

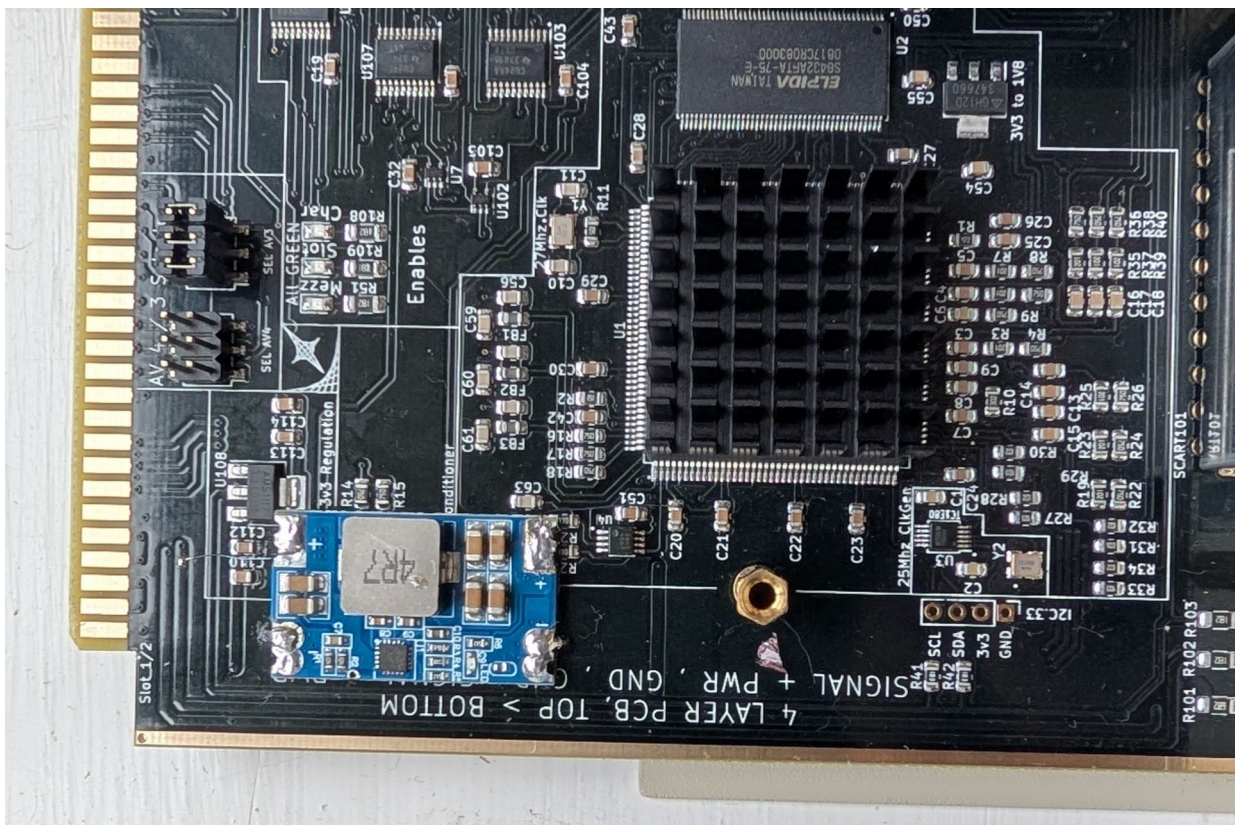
## Appy's Retro Scalar upgrade instructions

### Introduction

Firstly, this is to fix the Wiggle that does affect all boards but is only noticeable in very specific circumstances. So people using the Scalar to display desktop environments like AmigaOS Workbench or TOS on Atari ST range or high colour games with vertical lines or shapes. Even then it only shows up in high colour and vertical lines that show a slight wave.

This has taken a while to fix due to Appy's ill health, but it is to do with the 3.3v regulator we used being slightly noisy and during testing I did not pick up on this sadly. Please understand this is a Kickstarter project and something that does not exist in the market and this was a small flaw that we are fixing before we move on. So once you have replaced, please share this information within your community so we can move on.

This is the Scalar modification, as you can see a small regulator to supply cleaner 3.3v to the TrueView chip under the heat sink. Note there are a couple of very neatly hidden cables and cut tracks in this modification.



So basically what you are doing is replacing your existing scalar with this new Scalar. It is fairly straight forward process.

