



Intel[®] StrongARM^{*} SA-1110 Development Board

Parts List

May 2000

Phase 5



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1.0 Intel® StrongARM* SA-1110 Development Board Parts List

This document contains the parts list and revision information for the Intel® StrongARM* SA-1110 Development Board (SA-1110 Development Board).

Note: This document and module are for the Phase 5 hardware build of this product. For the latest information and updates, see the hardware release notes that are provided in hardcopy format, and the software readme.txt files that are provided in the software kits.

1.1 Parts List

The SA-1110 Development Board has the following list of components:

Table 1. Intel® StrongARM* SA-1110 Development Board Parts List (Sheet 1 of 7)

Device number	Qty	Reference Designator	Manufacturer and Part Number	Value	Order number
1	86	C1, C6-7, C9-18, C20-30, C33, C35-36, C44-45, C47-51, C59-61, C64-68, C72-74, C79-85, C87, C89, C92-93, C97-106, C116, C127-144, C146	Panasonic ECU-E1C104ZFQ	1 µF Capacitor, 16 V ceramic chip, Y5V 0402	10-0P1UF-X4
2	6	C2-3, C5, C8, C145, C148	AVX TPSD107K010R0150	100 µF Capacitor Tant 10 V "D"	10-100UF-XD
3	18	C4, C34, C62-63, C75-78, C86, C88, C91, C95-96, C117-119, C126, C149	Panasonic ECS-T1CY475R	4.7 µF Capacitor 16 V TANT EIA Size A	10-4P7UF-0A
4	6	C19, C69-70, C90, C94, C125	AVX TPSD226M025R0200	22 µF Capacitor Tant, 25 V "D"	10-TM122-NP
5	6	C31-32, C46, C56-58	Krypton Isolation K_2_934L	Capacitor	10-TM120-NP
6	11	C37-43, C52-53, C55, C113	Panasonic ECU-E1H103ZFQ	.01 µF Capacitor 50V Ceramic Chip Y5V 040	10-P01UF-X4
7	1	C54	Elna DYNA-CAP DX-5R5H334	0.33 Farads Super Cap 5.5 V	10-TM130-NP
8	1	C71	Panasonic ECS-T1CY105R	1 µF Cap, 16 V, Tant "A"	10-TM134-NP
9	1	C107	Panasonic ECU-E1H470JQC	47 pF Cap 50 V Ceramic Chip 0402	10-TM161-NP
10	3	C108-110	Panasonic ECU-E1H222KBQ	2200 pF Cap 50 V CerC X7R 0402	10-TM135-NP

Table 1. Intel® StrongARM® SA-1110 Development Board Parts List (Sheet 2 of 7)

