

Chapter 4

Bill of Materials

The following information is taken from the A1200 Bill of Materials (BOM).

- Title of the drawing
- Number and revision level of the drawing
- Part number of each part
- Description of each part
- Reference description/notes for each part

The BOM contains additional product configuration data not reproduced in this table. The BOM is updated periodically. For a complete current listing of all the information contained in a BOM (including line item numbers), request the latest revision BOM drawings (by drawing number) from Engineering Documentation in West Chester.

The following bracket types are used as to associate a part with an assembly or indicate a note:

Bracket	Description
[]	National Television Standard Committee (NTSC) US television standard
()	Phase Alternation Line (PAL) European television standard
< >	Real-Time Clock (RTC)
{ }	Notes

PCB Assembly, A1200 (364718 Rev E)

364718-01	PCB Assembly, A1200 NTSC, 1M
364718-02	PCB Assembly, A1200 PAL, 1M
364718-03	PCB Assembly, A1200HD NTSC, 1M
364718-04	PCB Assembly, A1200HD PAL, 1M
364718-05	PCB Assembly, A1200 NTSC, 2M, RTC
364718-06	PCB Assembly, A1200 PAL, 2M, RTC
364718-07	PCB Assembly, A1200HD NTSC, 2M, RTC
364718-08	PCB Assembly, A1200HD PAL, 2M, RTC
364718-09	PCB Assembly, A1200 NTSC, 2M
364718-10	PCB Assembly, A1200 PAL, 2M
364718-11	PCB Assembly, A1200HD NTSC, 2M
364718-12	PCB Assembly, A1200HD PAL, 2M
364717-01	Schematic
364719-01	PCB Fab
364725-01	Functional Description
364720-01	Artwork

PCB Assembly, A1200 (364718 Rev E)

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INTEGRATED CIRCUITS

391506-01	IC, CPU, MC68EC020, 16 MHz, 100-Pin PQFP	U1
391010-01	IC, CSG, 8374, ALICE, 84-Pin PLCC	U2
391227-01	IC, CSG, 4203, LISA, 84-Pin PLCC	U4
391077-01	IC, CSG, 8364R7, PAULA, 52-Pin PLCC	U3
391424-02	IC, CSG, Gate Array, AA GAYLE, 84-Pin PLCC	U5
391508-01	IC, 68HC05C, Keyboard MPU, 44-Pin PLCC	U13
391078-01	IC, CSG, 8520R4, CIA, 1MHz, 44-Pin PLCC	U7, U8
391425-01	IC, BUDGIE, 128-Pin PQFP	U20
391144-01	IC, 74HCT244, SM	U32
391142-01	IC, 74LS245, SM	U43, U45-U47
391426-01	IC, 74LS166, SM	U34
391176-01	IC, 74F139, SM	U23
391087-01	IC, Interface, MC1488D, SM	U28
391086-01	IC, Interface, MC1489D, SM	U29
391103-01	IC, Linear, LF347/TLO84ACD, SM	U15
391283-02	IC, Voltage Detector, RH5VA43A, SM	U49
391105-01	IC, DRAM, 256KX16, 80 nS, SM	U16, U17, {for -01 to -04} U16-U19, {for -05 to -12}
391557-01	IC, RICOH, RTC, RF5C01A, SM	<U9>
391508-02	IC, 68HC05C12, Keyboard MPU, SM	Substitute for PN 391508-01
391524-01	IC, ROM, Kickstart, A1200HD, ROM 1,40-Pin DIP	U6B
391523-01	IC, ROM, Kickstart, A1200HD, ROM 0,40-Pin DIP	U6A
391084-01	IC, Video Encoder, CXA1145M, SM	U12
391511-01	IC, 74LS86, SM	U26
391422-01	IC, Video DAC, Triple 8-Bit, 30 MHz, 44-Pin PLCC	U30
391422-02	IC, Video DAC, Triple 8-Bit, 30 MHz, 44-Pin PLCC	U30; {Do Not Stuff D215 and R215} Substitute for PN 391422-01
391558-01	IC, PAL, 16R4-10 Programmed PLCC, ROMFEST	XU9; Programmed into PN 391359-03 Substitute for PN 391549-02
391549-01	IC, GAL, 16V8-10 Programmed PLCC, ROMFEST	XU9; Programmed into PN 391347-01 Substitute for PN 391549-02
391543-01	IC, SM, 74HCT244, EIAJ Package	Substitute for PN 391144-01
391544-01	IC, SM, 74LS245, EIAJ Package	Substitute for PN 391142-01
391546-01	IC, SM, 74LS86, EIAJ Package	Substitute for PN 391511-01
391547-01	IC, SM, 74LS166, EIAJ Package	Substitute for PN 391426-01
391554-01	IC, Linear, LF347, EIAJ Package	Substitute for PN 391103-01
391549-02	IC, PAL, 16V8-15 Prog. PLCC ROMFEST	XU9; Program into 391347-03
391558-02	IC, PAL, 16R4-15 Prog. PLCC ROMFEST	Program into PN 391359-04,- Substitute PN 391549-02
FILTERS		
391092-01	Chip Ferrite Bead, Large (1812)	E301, FB401B, FB402D, FB992
391092-02	Chip Ferrite Bead, Medium (1206)	E231R, E258R-E260R, E263R-E265R, E597R, E598R
391515-01	Chip Ferrite Bead, Small (0805)	[E351R, E353R-E358R, E361R, E363R-E368R, E580R-E596R, E599R]
251878-02	Line Filter	(LF1)
391146-02	Bandpass Filter, F-K5-MS	[Z221]
391147-02	Delay Line, F-K5-MD	[Z222]

