

A500++ Replacement PCB for corrosion damaged A500+

I am now offering a new service to Amiga A500+ owners who have been plagued by corrosion due to leaking batteries. A new main board has been reverse engineered and produced by Rob “Peepo” Taylor to replace the corrosion damaged board in these computers. Boards can be purchased directly from Rob, but for those who don’t feel confident enough with their soldering skill (there are a LOT of solder joints to make – over 1800!), I can offer a partially built board using new parts.

I install all new resistors, capacitors, IC sockets, transistors, and most of the logic ICs. From your original board you would need to remove several connectors, all the main ICs, and a handful of obsolete or difficult to obtain parts such as the oscillator, crystal, line filter, etc. All IC positions are socketed for easier fault-finding / replacing in the future.

The A500++ board has jumpers to select whether the internal or external drive is DF0: and uses a replaceable battery rather than the old Varta one.

My price includes a new board (ask for a discount if you already have an A500++ board), plus all new parts as above. You will need to unsolder the RAM chips, power connector, and a few other parts from your original A500+ board as well as use all your existing socketed chips (I can quote for any parts that may be faulty or missing from your board).

A500++ Board fitted with sockets for ICs etc. and most common components. Some connectors, ICs, etc. are required from your old board or may be purchased separately. Parts marked with * are supplied with this service.	£245.00
A500++ Board built up using your original A500+ board (which will need to be removed from the case and sent to me in advance). Some parts will be unsoldered by me and fitted to the new board. Parts marked with * are supplied with this service.	£295.00
A500++ Board built up using new parts where possible and reclaimed parts where necessary. Fully working and tested board only.	£465.00
The following items are subject to availability:	
A500+ Case (Top and Bottom)	£50.00
A500+ Metal Screening Set	£25.00
A500+ UK Keyboard Assembly	£75.00
A500+ Disk Drive	£65.00
Gotek Replacement Drive (with OLED)	£65.00
Disk Drive Cable Set (Floppy / Gotek)	£7.50
Original Power Supply	£35.00
Modern Switch-Mode Power Supply	£45.00
Mouse	£35.00

UK Shipping is free for all orders over £20
Small orders or overseas, please enquire.

www.retrofix.co.uk

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A500++ Components

Please note that prices are subject to change without notice.

Parts supplied are not necessarily the same as shown on the A500++ BOM, but are functionally equivalent and are the same as used in our own builds. Some parts are tested, used / old stock as new parts aren't always available.

A500++ PCB	POA	
Parts marked with * are included on all PCB builds		
* Capacitor Pack	£45.00	All capacitors
* Resistor Pack	£15.00	All resistors / networks
* Transistors / Diodes	£2.00	All transistors / diodes
Set of Sockets (Turned Pin)	£45.00	Excludes Oscillator
* Set of Sockets (Alternative Double Wipe)	£15.00	Excludes Oscillator
* Connector Set	£30.00	Excludes 23 pin D and Power
* MC1488	£1.00	
* MC1489	£1.00	
* LF347 / TL084	£1.00	
* NE555	£1.00	
* 74F258	£3.00	
* 74F244	£3.00	
* 74LS244	£1.00	2 Required
* 74HCT245	£1.00	2 Required
* 74F139	£3.00	
* 74LS373	£1.00	2 Required
* 74F373	£3.00	
* 74LS157	£1.00	
* 74LS05	£1.00	
* 74LS32	£1.00	
M62428B RTC	£7.50	
* RTC-72421B	£12.50	Alternative RTC
* Crystal Oscillator 28.37516MHz	£5.00	
* Ferrite Beads	50p	5 Required
* Battery Holder for LIR2032	£3.50	Battery not supplied
* Line Filter	£10.00	
Oscillator Socket (not recommended)	£1.25	
8373R4 DENISE	£75.00	Used / Old Stock
MC68000	£25.00	Used / Old Stock
8230A CIA	£25.00	2 Required . Used / Old Stock
5719 GARY	£25.00	Used / Old Stock
8364R7 PAULA	£25.00	Used / Old Stock
8375 FAT AGNUS	£75.00	Used / Old Stock
Video Hybrid	£35.00	Used / Old Stock
* 44256 RAM	£6.00	8 Required
ROM V2.04	£25.00	Used / Old Stock
23 pin D Female	£25.00	Used
23 pin D Male	£25.00	Used
Power Socket	£25.00	Used

Amiga A500++ PCB – Partially Built

Thank you for purchasing the Amiga A500++ upgrade. You will need to finish building the PCB using parts from your original A500+, or I can supply at an extra cost (a price list is enclosed with the board).

Please take care when unsoldering items from your donor board. If you are not confident, please get the components removed professionally or contact me to arrange a further service. I can't take any responsibility for damage done to either your original parts or to the new PCB if damaged by unskilled work.

The following parts are required and should be removed from the donor board or may be purchased separately:

CN5 – 23 pin Sub-D Female Connector

CN8 – Power Connector

CN9 – 23 pin Sub-D Male Connector

HY1 – Video Hybrid

U1 – MC68000 CPU

U2 – FAT AGNUS (PAL or NTSC)

U3 – PAULA

U4 – DENISE HI-RES

U5 – GARY

U6 – KICKSTART ROM

U7 – CIA

U8 – CIA

Sockets are provided for all integrated circuits, the other items should be soldered directly to the board.

If you want the clock to maintain time while the computer is not in use, you can also add a CR2032 coin cell to the holder fitted on the board.

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Amiga A500++ PCB – Partially Built

Amendments

Due to a number of customers contacting me regarding corrosion on their original RTC I am now supplying a replacement RTC for the board at no extra cost (U9). This is the later model Epson chip - RTC-72421B which doesn't need an external crystal to keep time. This means that the following components are now no longer supplied and fitted to the A500++ board – Y9, TC9, C911. If you prefer to use an original RTC chip, you can remove these components from your original A500+ board or contact me if you are unable to do this.

RP106 and RP107 are now supplied fitted to the board. These resistor networks are required if you intend to upgrade the ROMs to Kickstart 3.14

I am now also supplying 8 x 44256 DRAM chips (1Mb), so there is no longer any need to de-solder the original RAM from the old board.

A diode is fitted between the battery holder and R913 – this stops the computer trying to charge the battery and allows the use of a standard CR2032 battery.

The crystal oscillator fitted to the board is for use with a PAL AGNUS chip. If you are using an NTSC AGNUS you will need to remove the oscillator and fit the original one from your old board.