

FPGA buffer board v1.3, 2021/03/10 by Andi. list contains 2 FPGA boards + 5 buffer boards

position	qty/board	Value	description	RS/mouser code	price/item	items/pkg	items to buy	price/total	note
C1	1	100uF	Condensatore Nichicon serie SR 100µF ±20%, 16V cc, +85°C, Su foro	475-8826	0.216	5	5	1.08	
C2	1	10uF Tantalum	AVX TAJ 10µF ±20%, 16V cc, +125°C, package 1206 (3216M)	136-0190	0.19	50	50	9.5	
C3, C4, C5, C6, C9, C10, C11, C12, C13, C14, C15, C16, C17, C7, C8, D1	13	100nF	Condensatore ceramico multistrato MLCC, 0603 (1608M), 100nF, ±10%, 50V cc, SMD, X7R	698-3251	0.032	100	100	3.2	
D2, D3, J1,	2	10nF/short*	Condensatore ceramico multistrato MLCC, AEC-Q200, 0603 (1608M), 10nF, ±10%, 100V cc, SMD,	723-5017	0.028	200	0	0	
J2, J4, J5	1		Indicatore LED per PCB Rosso Dialight, 45 °, 1 LEDs, Right-angle, 2 V, Montaggio con foro passante	546-0463	1.1	1	5	5.5	
J3, J8,	2		Indicatore LED per PCB Verde Dialight, 45°, 1 LEDs, Right-angle, Montaggio con foro passante	917-0767	0.678	20	20	13.56	
J6,	1	I2C* (1x3)	Connettore maschio Samtec, 3 vie, 1 fila, passo 2.54mm	180-3419	0.088	50	0	0	
J7,	2	1x8 (1x2, 1x4)	HMTSW-108-22-G-S-400, Board to Board & Mezzanine Connectors .100" High-Temp Variable Post H	200-HMTSW10822GS400	1.07	1	10	10.7	mouse
J9,	2	IO0-41 (2x8)	HMTSW-108-22-S-D-400, Board to Board & Mezzanine Connectors .100" High-Temp Variable Post H	200-HMTSW10822SD400	2.39	1	10	23.9	mouse
J10,	1	A0-A11 (2x6)	HMTSW-106-22-L-D-400, Board to Board & Mezzanine Connectors .100" High-Temp Variable Post H	200-HMTSW10622LD400	1.21	1	5	6.05	mouse
J11, J12	1	SPI* (2x3)	Presa PCB Samtec, 6 vie, 2 file, passo 2.54mm, Foro passante	155-7781	1.31	10	0	0	
J13, J15	1	Cora supply jack 2.1mm	Morsettiere per circuito stampato RS PRO Maschio a 2 vie, 1 fila, passo 5mm, Montaggio su foro pa	897-0843	0.353	10	10	3.53	
J14,	1	+/-15V, 5V from rack	Connettore circuito stampato Molex Filo-Scheda, 5 vie, 1 fila, passo 3.96mm	679-5697	0.429	10	10	4.29	
J16, J17, J18, J21	2	Cora PMOD JA/B (2x6)	Presa PCB Samtec, 12 vie, 2 file, passo 2.54mm, Foro passante	155-7885	1.136	10	10	11.36	
J19, J20, J22, J23	2	daughter connector 1, 2	TSM-125-01-L-DV, Headers & Wire Housings .100" Surface Mount Terminal Strip	200-TSM12501LDV	4.65	1	10	46.5	mouse
R1, R2	1	rack backplane connector*	Connettore DIN 41612 Harting 09031647921 64 vie Maschio, 2 file, passo 2.54mm, tipo C, classe C3	406-357	3	1	0	0	
R3, R5	1	clock in/out, in/out_0	Connettore SMA RF Solutions serie CON Femmina, 50Ω, montaggio su bordo PCB, a Saldare, polari	903-9388	1.791	4	20	35.82	alternative SMB: 526-5814 (expensive)