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391146-01	Bandpass Filter, BPF-K5-MS	(Z221)
391147-01	Delay Line, F-KS-MT	(Z222)
390253-04	Ferrite Bead, 3-Turn	[LF1B, LF1D]
903025-08	Ferrite Bead, Axial, Large	[LF1A, LF1C]
390818-03	Chip Cap, NPO, 15pF (1206)	(C242)
391318-09	Chip Cap, NPO, 22pF (0805)	C621, C622, E112C-E114C, E123C-E129C, E375C-E377C, <C911> E121C, E122C, E131C-E133C
391318-01	Chip Cap, NPO, 47pF (0805)	E258C-E260C
390818-05	Chip Cap, NPO, 56pF (1206)	C245, (C241)
391318-03	Chip Cap, NPO, 100pF (0805)	E231C, E251C-E257C, E261C, E266C, E267C, E511C-E523C, E525C, E551C, E552C, E558C, E580C-E596C, E599C,
391095-06	Chip Cap, X7R, 470pF (0805)	E351C, E353C, E354C, E361C, E363C, E364C, E374C, E553C-E556C
390853-07	Chip Cap, X7R, 1000pF (1206)	(C243)
390853-08	Chip Cap, X7R, 3900pF (1206)	C321, C323, C331, C333
391095-04	Chip Cap, X7R, 6800pF (0805)	C322, C332, E321C, E331C, E355C-E358C, E365C-E368C
391095-11	Chip Cap, X7R, .01uF (0805)	C216, C246, C349, C591, C592, C800-C803, E232C, E263C-E265C, E524C, E557C, E561C, E562C, E597C, E598C, (C244)
390853-04	Chip Cap, X7R, .047uF (1206)	C0B, C0D, C12B, C1B, C1D, C20B, C20D, C23, C26, C28A, C28B, C29, C30B, C311-C314, C34
310027-02	Chip Cap, Z5U, .1uF (1206)	C215, C221, C222, <C9>
310027-05	Chip Cap, Z5U, .22uF (1206)	C0A, C0C, C12A, C13, C16A-C20A, C16B-C19B, C199, C1A, C1C, C20C, C211-C213, C2A, C2B, C2X, C3, C301, C302, C305, C30A, C32, C352, C362, C43, C45-C47, C461, C4A, C4B, C551, C552, C5A, C5B, C6A, C6B, C7, C701, C702, C711, C8, C804, XC9 {C18A, C18B, C19A, C19B for -05 to -12}
391097-07	Capacitor, Alum Elect, 10uF 25V, SM, (C)	C214, C306, C407, C460
391097-08	Capacitor, Alum Elect, 22uF 25V, SM, (D)	C303, C304, C324, C334, C459
391097-04	Capacitor, Alum Elect, 47uF 16V, SM, (D)	C821, C822
391097-01	Capacitor, Alum Elect, 100uF 6.3V, SM, (D)	C235, C236, C239, C409
390797-01	Chip Capacitor Z5U, .33uF (1210)	C30C, C30D
390101-10	Capacitor, Alum Elect, 1000uF 10V	C408, C811
390101-03	Capacitor, Alum Elect, 470uF 16V	C237, C307
391231-02	Capacitor, Tantalum, 10uF 16	<C913>
	RESISTOR, 1/10w, 5%	
391509-03	Chip Resistor, 27 Ohm (0805)	(E580R, E583R-585R, E587R, E590R-E595R, E599R), E123R, 125R-E129R, E376R, E377R, R114, R116, R117, R162-R164, R599
391509-04	Chip Resistor, 47 Ohm (0805)	E253R-E256R, E557R, E561R, E562R