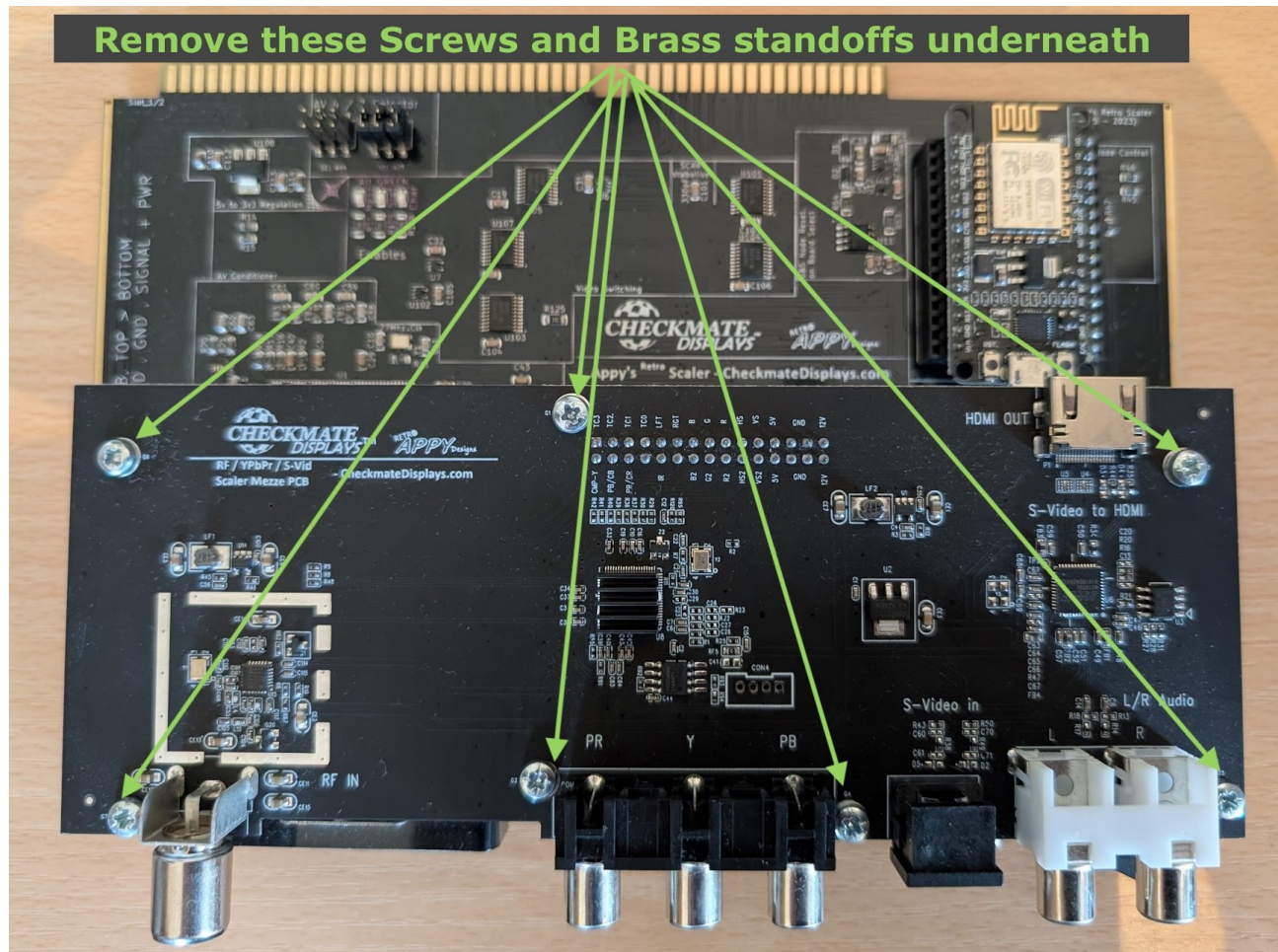
## IMPORTANT

Before you do anything, disconnect the power supply!!

If you have the SVideo board connected to the scalar please remove the SVideo cable from the scalar before fully pulling out the assembly. Leave the SVideo cable connected to the Slot-0 to save reconnecting.