Device number	Qty	Reference Designator	Manufacturer and Part Number	Value	Order number
11	2	C111-112	Novacap 1808B102K152NT	1000 pF Cap, 10%, 1500 V, X7R, 1808	10-TM138-NP
12	2	C114-115	Panasonic ECU-E1H271KBQ	270 pF Cap, 50 V CerC X7R 0402	10-TM167-NP
13	4	C120-122, C147	Panasonic ECS-T1AX156R	15 µF Cap, 10V TANT, EIA "B"	10-015UF-0B
14	2	C123-124	Novacap1206Z223Z201NT	0.022 µF Cap, +80/- 20, 200 V, Z5U, 1206,	10-TM139-NP
15	1	D1	HP HSDL-3600#007	IrDA Transceiver	11-TM139-NP
16	3	D2,D18,20	ZETEK ZHCS1000TA	1.0 amp Schottky Diode	11-TM104-NP
17	1	D3	ZETEK BZX84C3V3ZX	3.3 V Zener diode	11-TM112-NP
18	3	D4, D8, D13	KingBright KPT1608SGC	Green diode SMT 0603 package	11-TM108-NP
19	1	D5	LITEON BAT54S	Series diode	11-TM103-NP
20	2	D6-7	ZETEK ZHCS500TA	0.5 amp Schottky Diode	11-TM124-NP
21	3	D9-11	KingBright KPT1608EC	RED diode SMT 0603 package	11-TM107-NP
22	1	D12	ZETEK BZX84C11TA	11 V Zener Diode	11-TM120-NP
23	1	D14	TECCOR P2600SB	Transorb DO214	11-TM114-NP
24	2	D15-16	Central Semiconductor CMPD2004S	Diode pair	11-TM118-NP
25	1	E1	Intel GDS1110BB	Intel® StrongARM® SA-1110 CPU 206 Mhz, mBGA, 256 Pin ^a	21-TM100-NP
26	2	E2, E4	Samsung KM416S8030T-G8	SDRAM, 54p tsop 128 Mb	23-TM100-NP
27	1	E3	Philips Semiconductor PZ3128-S10BP	128 Macrocell CPLD 3 V, 100TQFP	23-TM104-NP
28	1	E5	Maxim MAX3244ECAI	RS232 transceivers with autoshutdown	21-TM114-NP
29	2	E6-7	Texas Instruments 74LVCH16374ADGGR	16 D-type Flip-Flops	19-TM104-NP
30	1	E8	Philips Semiconductor UDA1341TS	Mini Disk Audio Codec SSOP28	21-TM103-NP
31	1	E9	Maxim MAX1705EEE	Step-up DC-DC converter with Line Reg	21-TM134-NP
32	1	E10	National LMC6009MT	9 Channel Buffered Amp for TFT-LCD	19-TM105-NP

Table 1. Intel® StrongARM* SA-1110 Development Board Parts List (Sheet 3 of 7)

Device number	Qty	Reference Designator	Manufacturer and Part Number	Value	Order number
33	2	E11-12	Intel 28F128J3A	Intel® StrataFlash™, TSOP 56 ^b	23-TM102-NP
34	1	E13	Philips Semiconductor PZ3032C	32 Macrocell CPLD, 8 ns, 3 V, 44TQFP	23-TM103-NP
35	2	E14, E26	Micrel MIC5207-3.3BM5	180 ma low noise LDO Voltage regulator	21-TM138-NP
36	1	E15	Texas Instruments SN74LVCH162244ADGGR	Buffer	19-TM102-NP
37	2	E16, E17	Micrel MIC5219-3.3BM5	500ma Low Noise LDO v-Reg	21-52193-P3
38	1	E18	Philips Semiconductor UCB1300BE	Modem/audio analog FE, LQFP48	21-TM102-NP
39	4	E19-20, E25, E29	Texas Instruments SN74LVCH16245ADGGR	Transceiver	19-TM103-NP
40	1	E21	Maxim MAX633ACSA	CMOS adjustable output step-up switching regulator	21-TM109-NP
41	1	E22	Analog Devices TMP37GRT	Low-voltage temperature sensor	21-TM110-NP
42	1	E23	Maxim MAX1692EUB	Low-noise 5.5 V step-down regulator	21-TM115-NP
43	1	E24	Maxim MAX846AEEE	Cost saving battery charger system	21-TM105-NP
44	2	E27-28	Texas Instruments SN74HCT04PWR	Hex inverter	19-TM106-NP
45	1	E30	Kryton Isolation K_2_961C	DAA interface	21-TM135-NP
46	1	E31	Micrel MIC5207-4.0BM5	180 ma low-noise LDO V-reg	21-TM139-NP
47	1	E32	Micrel MIC5207-5.0BM5	180 ma low-noise LDO V-reg	21-TM133-NP
48	1	E33	Maxim MAX811TEUS-T	Microprocessor voltage monitor	21-TM117-NP
49	1	E34, E39	Micrel MIC5219BM5	500ma Low Noise LDO v-Reg	21-5219A-DJ
50	1	E35	Analog Devices ADV7171K5U	Digital PAL/NTSC Video Encoder	21-ADV71-71
51	1	E36	National Semiconductor LM4880MX	Boomer Audio Pwr Amp	21-TM113-NP
52	1	E37	Krypton Isolation K963C	DAA interface	21-TM140-NP
53	1	E38	Maxim MAX812TEUS-T	uP voltage Monitor	21-TM118-NP
54	1	E40	Maxim MAX324CUA	Precision, Single Supply Analog Switch	21X324C-UA
55	1	J1	Kycon ST-3500-4N-TR	3.5mm Stereo Jack, single shunt	12-TM102-NP

