

16-Channel Discriminator/Scaler Board Cost Estimate

J. Proffitt 26-Feb-2002

Description	Manufacturer	Mfr. Part Number	Qty	Price ea.	Total	Notes	Source
FPGA, ACEX	Altera	EP1K30TC144-1	1	\$25.00	\$25.00		Arrow
FPGA, ACEX	Altera	EP1K100QC208-1	1	\$51.00	\$51.00		Arrow
FPGA configuration device	Altera	EPC2LC20	2	\$33.00	\$66.00		Arrow
Comparator, ECL out	Maxim	MAX9691EUA	32	\$2.50	\$80.00	Qty 1K	Maxim
Op-amp, current-feedback	Burr-Brown	OPA685N	67	\$2.00	\$134.00	Qty 1K	Digikey
D-FF, ECL	On Semiconductor	MC10EL31DT	16	\$4.30	\$68.80	Qty 100	Avnet
dECL to TTL translator	On Semiconductor	MC10ELT25DT	18	\$4.40	\$79.20	Qty 100	Avnet
TTL to dECL translator	On Semiconductor	MC10H124FN	4	\$3.24	\$12.96		Avnet
Oscillator, 7.5x5mm, 3.3V, 125MHz	ECS	ECS-3953M	1	\$4.75	\$4.75	Qty 10	Digikey
Oscillator, 7.5x5mm, 3.3V, 50MHz	ECS	ECS-3953M	1	\$4.75	\$4.75	Qty 10	Digikey
DAC, 12-bit	Maxim	MAX5352ACUA	2	\$9.21	\$18.42		Maxim
Op-amp, quad	Texas Instruments	TLC2274ACPW	9	\$1.02	\$9.18	Qty. 250	Digikey
Identity comparator, 8-bit	Texas Instruments	SN74ALS540DW	3	\$1.35	\$4.05		Arrow
Open-collector driver, 8-bit	Texas Instruments	SN74AHCT138PWR	1	\$0.20	\$0.20		Arrow
Bus transceiver, 16-bit	Texas Instruments	SN74ABTH16245DG	2	\$1.50	\$3.00		Arrow
Voltage reference, 2.5V	Thaler	VRE4125B	1	\$6.00	\$6.00		Thaler
DC-DC converter, 5V, 3A	CDI	1505S24WFR	1	\$72.00	\$72.00	Qty 25	CDI
DC-DC converter, 3.3V, 3A	Datel	UNR-3.3/3-D5SM	1	\$22.20	\$22.20	Qty 25	Datel
DC-DC converter, 2.5V, 2A	Datel	UNR-2.5/2-D5SM	1	\$22.20	\$22.20	Qty 25	Datel
Connector, vertical coax receptacle	LEMO	EPA.00.250.NTN	20	\$4.91	\$98.20	Qty 500	LEMO
Connector, VME P1/P2	Harting	93.03.196.6921	2	\$1.00	\$2.00		Allied
Connector, header, sip, straight, female, 25-pin	Samtec	SLM-125-01-S-S	8	\$2.00	\$16.00		Samtec
Connector, header, sip, straight, male, 25-pin	Samtec	TMS-125-02-S-S	8	\$2.00	\$16.00		Samtec
Connector, header, dip, right-angle, male, shrouded, 34-pin	3M	2534-5002UB	1	\$2.25	\$2.25		Digikey
Connector, header, dip, right-angle, male, unshrouded, 4-pin	Samtec		8	\$0.50	\$4.00		Digikey
LED, quad, right-angle, green	Dialight	568-0122-222	1	\$1.19	\$1.19		Arrow
LED, dual, right-angle, yellow	Lumex	SSF-LXH240YYD	8	\$0.31	\$2.48		Allied
Diode, dual, series	Diodes, Inc:	BAV99DW	8	\$0.30	\$2.40	Qty 100	Digikey
Potentiometer, vertical, 25-turn, 5K	Bourns	3299Y	2	\$1.66	\$3.32		Allied
Switch, toggle, mom-off-mom, right-angle, SPDT	C&K	ET05MD1AVBE	1	\$4.77	\$4.77		Avnet
Switch, SIP, 8-bit	C&K	SP08A	3	\$2.81	\$8.43	Qty 100	Digikey
Schottky diode network	California Microdevices	PACDN005Q	3	\$2.40	\$7.20		Arrow
Socket, PLCC, 20-pin, SMT	Mill-Max	540-99-020-17-4	2	\$1.13	\$2.26		Digikey

EMI T-Filter	Murata	DSS306-55FZ103N	8	\$0.14	\$1.12		Allied
Fuse, radial	Wickmann		5	\$0.37	\$1.85	Qty 100	Digikey
Fuseholder, radial	Wickmann	562	5	\$0.27	\$1.35	Qty 100	Digikey
Other (passives, hardware, etc.)			1	\$30.00	\$30.00		
Discriminator board fabrication			1	\$15.00	\$15.00	Qty 120	
Discriminator board assembly			1	\$15.00	\$15.00	Qty 120	
VME board fabrication			1	\$60.00	\$60.00	Qty 30	
VME board assembly			1	\$50.00	\$50.00	Qty 30	
VME connector board fabrication			1	\$15.00	\$15.00	Qty 30	
Front panel, machining, lettering			1	\$50.00	\$50.00		
Total, 1 board					\$1,093.53		
Total, 30 boards					\$32,805.90		