R4	4	in_1/2, out_1/2*	Connettore coassiale Diritto TE Connectivity, Femmina, 50Ω, Montaggio foro passante	420-5401	2.48	1	0	0	
R6	2	0	Resistenza SMD Vishay Film spesso, 0Ω, 1206 (3216M), ±0%, 0.5W, serie CRCW	812-1773	0.077	25	25	1.925	
R7, R8, R12, R13, R14,	2	open/120*	Resistenza SMD TE Connectivity Film spesso, 120Ω, 1206 (3216M), ±5%, 0.5W, 200V, serie CRGH	807-1114	0.033	100	0	0	
R9, R10, R11,	1	short/82*	Resistenza SMD TE Connectivity Film spesso, 82Ω, 1206 (3216M), ±5%, 0.5W, 200V, serie CRGH	807-1306	0.031	100	0	0	
R15, R16, R17	1	51/82*	Resistenza SMD Vishay Film spesso, 51Ω, 1206 (3216M), ±1%, 0.5W, serie CRCW	812-1916	0.063	25	0	0	
R18, R19, R20,	5	100	Resistenza SMD Panasonic Film spesso, 100Ω, 0805 (2012M), ±1%, 0.125W, serie ERJ	865-4191	0.05	100	100	5	
U1, U2, U3, U4, U7, U8, U9, U10,	3	510	Resistenza SMD Vishay Film spesso, 510Ω, 0805 (2012M), ±1%, 0.125W, serie CRCW	679-1519	0.018	50	50	0.9	
U5,	3	open					0	0	
U6	3	2.2k	Resistenza SMD Kamaya Film spesso, 2.2kΩ, 0805 (2012M), ±1%, 0.125W, serie RMC	117-947	0.021	100	100	2.1	
U11,	8	74HCT541*	Driver e buffer di linea 74HCT541D, 652, HCT, 3 stati, Non-invertente, SOIC, 20-Pin	103-8183	0.489	38	38	18.582	2 missing items I have in lab
U12	1	LTC6957xDD-3	LTC6957-3, Buffer di clock Low Phase Noise, Dual Output Buffer/Driver/Logic Converter with CMOS	584-LTC6957HMS-3#PBF	7.92	1	5	39.6	mouse
additional:	1	MC10EPT20	MC10EPT20DTG Traslatore di livello logico, 8-Pin, TSSOP	908-0951	9.09	1	5	45.45	
	1	74LVC06	Driver e buffer di linea SN74LVC06APWR, LVC, Drain aperto, Invertente, 1,65 → 3,6 V, TSSOP, 14-F	662-8578	0.279	10	10	2.79	
	1	74LVC3G17	Buffer SN74LVC3G17DCTR, Triple canali, LVC, 1,65 → 5,5 V, SSOP, 8 Pin Si	662-9045	0.59	5	5	2.95	
	1	Kit di sviluppo 410-370-1 per ARM Development, FPGA Development		184-0484	113.86	1	2	227.72	
	1	Micro SD Verbatim Class 10 MicroSDHC		200-750-4802	10.64	1	2	21.28	
	1	2x30, 90 degree, long, clock in	HMTSW-130-09-G-D-240-RA, Board to Board & Mezzanine Connectors .100" High-Temp Variable P	HMTSW13009GD240R	7.17	1	0	0	mouse
	1	Cavo di alimentazione, L. 1.8m, Cavo spina da 2,5 mm Senza terminazione, 12 V, 1 A		656-3894	3.65	1	2	7.3	
	1	19" rack plug-in module	Unità a innesto nVent-SCHROFF 3U, in Alluminio, ventilato	442-1439	62.1	1	0	0	optional for rack
	1	free standing box, 1 board	Contenitore Hammond in Alluminio 160 x 103 x 30.5mm, col. Nero	773-2984	22.88	1	0	0	optional for 1 board
	1	free standing box, 2 boards	Contenitore per strumentazione RS PRO in Alluminio anodizzato 165 x 105 x 61mm	185-3209	35.67	1	1	35.67	optional for 2 boards

sum 81 586.257

*leave open for manual configuration/have components in lab