Table 1. Intel® StrongARM* SA-1110 Development Board Parts List (Sheet 4 of 7)

Device number	Qty	Reference Designator	Manufacturer and Part Number	Value	Order number
56	2	J2-3	AMP 536279-6	140 pin connector	12-0168D-UM
57	1	J4	Berg 95000-010	10 pin connector R/A	12-TM158-NP
58	1	J5	Kycon ST-2550-5N-TR	2.5mm Stereo jacks, dual shunt	12-TM101-NP
59	1	J6	Berg 62453-022	Compax Flash II SMT header	12-TM104-NP
60	1	J7	Amp, Inc. 787780-1	USB connector type B	12-TM103-NP
61	1	J8	Amp, Inc. 487951-4	4-pin Flexconn header	12-TM120-NP
62	1	J9	Hirose FH12A-50S-0.5SH	50 pin 0.5mm flex connector, TOP	12-TM106-NP
63	1	J10	Berg MPP3-ECE-001A1	14 SMT connector	12-TM118-NP
64	1	J11	ELCO (AVX) 24-8005-002-001-867	2 pin 0.050 connector	12-SMSKP-ER
65	5	J12, J15, J19-21	ELCO (AVX) 24-8005-002-001-867	2 pin 0.050 connector	12-TM124-NP
66	2	J13, J18	Berg 95000-005	5 pin connector R/A	12-TM157-NP
67	1	J14	SAMTEC AW1503GD200075ESP	SMT Stack Header	12-TM144-NP
68	2	J16-17	ELCO (AVX) 24-8005-002-001-867	2 pin 0.050 connector	12-MIKEP-AD
69	1	J22	SAMTEC TSW-102-22-G-S-RA	Battery-power jumper	12-TSW10-2R
70	1	L1	Coilcraft DO3308P-103	10 uH Coil SMT	16-TM111-NP
71	3	L2-3, L6	Panasonic EXC-ML20A390	Panasonic chip bead core, 0805	16-TM101-NP
72	1	L4	Coilcraft DS1608C-474	470 uH Coil SMT	16-TM102-NP
73	1	L5	Coilcraft DO1608C-103	10 uH Coil SMT	16-TM112-NP
74	1	Q1	ZETEK FMMTA92	SMT Transistor PNP	11-TM109-NP
75	1	Q2	ZETEK FZT968TA	SMT Transistor PNP	11-TM106-NP
76	1	Q3	ZETEK FMMTA42	SMT Transistor NPN	11-TM119-NP
77	1	Q4	Motorola MMBTA14LT1	Darlington, NPN, SOT-23	11-TM115-NP
78	2	R1,R3	Panasonic ERJ-2RKF2262X	22.6 K Resistor, 1/16 W, 1% 0402	13-22P6K-X4

Table 1. Intel® StrongARM® SA-1110 Development Board Parts List (Sheet 5 of 7)

