GitHub repository: https://github.com/jambuur/APEDSK99

Dear TI enthusiast,

Thanks for choosing APEDSK99! I hope you will get as much pleasure out of using it as I do.

Please check the below to get APEDSK99 up and running as quickly and smoothly as possible:

- Have a read of the APEDSK99 GitHub page to learn about its quirks and features
- Program your Arduino UNO with the latest APEDSK99 software from the GitHub repository. You will find there are specific (versions of) libraries provided you will need to install within your Arduino IDE. Without these libraries the software won't compile or will be too large to fit within the Arduino's memory.
- Fit the APEDSK99 to the Arduino, pushing it all the way down and making sure all pins are connected
- Prepare a SD card with the contents from the GitHub repository and insert into the Ethernet Shield reader slot
- Test APEDSK99 by applying power to the Arduino. The LED should briefly flash, and this should be repeatable by pressing the Ethernet shield reset button. If the LED flashes a pattern:

    - *Flash: SD Card fault/not ready*. Make sure if the SD card is fully inserted and is readable on another device. Although I haven't specifically experienced it myself with APEDSK99, SD cards can be temperamental. Try a different SD card if you can.
    - *Flash-Flash: can't read DSR binary image (/xxxxxxxx.DSR).* Check if the SD card has a proper DSR file in the root.
    - *Flash-Flash-Flash: no valid DSR header (>AA) at DSR RAM >4000.* This could point to a hardware problem. Check if the power-up routine gets executed (see above). Check with a debugger (Easybug etc) if you can see data from >4000 onwards, specifically if you see the >AA02 DSR signature at >4000. If you don't see any data (so all >00's or >FF's), APEDSK99 is not recognised. Make sure all shields are properly fitted together, the I/O connector is pushed in all the way and you have a suitable power connection.

    If all is well, remove power and continue below; if all is not well please get in touch (see below).

- Thoroughly clean the TI's I/O port before you attach APEDSK99. Use something like a cotton swab with isopropyl alcohol or similar on top and bottom contacts. Oxidised contacts can definitely spoil the fun.
- Handle APEDSK99 by gripping the middle shield only. Especially when first used, the APEDSK99 I/O connector is rather stiff and will require some force to push in place or remove. Putting force on the Arduino or Ethernet shield can damage the shield interconnects. You will find it easiest to wiggle APEDSK99 in place.
- Turn on your TI.
- Apply power to APEDSK99, wait for the LED to go off and then <FCTN><QUIT> your TI. You should see a (very) brief flash of the LED, showing the DSR powerup routine has been executed.
- Go into BASIC, type "CALL AHLP" and press <ENTER>. The APEDSK99 help screen should pop up.
- To configure APEDSK99 for your network and be able to use NTP and FTP you will need the IP address(es) of your FTP and NTP host(s). I suggest trying these addresses on a PC etc before you configure APEDSK99 as the latter doesn't provide any network testing/debugging function. This is especially important when using addresses outside the local subnet as you will be relying on some forwarding/routing service to reach these hosts.

    Connect an Ethernet cable to the Ethernet shield, it should show some LED activity.

    Mount the configuration disk in DSK1 and run the following in TI BASIC (not EXBAS):

    - CALL MDSK(1,"AD99SUP")
    - OLD DSK1.ACFG
    - RUN

    Follow the prompts and see if you get the proper date and time displayed when finished.

Needless to say, if you run into unexpected problems, can't get APEDSK99 to behave or are otherwise unhappy with it just email me at burell@hotmail.com or ping me on AtariAge (JJB) and I will sort it out for you.

Don't hesitate to ask any questions or provide feedback, chances are it will improve the APEDSK99 experience for other users too.

Thanks again,

Jochen