vLA81 Installation v1.0

The vLA81 is designed for all models of the ZX81. It can be simply plugged into the existing ULA socket.
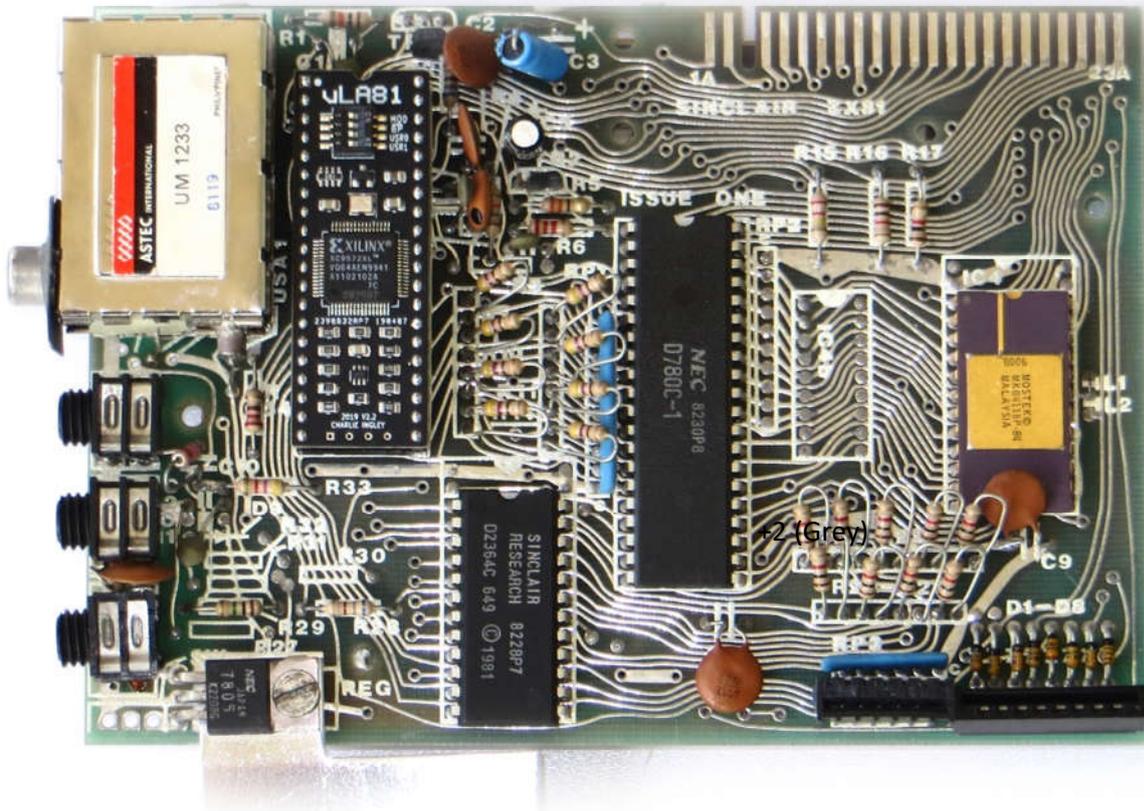

Fig.1 – vLA81 installed

Caution: Although the vLA81 is designed to withstand the forces required during normal installation, it will not tolerate excessive pressure or any bending. Care also needs to be taken if the vLA81 is removed as there are printed tracks under the PCB which can easily be damaged.
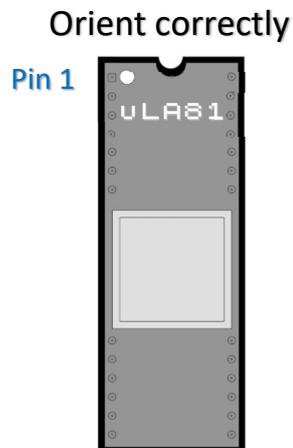
INSTALLATION STEPS:

Note: Although the installation procedure is straightforward it is assumed that the installer has a basic knowledge of electronics and understands the terminology and concepts contained within this guide.
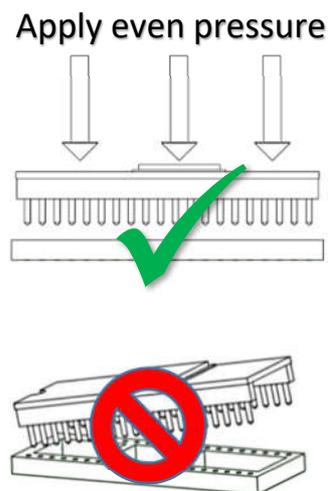
Caution: As the vLA81 is sensitive to static discharge please handle with care throughout the installation procedure. Avoid touching the vLA81 pins and the use of a grounding strap is recommended.

1. First repair any prior defects.
2. Ensure the ZX81 power supply is disconnected.
3. Remove the top case and unplug the keyboard membrane.
4. Remove the existing ULA.

5. Remove the vLA81 from the plastic antistatic shipping bag and orient correctly with pin 1 closest to the rear of the ZX81 PCB. Please refer to Fig.1 above.

Orient correctly

Pin 1

vLA81

6. Apply even pressure across the vLA81 top surface and press into the ULA socket.

Apply even pressure

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Do NOT bend PCB or insert at an angle

REASSEMBLY AND TESTING:

1. Reconnect the keyboard membrane and replace the top cover.
2. Connect the ZX81 to a video monitor and apply power.
3. If successful, you will be greeted with the K prompt.
4. Check that the video and keyboard are OK then check that both tape input (load a tape) and tape output are working as expected.
5. If all is in order then, congratulations, the vLA81 is fully operational!

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TROUBLESHOOTING:

If the ZX81 does not boot to the K prompt or any of the tests fail then it is possible that the vLA81 may not be seated correctly, may have been damaged during the installation or is faulty.

Some symptoms pointing to the vLA81 (assuming the ZX81 had no pre-existing faults) include a missing K prompt or corrupted screen data. Further fault diagnosis is beyond the scope of this guide.

If the vLA81 is suspected faulty or you have problems with the installation procedure then please contact me on vdrivezx@gmail.com.

Have fun!

Charlie Ingley

July 2019