Bill of Materials
<<<From Job: E:\EES_JOBS\ADMEM\admem_version4\vbdc\admem_version4.prj>>>

Fermi National Accelerator
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Item	QTY	vendor part number	Description	Cost	REF DESG
1	1	AMP 352009-1 PLUS SHIELDS .	AMP 5x19 Z-PACK 2mm Female Conn w/gnd sh	18.75	P0
2	8	AMP 536272_1.	AMP 536272_1 40 pin micro_strip male 536	16.00	J3-J10
3	1	AM27S19SAPC	32x8 PROM	1.25	U45
4	7	Am29F100B-75EC	1 Mb CMOS Flash Memory	15.00	U101-U107
5	1	Am29F200B-75EC	2 Megabit Flash Ram	20.10	U88
6	1	C&K P8121 1160-1890	Mom. Push button Panel mnt	2.48	S1
7	15	COTTER PIN	test point	0.01	TP1-TP3,TP8,TP12
*					TP20,TP33,TP34
*					TP61,TP62,TP65
*					TP67,TP96,TP98
*					TP99
8	1	CY7B991-7JC	ROBOCLOCK	21.85	U34
9	2	CY7C470-15JC	Cypress 8K x 9 FIFO	22.00	U37,U38
10	9	CY74FCT16374CTPAC	16-bit register	3.45	U1-U7,U40,U67
11	28	CY74FCT16543CTPAC	16-bit latched tranceiver	5.25	U8-U13,U16,U17
*					U18,U19,U21,U23
*					U25,U27,U29,U30
*					U35,U36,U39,U42
*					U44,U47,U50,U52
*					U54,U57,U58,U72
12	9	CY74FCT162244TTSSOP	16-Bit Buffers/Line Drivers	3.95	U41,U43,U46,U49
*					U51,U53,U55,U60
*					U68
13	18	DS26C31TM RS-422 driver National	Differential Line Driver RS-422	2.23	U65,U66,U69,U70
*					U71,U73-U85
14	6	ERIE 8121-050-651-103M 1415-3000	Bypass Cap .01UF	0.07	C17,C21,C22,C24
*					C27,C28
15	1	ERIE 8131-100-651-153M 1415-3090	Bypass Cap .015UF	0.07	C4
16	5	ERJ-6ENF47.5 Digi P47.5CBK-ND	1/10W 1% 47.5 ohm	0.061	R6-R10
17	2	ERJ-8ENF1.00K Digi P1.00KFBK-ND	1/8W 1% 1.0K ohm	0.0542	R11,R12
18	7	FCN-235D020-G/E(MH)	Fujitsu 20 Pin SCSI II	2.20	J1,J2,P4-P8
19	3	HARTING-0201-160-2101	VME64 Card Connector	25.29	P1-P3
20	1	HP HLMP-1301 1445-0475	Red LED	0.24	D1
21	1	HP HLMP-1401 1445-0495	Yellow LED	0.24	D2
22	20	KEMET T340B106K015AS	10UF 15V Bullet	0.53	C2,C7-C9,C13,C14

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*					C15,C18,C34,C163
*					C164-C173
23	7	KEMET T354H336K016AS	33UF 16V RADIAL Dip	0.68	C1,C16,C19,C20
*					C23,C25,C26
24	4	LITTLEFUSE 251002 1120-0235	2 AMP PCB Fuse	0.74	F3-F6
25	2	LITTLEFUSE 251010 Newark 20F604	10 AMP PCB Fuse	0.74	F1,F2
26	2	MACH 110-12JC	AMD PLD 44 Pin PLCC	7.00	U31,U108
27	1	MC10H350P	PECL to TTL Translator	7.98	U64
28	4	MOTOROLA 1N5908	Transient Suppressor 6.0V	1.24	D4,D5,D7,D9
29	2	MOTOROLA 1N6275	Transient Suppressor 15V	0.70	D6,D8
30	20	PADDLE_BD	EES paddle 72pin simm module	2.50	PB1-PB20
31	1	PAN ECS-H1CC106R DIG PCT3106	SMT CAP 10.0UF	0.9765	C12
32	1	PAN ECS-H1CY105R DIG PCT3105	SMT CAP 1.0UF	0.3955	C11
33	1	PAN ECU-V1H103KBG DIG PCC103BN	SMT CAP 0.01UF	0.168	C95
34	131	PAN ECU-V1H104KBW DIG PCC104B	SMT CAP 0.1UF	0.5914	C30-C33,C35,C36
*					C37-C94,C96,C97
*					C98-C162
35	5	PAN ECU-V1H270JCG DIG PCC270CG	SMT CAP 27pF	0.133	C3,C5,C6,C10,C29
36	2	RC05-270 1487-0290	270 ohm 1/8W 5%	0.19	R1,R2
37	1	RC05-820K 1487-0497	1/8W 820Kohm 5%	0.18	R4
38	1	RC07-1.5M 1487-1125	1/4W, 5PCT, THRU	0.14	R5
39	1	RC07-5.6 Digi 5.6QBK-ND	1/4W, 5PCT, THRU	0.06	R3
40	5	RC07-4700 1487-0825	1/4W, 5PCT, THRU	0.08	R13-R17
41	6	SN74ABTE16245SSOP	16 Bit Incident Transceiver	5.60	U20,U24,U32,U61
*					U62,U63
42	21	Samtec TSW-12-07-L-D 2pin sip	2 pin jumper - mates with SNT-100-BK-G $	0.16	S4,S6,S7,S12,S13
*					S14,S21,S51,S52
*					S53-S64
43	4	Spare-IC 24DIP3	Spare Part	0.00	U22,U26,U28,U33
44	135	TEST_PIN	.025 x .025 square post.	.01	TP4-TP7,TP9,TP10
*					TP11,TP13,TP14
*					TP15-TP19,TP21
*					TP22-TP32,TP35
*					TP36-TP57,TP59
*					TP60,TP63,TP64

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Item	QTY	vendor part number	Description	Cost	REF DESG
*					TP66,TP68,TP69
*					TP70-TP95,TP97
*					TP100-TP119,TP129
*					TP188,TP189,TP195
*					TP196,TP197,TP203
*					TP204-TP228
45	3	XC4003EPQ100-3	Xilinx FPGA XC4003E	45.75	U89-U91
46	6	XC4013EPQ240-3	Xilinx FPGA XC4013EPQ240	293.60	U95,U98,U109,U110
*					U111,U112
47	3	XC17128-PD8C	Xilinx Serial PROM	9.70	U92-U94
48	2	XC17256-PD8C	Xilinx Serial PROM	15.10	U48,U56
49	2	shunt10 AMP 1-435704-0	10 position shunt	0.62	U86,U87
50	1	1N5817	Shotky diode 1Amp 20V	.80	D3
51	2	10x-2-102	Bourns 10 pin 1K SIP pin 1 common	0.34	RP1,RP2
52	1	74F38N	Nand gate, OC output	0.53	U59
53	1	74LS14N 1455-8014	Hex Scmitt-trigger Inverters	0.31	U15
54	1	74LS123N 1455-8123	Multivibrator	0.35	U14
55	1	2743021446 PSC ELECTRONICS	SMT FERRITE BEAD 10UH	1.30	L1

Total Parts Used: 527
Total Parts Cost: 2868.62