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391509-05	Chip Resistor, 68 Ohm (0805)	E112R-E114R, E121R, E122R, E124R, E131R-E133R, E251R, E252R, E257R, E261R-E262R, E266R, E267R, E374R, E375R, E511R-E523R, E525R, E551R-E556R, E558R, R113, R151A-R151I, R152A-R152G, (E351R,E353R-E358R, E361R, E363R-E368R, E581R, E582R, E586R, E588R, E589R, E596R)
391509-15	Chip Resistor, 470 Ohm (0805)	R101, R103, R161, R233A-R233D, R593, R659, R660, R952A, R952B, R953A-R953F, R954C, R954D, <R911>
391509-18	Chip Resistor, 1K Ohm (0805)	R102, R104, R222, R319, R324, R334, R512, R591, R592, R654, R954A-R954B, R954E, XR9, (R244), <R917>, R215 {Do not stuff R215 when using PN 391422-02}, R202
391509-24	Chip Resistor, 4.7K Ohm (0805)	R204, R250-R253, R348, R370A-R370H, R621A-R621G, R624A-R624F, R632, R634, R636, R651,R655, R715X, R951A-R951G, R971, (R241)
391509-26	Chip Resistor, 10K Ohm (0805)	R209, R322, R323, R327, R329, R332, R333, R337, R339, R346, R511A-R511F, R572, R623, R629, R631, R633, R635, R652, R653, R656, R657, R701, R715A-R715H, R715Y, R716-R718, (R243), <R912, R914-R916, R919A-R919H>
	RESISTORS, 1/8W, 5%	
310026-26	Chip Resistor, 0 Ohm (1206)	E321R, E331R, XJ1 ,XJ2, XJ3, [R203, R225]
310026-09	Chip Resistor, 10 Ohm (1206)	R301, R302
310026-12	Chip Resistor, 68 Ohm (1206)	R115
310026-29	Chip Resistor, 75 Ohm (1206)	R232E, R234D
310026-05	Chip Resistor, 100 Ohm (1206)	R237, R622, R639
310026-24	Chip Resistor, 120 Ohm (1206)	R714A, R714B
310026-42	Chip Resistor, 180 Ohm (1206)	[R236]
310026-14	Chip Resistor, 360 Ohm (1206)	R235, (R236)
310026-21	Chip Resistor, 470 Ohm (1206)	<R913>
310026-11	Chip Resistor, 820 Ohm (1206)	R224, (R221)
310026-36	Chip Resistor, 910 Ohm (1206)	(R223)
310026-54	Chip Resistor, 1.2K Ohm (1206)	[R221,R223]
310026-25	Chip Resistor, 1.5K Ohm (1206)	R321, R331
310026-16	Chip Resistor, 2.7K Ohm (1206)	R347, R571, (R245), [R246]
310026-35	Chip Resistor, 6.8K Ohm (1206)	(R242)
310026-23	Chip Resistor, 22K Ohm (1206)	R345
310026-27	Chip Resistor, 27K Ohm (1206)	R459
310026-18	Chip Resistor, 33K Ohm (1206)	R349
310026-03	Chip Resistor, 47K Ohm (1206)	<R918>
310026-19	Chip Resistor, 470K Ohm (1206)	R326, R336
310026-20	Chip Resistor, 1M Ohm (1206)	R628

PCB Assembly, A1200 (364718 Rev E)