Device number	Qty	Reference Designator	Manufacturer and Part Number	Value	Order number
79	1	R2	Bourns 3313J-1-502E	5K Pot SMT	13-POT5K-SM
80	3	R4, R91-92	Panasonic ERJ-2RKF4753X	475K Resistor, 1/16W 1% 0402	13-0475K-X4
81	1	R5	Panasonic ERJ-2RKF4323X	432 K Resistor, 1/16W, 1% 0402	13-0432K-X4
82	1	R6	Panasonic ERJ-2RKF3652X	36.5 K Resistor, 1/16W, 1% 0402	13-36P5K-X4
83	2	R7, R41	Panasonic ERJ-2RKF6191X	6.19 K Resistor, 1/16W, 1% 0402	13-6P19K-X4
84	11	R8-9, R37, R79-83, R103, R131, R138	Panasonic ERJ-2RKF10R0X	10.0 Ohm resistor, 1/16W, 1% 0402	13-00010-X4
85	1	R10	Panasonic ERJ-2RKF4992X	49.9 K Resistor, 1/16 W 1% 0402	13-49P9K-X4
83	2	R11-12	Panasonic ERJ-2RKF2742X	27.4 K Resistor, 1/16 W 1% 0402	13-27P4K-X4
84	1	R13	Panasonic ERJ-2RKF2373X	237 K Resistor, 1/16 W 1% 0402	13-0237K-X4
85	48	R10, R42-44, R46, R52-55, R63-67, R69- 78, R115-118, R120, R123- 126, R130, R147-150, R167-176	Panasonic ERJ-2RKF1003X	100K	13-0100K-X4
86	2	R11-R12	Panasonic ERJ-2RKF2742X	27.4K	13-27P4K-X4
87	1	R13	Panasonic ERJ-2RKF2373X	237K	13-0237K-X4
88	2	R14-15,	Panasonic ERJ-2RKF4022X	40.2 K Resistor, 1/16 W 1% 0402	13-40P2K-X4
89	11	R16, R90, R96, R105-106, R135-136, R151, R153- 154, R177	Panasonic ERJ-2RKF1002X	10 K Resistor, 1/16 W 1% 0402	13-0010K-X4
90	11	R17, R29, R40, R47-50, R68, R93, R144, R156	Panasonic ERJ-2RKF1501X	1.5K	13-01P5K-X4
91	2	R18-19	Panasonic ERJ-2RKF9761X	9.76 K Resistor, 1/16 W 1% 0402	13-9P76K-X4
92	1	R20	Panasonic ERJ-2RKF1503X	150 K Resistor, 1/16 W 1% 0402	13-0150K-X4
93	1	R21	Panasonic ERJ-2RKF7321X	7.32 K Resistor, 1/16 W 1% 0402	13-7P32K-X4

Table 1. Intel® StrongARM* SA-1110 Development Board Parts List (Sheet 6 of 7)

Device number	Qty	Reference Designator	Manufacturer and Part Number	Value	Order number
94	1	R22	Panasonic ERJ-2RKF1742X	17.4 K Resistor, 1/16 W 1% 0402	13-17P4K-X4
95	1	R23	Panasonic ERJ-2RKF8253X	825 K Resistor, 1/16 W 1% 0402	13-0825K-X4
96	1	R24	Panasonic ERJ-2RKF1872X	18.7 K Resistor, 1/16 W 1% 0402	13-18P7K-X4
97	1	R25	Panasonic ERJ-2RKF1502X	15 K Resistor, 1/16 W 1% 0402	13-0015K-X4
98	3	R26-28	Panasonic ERJ-2RKF4752X	47.5 K Resistor, 1/16 W 1% 0402	13-47P5K-X4
99	1	R30	Panasonic ERJ-2RKF2872X	28.7 K Resistor, 1/16 W 1% 0402	13-28P7K-X4
100	2	R31-32	Panasonic ERJ-2RKF3012X	30.1 K Resistor, 1/16 W 1% 0402	13-30P1K-X4
101	1	R33	Panasonic ERJ-2RKF6810X	681 Ohm Resistor, 1/16 W 1% 0402	13-00681-X4
102	1	R34	Panasonic ERJ-2RKF4222X	42.2 K Resistor, 1/16 W 1% 0402	13-42P2K-X4
103	1	R35	Panasonic ERJ-2RKF1242X	12.4 K Resistor, 1/16 W 1% 0402	13-12P4K-X4
104	2	R36, R38	Panasonic ERJ-2RKF3482X	34.8 K Resistor, 1/16 W 1% 0402	13-34P8K-X4
105	1	R39	Panasonic ERJ-2RKF1372X	13.7 K Resistor, 1/16 W 1% 0402	13-13P7K-X4
106	1	R45	Panasonic ERJ-8RQFR27V	0.27 Ohm Resistor, 1/8 W, 1%, 1206	13-00P27-12
107	5	R51, R102, R109, R140, R142	Panasonic ERJ-2RKF75R0	75 Ohm Resistor, 1/10 W, 1%, 0805	13-00075-X4
108	3	R56, R84-85	Panasonic ERJ-6RQF1R0V	1 Ohm Resistor, 1/10 W 1% 0805	13-R0001-X8
109	14	R57-58, R98-99, R107, R121, R128-129, R132-133, R155, R157, R164-165	Panasonic ERJ-2GE0R00X	0 Ohm Resistor, 1/16 W 5% 0402	13-00000-X4
110	6	R59-61, R88, R97, R108	Panasonic ERJ-2RKF2002X	20 K Resistor, 1/16 W 1% 0402	13-0020K-X4
111	1	R62	Panasonic ERJ-2RKF84R5X	84.5 Ohm Resistor, 1/16 W 1% 0402	13-084P5-X4
112	2	R86-87	Panasonic ERJ-2RKF27R4X	27.4 Ohm Resistor, 1/16 W 1% 0402	13-00027-X4
113	3	R89, R145-146	Panasonic ERJ-2RKF4991X	4.99 K Resistor, 1/16 W 1% 0402	13-4P99K-X4
114	1	R94	Panasonic ERJ-12ZYJ240U	24 Ohm Resistor, 1/2W 5% 2010	13-L0024-20

