<u>GoDRIvE600</u> A600 Floppy emulator:



GoDRIvE600 is a complete solution for people who want to have a floppy drive emulator in their A600, but don't want to sacrifice the original floppy drive.

GoDRIvE600lets you have both inside and switch between them on the go. Both act as DF0:

You can use either an FDD or floppy drive emulator, but **NOT** both at the same time.

Features:

- purposely designed PCB to fit under A600 FDD with all necessary brackets.
- ability to switch between both (FDD and GoDRiVE600)on the go. Letting you copy in between (FDD to .ADF and vice - versa)
- Buzzer with amplifying circuit to hear emulated floppy sound's even through FDD and case. (FF.cfg adjustable)
- No modification to the case needed.
- Used FFC tape instead of dupont connectors (much neater and easier to feed FFC through case vents).

- Breakout box with all necessary features (Large 1.3" OLED screen, rotary encoder with switch, activity LED light, drive selector and USB socket) all fitted on purposely designed PCB.
- In case you want to put addons (USB, Screen, Rotary encoder) in different position instead of using breakout box, all necessary connections are on the PCB
- Running the most popular FlashFloppy firmware, thanks to Keir Fraser. <u>https://github.com/keirf/flashfloppy</u> – strongly recommend to visit his page for the latest firmware updates, "FF" config guide and to donate his hard work.



GoDRIvE600 set:

Included:

- GoDRIvE600 PCB board
- FFC connecting cable 30cm
- Breakout box
- Brackets
- Y-power split cable



FITTING MANUAL:

1.Turn your A600 upside down and remove 4 screws.



2. Turn it over and lift the front of the top case gently to let your hand in and unplug the LED activity lights connector on the right hand side first before fully opening!!!

3. Lift keyboard tab before removing keyboard flexible tape from the socket and put the top case with keyboard somewhere safe.



4.Remove 34 pin floppy drive data cable and power cable from the FDD 5. Remove 3 screws holding FDD, one inside, 2 outside:



6. Now you can remove the Floppy drive and 34 pin data cable. You should see this:



7. Now it's time to fit the new **GoDRIvE600**.

But before it's done we need to connect the FFC cable as it's underneath **GoDRIvE600** PCB. If you plug the emulator to the A600 motherboard beforehand, you'll lose access to it. The PCB sits directly on the FDD 34 pin motherboard connector.

8. Turn the emulator PCB upside down and remove the plastic bracket close to the FFC connector for easy access, lift the FFC connector tab.



9. Insert FFC tape, BLUE side as shown in the picture, make sure that FFC tape sits properly, then lock the tab back in.



10. Put supporting bracket back in place (next to FFC connector)
11. Time to fit GoDRIvE600 PCB directly on the 34pin FDD connector.
12. TAKE YOUR TIME, AND MAKE SURE IT'S ALIGNED
CORRECTLY.

ANY MISALIGNMENT CAN CAUSE MALFUNCTIONING/ DAMAGE TO THE EMULATOR/ MOTHERBOARD!!!

13. If fitted correctly, you should see motherboard capacitor in the centre of PCB cutout hole (bracket removed for picture purposes)





Above picture just shows the side view of **GoDRIvE600** fitted with FDD on top and the purpose of brackets.

14. Time to connect 34pin FDD data cable and Y – split power cable.
For the best results guide them as shown in the picture.
(TAKE NOTE ON THE CORRECT ORIENTATION OF THE 34PIN DATA CABLE – PIN 1 ON THE RIGHT HAND SIDE)



15. Now it's time to put FDD back in place, but before it's done, make sure that FDD data cable is fitted correctly to avoid any trouble. Once Floppy drive sitting correctly put 3 screws back in and connect 34pin data cable and power cable on the FDD side. It should looks like this:



16. Now it's time to bring the top case back in and feed FFC cable through the vents as in the picture.



17. Connect keyboard flexi tape back and lock connector tab back in.18. Bring the top case back in place leaving a small gap to reconnect the activity LED light connector, also making sure that FFC tape does not fall back inside the case.



19.Time for a breakout box. 1st. Put it upside down and remove the bracket by pushing it down first. Then 2nd. Grab it in the middle and lift it gently until it comes off.



20.Lift FFC connector tab and place the bracket back on the FFC cable as in the picture before connected to the FFC connector. Then place FFC tape BLUE side as in the picture - firmly, then lock tap back in.



21. Time to put the bracket back in place. Slide one side into the groove as in the picture.



22. Grab in the middle as previously, keep it bowed and slide the other side back in the groove. And then slide the whole bracket back to the top groove.



23. Time to place the breakout box in place and test before we put A600 screws back in. It should looks like this:



Side note: Due to the nature of 3D printing and the fact that you fit it on a 30 year old machine **discrepancies may occur**, therefore notches underneath breakout box are more likely for guidance only. I do recommend to use some sort of non invasive adhesive solution (double sided tape) to keep it in place.

24. If everything was connected correctly, you should be greeted with the FlashFloppy logo on the OLED screen like in the picture below.



And you should hear "famous" clicking sound either from FDD or GoDRIvE600 emulator buzzer depend on "drive selector switch" position.

Time for a quick test before putting everything back together. Prepare known working floppy disk and USB thumbstick FAT32 formatted with couple of .ADF images.

Plug USB thumbstick to the right side of the breakout box.



.ADF image names should appear on the screen. By using a rotary encoder choose which file you want to load and check if loading correctly.

Once tested, move "drive selector" to FDD position and insert Floppy disk to check if loading correctly, if happy with the results you can finally put your case and screws back together!

- In any case if something not working correctly(either drive not responding correctly), check back all the connection fitted firmly and correctly.
- Each emulator is tested prior to shipping
- Everytime switching between drives you should re-insert either .ADF image or floppy disk as they might not appear automatically. (MCU dependent)
- I CAN'T BE HELD RESPONSIBLE FOR ANY DAMAGE OCCURRED TO THE GoDRIvE600 OR/MOTHERBOARD CAUSED BY INCORRECT FITTING!!!



INFO@DIGITALRETROBAY.CO.UK 2022 (C)