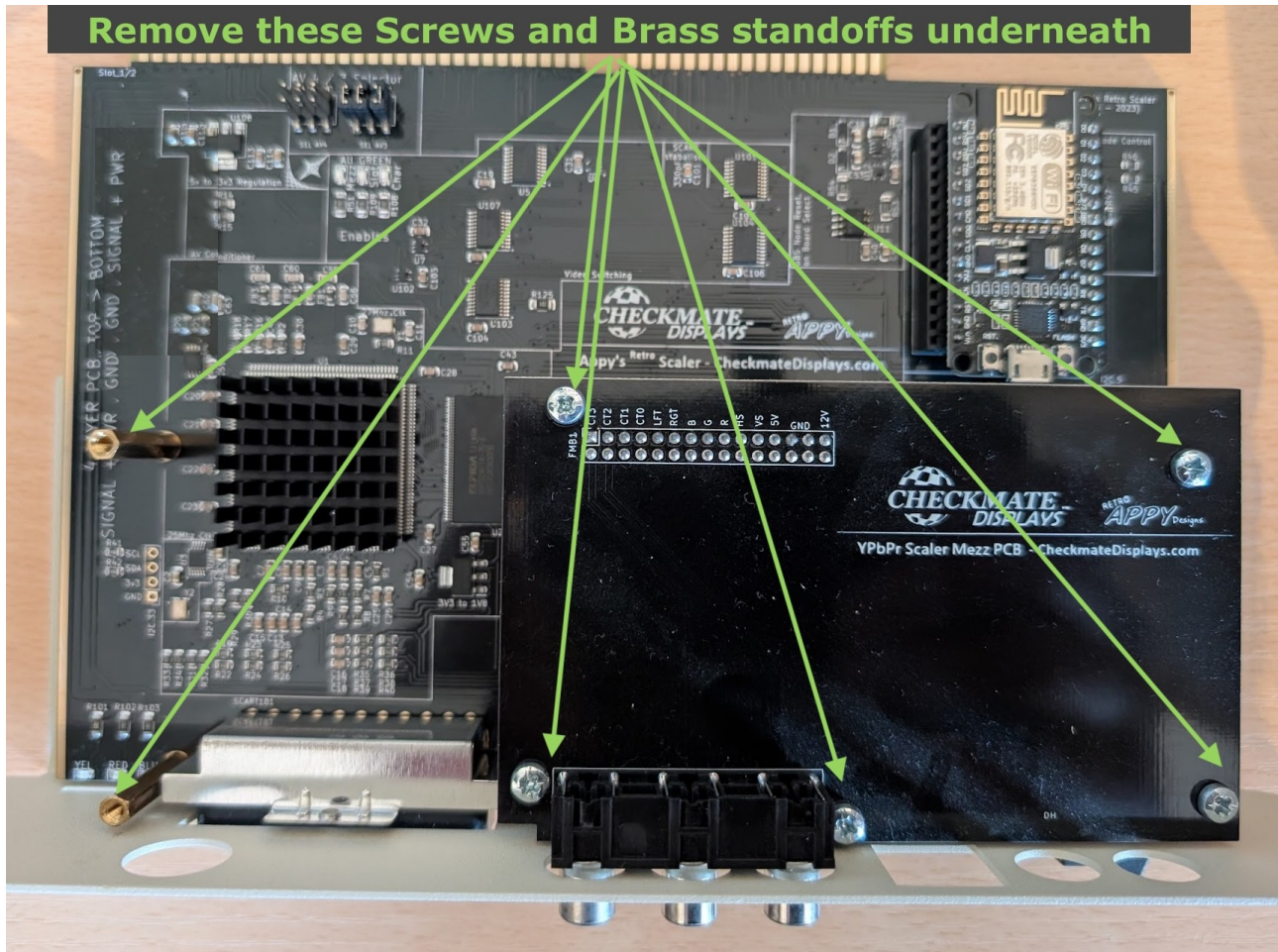
Remove the two thumbscrews and slide out the Scalar Pod and remove it.

If you have the SVideo board !!





