

# Psion Series 3a Memory Upgrade

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## Disassembly

1. Remove main and backup batteries from device.
2. Using a suitable cross-headed screwdriver, remove the four screws as indicated by the arrows. (psion001.png)
3. Carefully lift battery cable over catch. (psion002.png)
4. Remove plastic battery connector from main board by pulling the edges of the plastic connector. (psion003.png)
5. Open SSD slot B and remove screw . (psion004.png)
6. Open SSD slot A and remove screw. You'll probably have to remove the warranty label to do this, if not already removed. (psion005.png)
7. Working at one side at a time, lift the keyboard from the bottom case as indicated by the arrows. I found inserting a small screwdriver into the vacated SSD screw holes pushed the keyboard cover up so I could then get my fingers in. (psion006.png)
8. This is the tricky bit. You now need to pull the keyboard cover forward and up so the small plastic tab comes out from under the hinge. (psion007.png)
9. Repeat on the other side. (psion008.png)
10. These tabs now need to be released. I found the safest way is by using a small flat-head screwdriver working underneath the button bar as it's now bowing due to the spring pressure. (psion009.png)
11. Top area of keyboard released. (psion010.png)
12. The remaining 2 tabs on the bottom part of the keyboard cover need to be released. I found that carefully removing the rubber keyboard membrane, together with the keys, makes the operation easier. I have come across two types of keyboard, one with the keys stuck to the rubber membrane, and the other not, so be careful when you do this. Now gently pull the cover away from the case. Sliding a thumb between the cover and case can help.(psion011.png)
13. Removed cover. (psion012.png)
14. Removed membrane & keys. (psion013.png)
15. With this type the keys aren't stuck to the membrane. (psion014.png)
16. To remove the main board, carefully lift the front by inserting a small screwdriver into the slot shown by the arrow, trying not to use too much pressure as it may damage the plastic rim. (psion015.png)
17. Once the main board front is lifted, push the 3-link plastic shutter in. (psion016.png)
18. You should now be able to remove the board. (psion017.png)
19. 256K Main board. (psion018.png, psion019.png & psion020.png)
20. Following this guide here [http://www.home.unix-ag.org/nils/s3a\\_512kb.html](http://www.home.unix-ag.org/nils/s3a_512kb.html) , I found some Hitachi 628128 memory on eBay. I was unable to find any of the original Sony ones. Once delivered I carefully soldered them into place. (psion021.png)
21. I checked every soldered connection five or six times and re-assembled the device, which is the reverse procedure. Be careful closing it as the bowed button bar can catch, so push it flat as you do this. When I powered it up everything look promising, but as soon as I opened a

app, I saw the message "Memory corruption". I took it apart and checked the soldering again, but it all looked as it should, so all I can think of is it's incompatible memory.

22. A week or so later I saw a 512K 3a on eBay with a faulty screen. That'll do nicely I thought, and won it for £2.99. I swapped main boards and now have a working 512K

3a.(psion022.png)

23. ....or so I thought.....to be continued.