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	RESISTORS, 1/10W, 1%	
391507-01	Chip Resistor, 15 Ohm (0805)	R216
391507-09	Chip Resistor, 511 Ohm (0805)	R217
	RESISTORS, 1/8W, 1%	
391154-14	Chip Resistor, 24.9 Ohm (1206)	R232A-R232C
391154-12	Chip Resistor, 49.9 Ohm (1206)	R231A-R231C
391154-03	Chip Resistor, 1K Ohm (1206)	R303, R304
391154-04	Chip Resistor, 2K Ohm (1206)	R325, R335
	RESISTORS, 1W, 5%	
391093-01	Chip Resistor, 1 Ohm (2512)	R309
391093-02	Chip Resistor, 4.7 Ohm (2512)	E232R, R352, R362
391093-04	Chip Resistor, 47 Ohm (2512)	E524R
	CONNECTORS	
390241-03	D-SUB, 23-Pin, Female, DB23S	CN5, {External Floppy}
390242-03	D-SUB, 23-Pin, Male, DB23P	CN9, {RGB Video}
390241-05	D-SUB, 25-Pin, Female, DB25S	CN7, {Parallel Port}
390242-05	D-SUB, 25-Pin, Male, DB25P	CN6, {Serial Port}
390242-01	D-SUB, 9-Pin, Male, DB9P	CN1, CN2, {Mouse/Joystick}
252122-03	RCA Jack, Yellow	CN10, {Composite Video}
252122-01	RCA Jack, White	CN4, {Left Audio}
252122-02	RCA Jack, Red	CN3, {Right Audio}
252167-01	DIN, 5-Pin, Square	CN8, {CPU Power}
325516-04	SIL, 4-Pin, Header	CN12, {Floppy Power}
903345-17	DIL, 34-Pin, Header w/key (Pin 3)	CN11, {Floppy Signal}
391153-01	DIL, 44-Pin, Header w/key (Pin 20)	CN16, {HDD}
391073-01	68-Pin, Right Angle, High Density	CN15, {PCMCIA Port}
390492-04	31-Pin, Locking ZIF, FFC	CN13, {Keyboard}
251065-04	SIL, 5-Pin, Header, w/key (Pin 4)	CN14, {LED}
391153-03	Header, 2mm, 22-Pin	P9B
391153-02	Header, 2mm, 40-Pin	P9B
	TRANSISTORS	
391145-01	JFET, MPF102/PN4302, SOT23	Q321, Q331
391121-01	NPN, 2N3904, SOT23	Q201, Q571, Q651, Q653, (Q461)
391122-01	PNP, 2N3906, SOT23	Q341, Q631-Q633, Q652, Q654
	DIODES	
391421-01	LM385, Voltage Reference, 1.2V, S0-8	D215 {Do not stuff when using, PN 391422-02}
391129-01	1N4148, SOT23	D231A-D233A, D231B-D233B, D571 <D911, D912>
391128-01	1N914, SOT23	Substitute for PN 391129-01
391327-01	1N4001, MELF	D572, D573, D574, D575, D576
	MISCELLANEOUS	
391138-01	Chip Inductor, 1.2uH (1206)	(L241)
252345-01	Crystal, 4.433619 MHz	(Y451)
325566-01	Oscillator, 28.63636 MHz	[X1]
252344-01	Oscillator, 28.37516 MHz	(X1)
904150-09	Socket, 42-Pin DIP	U6A, U6B
313371-01	Modulator, MDG-VA3424	[X2]

PCB Assembly, A1200 (364718 Rev E)

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313371-05	Modulator, MDG-UD3626	(X2)	
391156-01	Ceramic Resonator, 3.00 MHz	Y621	
391260-01	Battery, NiCd, 3/V30R, 3.6V, 30 mAh	<BT9>	*Note - Flatpack Version
900560-01	Crystal, 32.768 KHz	<Y9>	
251029-06	Capacitor, Variable, 6.8-45pF	<TC9>	
366648-01	Bar-Code Label, Blank, 0.5" x 1.75"		
366649-01	Bar-Code Label, Blank, 0.5" x 1.00"		
UNSTUFFED LOCATIONS			
	Integrated Circuits, 68-Pin, PLCC	U0	
	Integrated Circuits, 14-Pin, SOIC	U26X, XU1, XU2, XU3	
	Resistor (0805)	R100, R118, R238, R598, R626, R637, R638, R658	
	Resistor (1206)	XJ4, R625, XJ9	
	Capacitor (0805)	C152A-C152F, E262C	
	Capacitor (1206)	C629, XC1-XC3	
	Transistor SOT23	Q634	
	Filters	FB401A, FB402A-FB402C	
	Connectors, 10-Pin, DIL	CN1A	
	Connectors, 10-Pin, SIL	TP1, TP2, TP3	
	Connectors, 40-Pin, DIL	P9A	