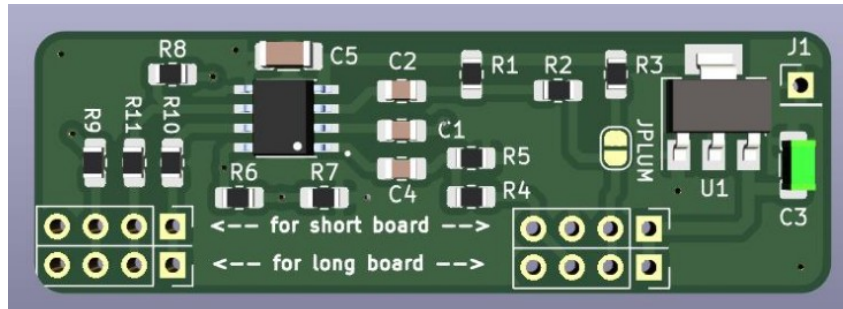# Commodore C64 Analog Video Enhancement

Ver 1.0

Introduction

This guide describes the installation steps in order to replace the RF Modulator on the Commodore 64 with the C0pperdragon RF Replacement module.

The analog replacement PCB is meant to replace the RF modulator and provides a cheap solution for improving the original video signals.

C0pperdragon's open source project can be found here:
https://github.com/c0pperdragon/C64-Video-Enhancement/tree/master/analog_only

MyRetroStore cannot be held liable for any damage or injuries that may occur due to incorrect handling or installation of this product. It is advisable to wear a anti static wrist strap when handling any electronics, especially the old retro computers

Installation

1) Remove the RF modulator. This requires a soldering iron with decent wattage as there are large ground planes. Take care not to damage any tracks while removing the RF modulator.

2) Once the RF modulator has been removed and pads cleaned, solder the 2 x 4 pin headers in place. Ensure they are vertical (90 degrees) before soldering in place.
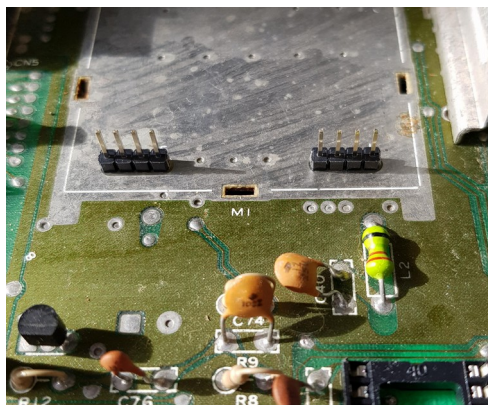
3) Solder the Video Enhancement PCB to the pins. Take note of the orientation and pin placements for longboard and shortboard.

Long board ASSY No: 326298, 250407, 250425, 250466
Short board ASSY No: 250469

Leave a gap between the PCB and the motherboard to ensure it does not short out against the ground plane.

If you are installing on a longboard using a NMOS VIC-II chip (12V) then you need to short (close) jumper JPLUM

4) Solder a short piece of insulated wire from J1 (Top right) to a convenient ground point on the motherboard.

Do NOT power up the C64 until the ground wire has been installed otherwise you risk damaging the C64
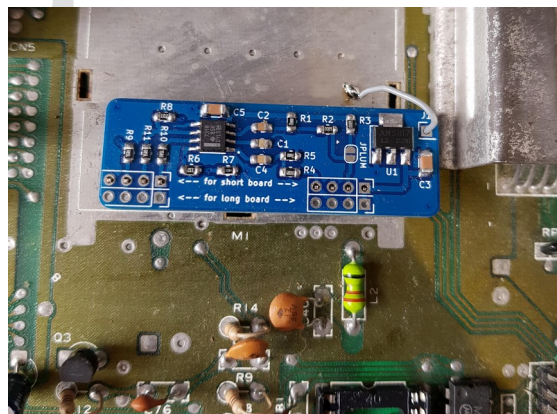
5) Double check your connections, ground wire, Long/Short board options before closing up the C64 and powering on.