Table 1. Intel® StrongARM® SA-1110 Development Board Parts List (Sheet 7 of 7)

Device number	Qty	Reference Designator	Manufacturer and Part Number	Value	Order number
115	11	R95, R100-101, R112-113, R119, R127, R160-163	Panasonic ERJ-2RKF1001X	1.00 K Resistor, 1/16 W 1% 0402	13-0001K-X4
116	1	R104	Panasonic ERJ-2RKF9533X	953 K Resistor, 1/16 W 1% 0402	13-0953K-X4
117	4	R110-111, R114, R122	Panasonic ERJ-2RKF2743X	274 K Resistor, 1/16 W 1% 0402	13-0274K-X4
118	1	R134	Panasonic ERJ-2 GEJ155X	1.5 M Resistor, 1/16 W 5% 0402	13-01PFM-X4
119	1	R137	Panasonic ERJ-2RKF2372X	23.7 K Resistor, 1/16 W 1% 0402	13-23P7K-X4
120	1	R139	Panasonic ERJ-2RKF1500X	150 K Resistor, 1/16 W 1% 0402	13-00150-X4
121	1	R141	Panasonic ERJ-2RKF1153X	115 K Resistor, 1/16 W 1% 0402	13-0115K-X4
122	1	R152	Panasonic ERJ-12ZYJ160U	16 Resistor, 1/16 W 1% 0402	13-LOO16-20
123	1	R158	Panasonic ERJ-2RKF5113X	511 K Resistor, 1/16 W 1% 0402	13-0511K-X4
124	1	R159	Panasonic ERJ-2RKF9530X	953 Resistor, 1/16 W 1% 0402	13-00953-X4
125	1	R166	Panasonic ERJ-2RKF1000X	100 Resistor, 1/16 W 1% 0402	13-00100-X4
126	8	S1-S8	Panasonic EVQ-PUJ02K	Tactile switch, momentary, ultra miniature	12-EVQPU-SW
127	1	S9	Bourns 7914J-001-00E	Tactile switch, momentary, ultra miniature	12-7914J-SW
128	1	Y1	Citizen CFS145 32.768000K DZFB	32.768 KHZ Crystal, watch	18-32P76-KH
129	1	Y2	Citizen HCM49 3.686400M ABIB	3.6864 MHZ Crystal, SMT	18-3P686-MH
130	2	E11, E12	Meritec 980020-56-01	Flash socket	12-TM177-NP

- a. For more information, see the assembly drawings in the Intel® StrongARM® SA-1110 Microprocessor Developer's Manual.
- b. For more information, see the assembly drawings.

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