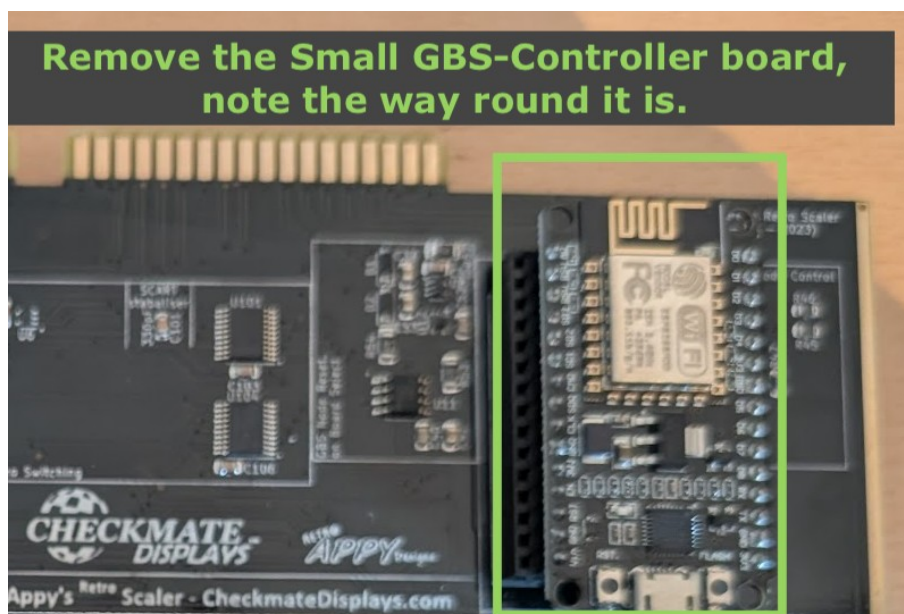
If you do not have the SVideo board



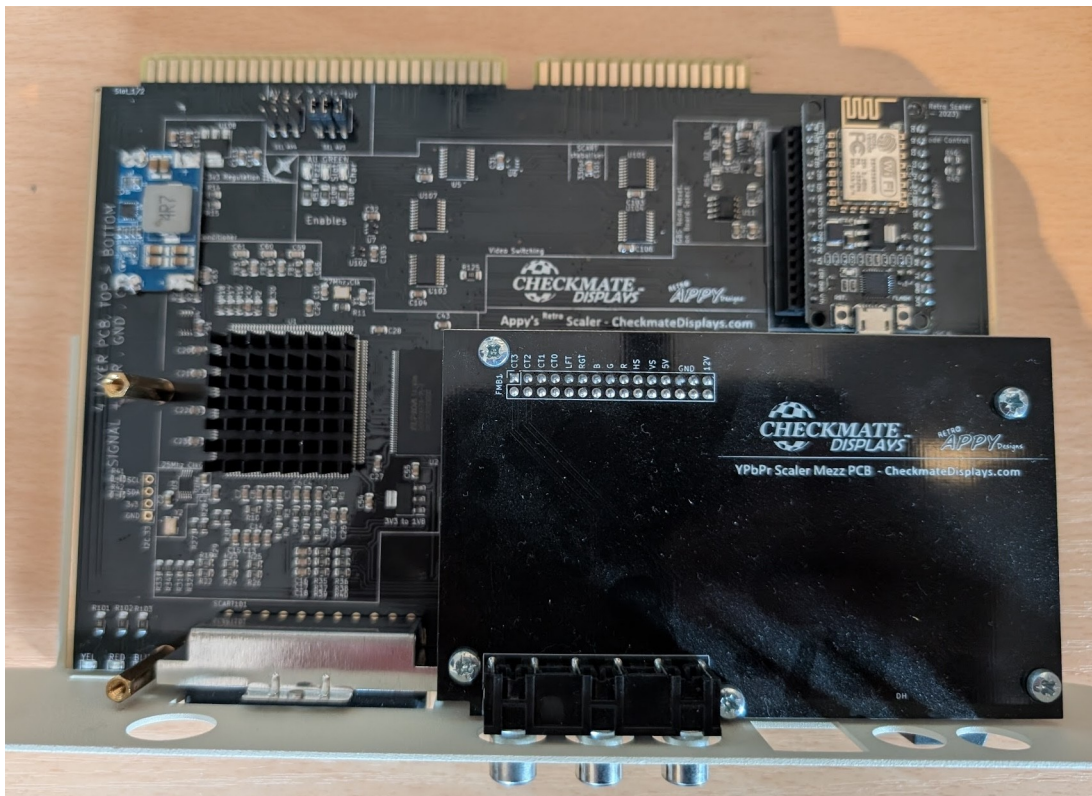
When you have removed the screws and brass standoffs, you can remove the old board.

GBS-Controller moving

Remove this small controller board and fit to the new scalar board the same way round using the centre pins of the connector.



Now refit back into the metal frame as you took it out, screw the brass spacer into place, fit the boards as they were with the screws you have.



## IMPORTANT

If you have the SVideo board, reconnect the cable.

Now slide the Pod back into the monitor and push into the slot. This does take some pressure, so maybe lay the monitor face down onto a towel on a flat table and push the bottom of the Pod frame until it clicks into place.

Replace the thumb screws.

Test it is all working.

Finally package up the old board back in the box that the replacement arrived in and return to us in the UK, or if in Europe to [DragonBox.de](http://DragonBox.de)

Thanks

Steve