_BLM18EG121SN1D	FILTER CHIP 120 OHM 2A 0603,30473,0DCR: 40 mOhm Max	Murata	BLM18EG121SN1D
FB17, FB18, FB19, FB20	4	BL0603_BLM18AG601SH1D	FERRITE CHIP 600 OHM 500MA 0603,10732,0DCR: 380 mOhm Max	Murata	BLM18AG601SH1D
J1	1	Header_2.54mm_10p		Würth	61201021621
J2	1	0430450818		Molex	0430450818
L1	1	IHLP2020_4u7_31	4.7μH, ±20%, I=2.8A, I <sub>sat</sub> =5A, DCR=116.6 mOhm Max, Self resonance: 28MHz, -55°C ~ 125°C, 0.216 L x 0.204 W (5.49mm x 5.18mm)	Vishay	IHLP2020BZER4R7M01
M1, M2, M3, M4, M5	5	MHNP_2.5mm			
Q1	1	PHPT61002PYCLHX		Nexperia	PHPT61002PYCLHX
Q2	1	PUMH13		Nexperia	PUMH13,115
Q3	1	PUMD13		NXP	PUMD13,115
R1, R9, R10, R11, R16, R18, R20	7	R0603_10k	10k, ±1%, 0.1W	Vishay	CRCW060310K0FKEA
R4, R5	2	R0603_1R	1, ±1%, 0.1W	Vishay	CRCW06031R00FKEA
R6	1	R0603_1k	1k, ±1%, 0.1W	Vishay	CRCW06031K00FKEA
R7	1	R0603_4k30	4.3k, ±1%, 0.1W	Vishay	CRCW06034K30FKEA
R8	1	R0603_100R	100, ±1%, 0.1W	Vishay	CRCW0603100RFKEA

R12, R13	2	R0603_1k50	1.5k, ±1%, 0.1W	Vishay	CRCW06031K50FKEA
R14, R15	2	R0603_470R	470, ±1%, 0.1W	Vishay	CRCW0603470RFKEA
R17, R22	2	R0603_100k	100k, ±1%, 0.1W	Vishay	CRCW0603100KFKEA
R19	1	R0603_120R	120, ±1%, 0.1W	Vishay	CRCW0603120RFKEA
R21	1	R0603_390R	390, ±1%, 0.1W	Vishay	CRCW0603390RFKEA
R23	1	R0603_680k	680k, ±1%, 0.1W	Vishay	CRCW0603680KFKEA
R24	1	R0603_120k	120k, ±1%, 0.1W	Vishay	CRCW0603120KFKEA
R25	1	R0603_118k	118k, ±1%, 0.1W	Vishay	CRCW0603118KFKEA
R26	1	R0603_150k	150k, ±1%, 0.1W	Vishay	CRCW0603150KFKEA
R27	1	R0603_187k	187k, ±1%, 0.1W	Vishay	CRCW0603187KFKEA
R28	1	R0603_82k50	82.5k, ±1%, 0.1W	Vishay	CRCW060382K5FKEA
U1, U2, U3	3	TAS2770		TI	TAS2770RJQT
U4	1	ADAU1467		Analog Devices	ADAU1467WBCPZ300
U5	1	TORX1355(V,F)	TOSLINK Receiver	Toshiba	TORX1355(V,F)
U6	1	TOTX1350(V,F)	TOSLINK Transmitter	Toshiba	TOTX1350(V,F)
U7	1	25AA1024		Microchip	25AA1024-I/MF
U8	1	LP3470IM5X-3.08_NOPB		TI	LP3470IM5X-3.08/NOPB
U9	1	XCL226A0K1H2		Torex	XCL226A0K1H2
U10, U11, U12, U13, U14, U15	6	74LVCH1T45GW		TI	74LVCH1T45GW
U16, U17	2	LMZ10501SILR		TI	LMZ10501SILR
X1	1	NX3225SA-12.288M-STD-CRS-2	f=12.288MHz, Stability: ±50ppm, Tol:±15ppm, Load capacitance:8pF,esr:120 Ohm,Temp:-40°C ~ 125°C	NDK	NX3225SA-12.288M-STD-CRS-2