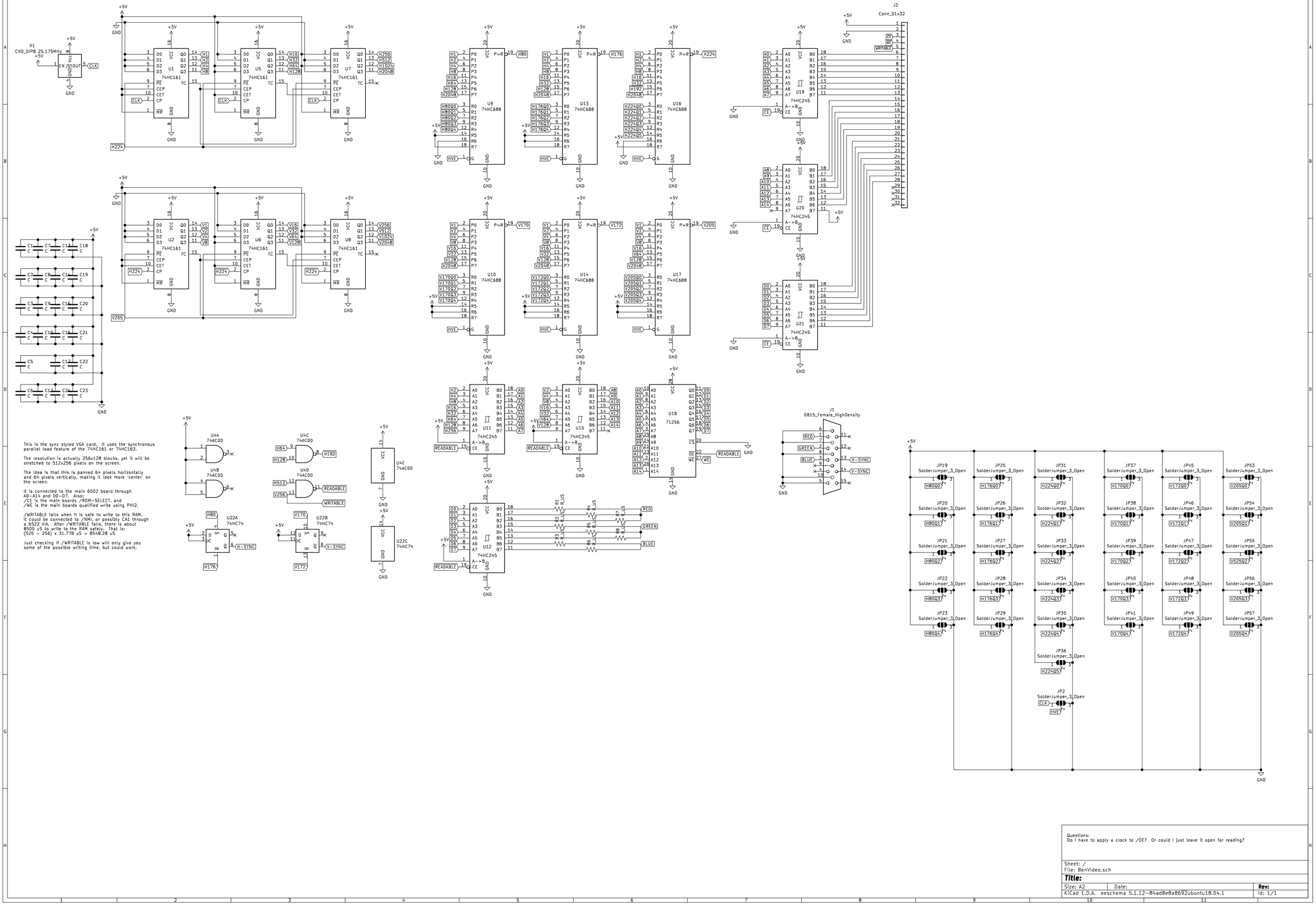
This is the sync styled VGA card. It uses the synchronous parallel load feature of the 74HC161 or 74HC163.
The resolution is actually 256x128 blocks, yet it will be stretched to 512x256 pixels on the screen.
The idea is that this is panned 64 pixels horizontally and 64 pixels vertically, making it look more 'center' on the screen.
It is connected to the main 6502 board through A0–A14 and D0–D7. Also /CE is the main boards /ROM–SELECT, and /WE is the main boards qualified write using PHI2.
/WRITABLE falls when it is safe to write to this RAM. It could be connected to /NMI, or possibly CA1 through a 6522 VIA. After /WRITABLE falls, there is about 8500 uS to write to the RAM safely. That is: (525 – 256) x 31.778 uS = 8548.28 uS
Just checking if /WRITABLE is low will only give you some of the possible writing time, but could work.
Questions:
Do I have to apply a clock to /OE? Or could I just leave it open for reading?
Sheet: /
File: BenVideo.sch
Title:
Size: A2
Date:
Rev:
KiCad E.D.A. eeschema 5.1.12–84ad8e8a8692ubuntu18.04.1
Id: 1/1