

This is where the cartridge "ROM" image is stored. Not an actual ROM, or EPROM, but Flash RAM, which is way cheaper.

Maximum ROM size is 2MB.

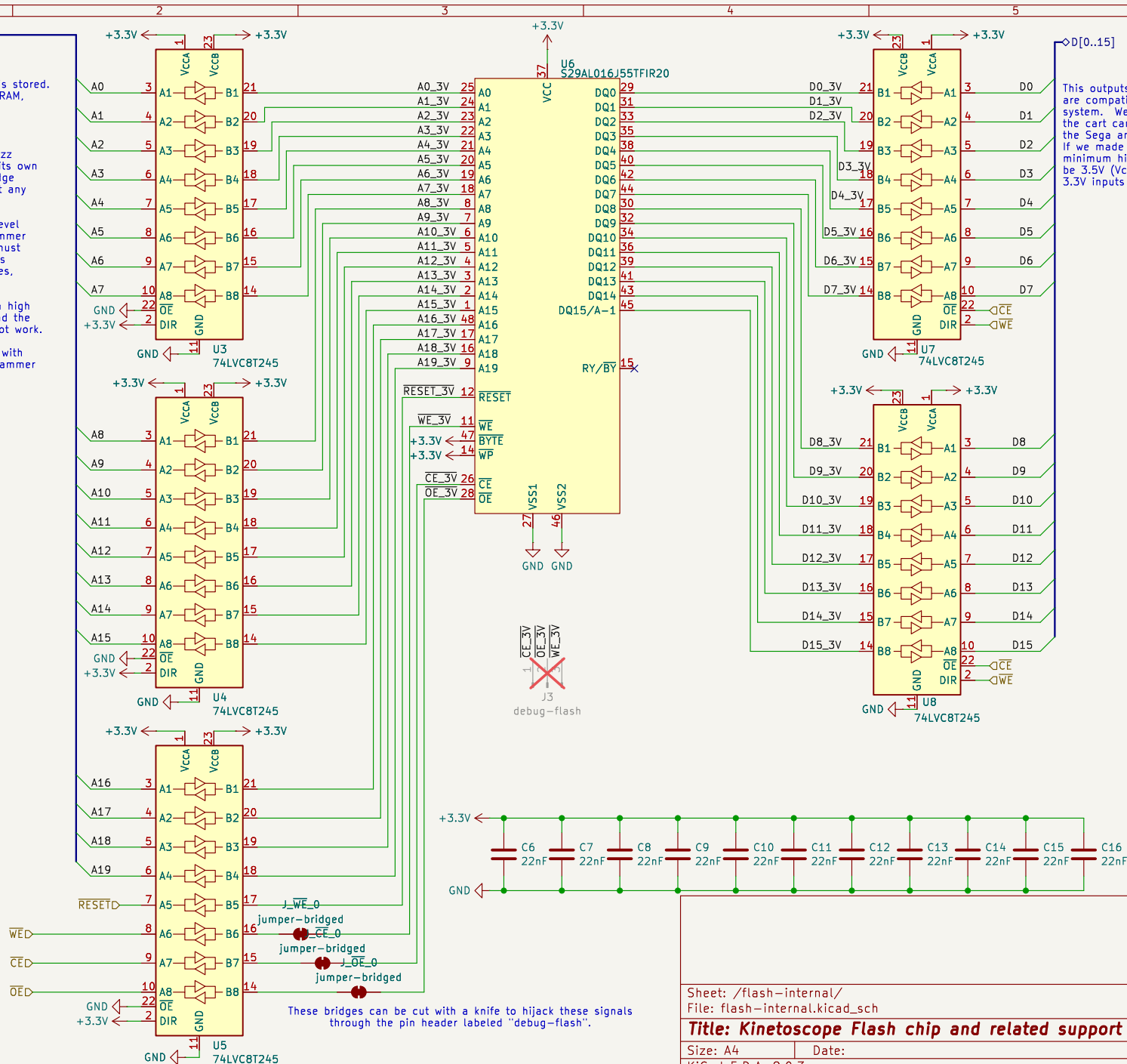
The flash chip is compatible with the Krikzz Flashkit MD Programmer. This chip gets its own voltage regulator so that this base cartridge board can be programmed directly without any other boards attached.

This 3.3V chip talks through a series of level translators. Because the FlashKit programmer uses 3.3V logic, all inputs to this sheet must work as either 5V or 3.3V. The translators will tolerate 5V input at all supply voltages, so we supply both sides with 3.3V.

If we used 5V for VccA, then the minimum high level for input would be 3.5V ($V_{CC} \cdot 0.7$), and the levels from our 3.3V programmer would not work.

This arrangement allows for compatibility with both 3.3V signals from the FlashKit Programmer and 5V signals from the Sega.

This outputs at 3.3V logic levels, which are compatible with the Sega's 5V TTL system. We rely on this fact so that the cart can remain compatible with both the Sega and the FlashKit programmer. If we made the right side 5V, then the minimum high level for data input would be 3.5V ($V_{CC} \cdot 0.7$), which would cause 3.3V inputs not to work right.



Sheet: /flash-internal/

File: flash-internal.kicad_sch

Title: Kinetoscope Flash chip and related support circuits

Size: A4

Date:

Rev:

KiCad E.D.A. 8.0.3

Id: 2/2