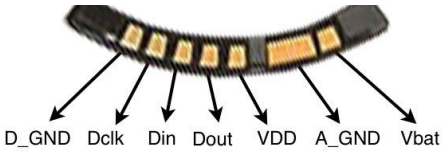
Canon interface board model A installation manual



Vbat:	Focusing Motor Power	A_GND:	Motor Ground
VDD:	Lens Digital Power	Dout:	SPI Data Camera Output
Din:	SPI Data Camera Input	Dclk:	SPI Clock and signalisation
D_GND	Lens Digital Ground		Connector view from camera side (face)

Lens contacts pinout

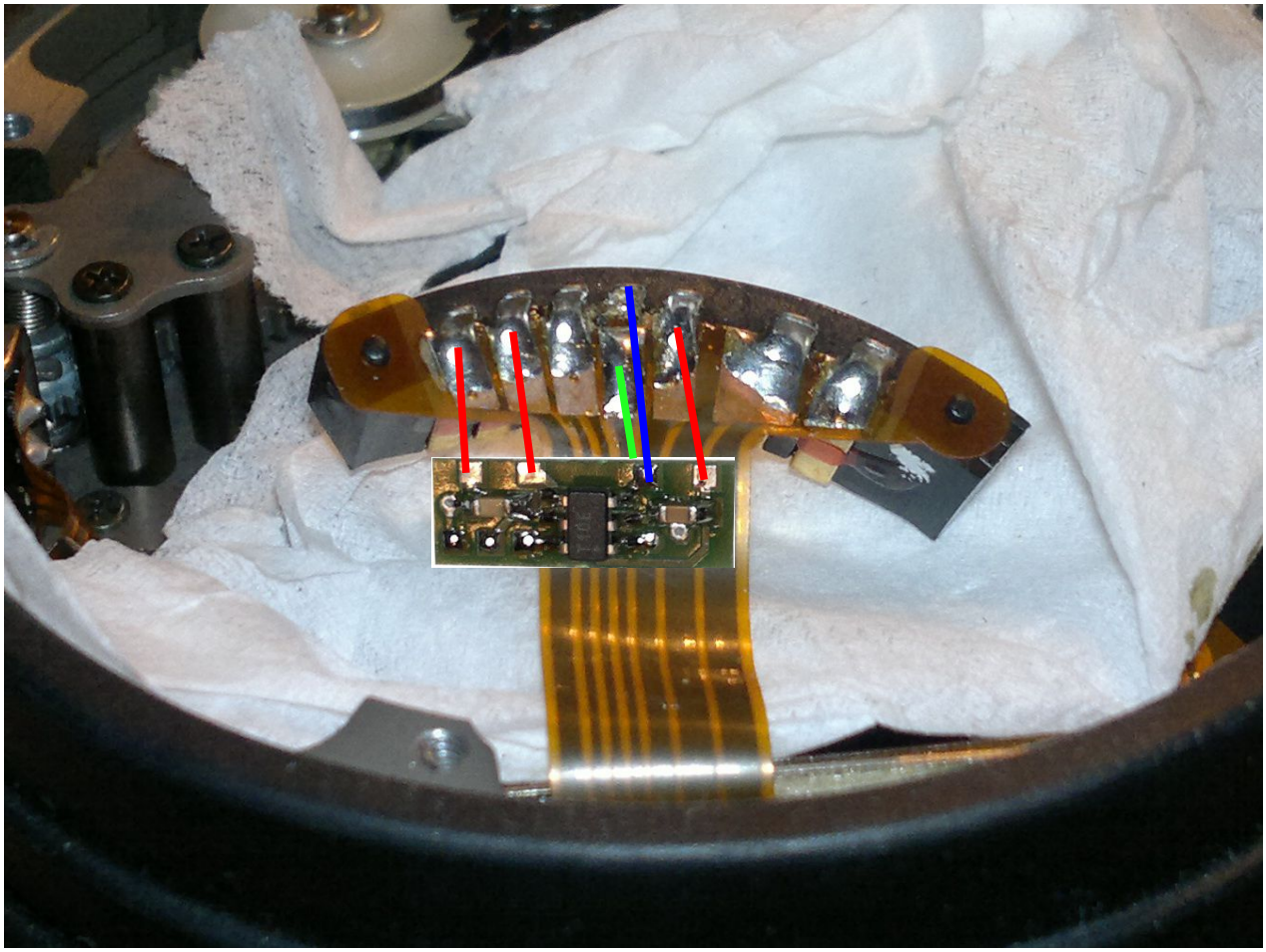
DISCLAIMER

I'm not responsible for any damage or injury which can be caused by these steps. This procedure was tested but in case you want to follow it you have to take full responsibility for your work. If you don't experience to do this yourself I can offer you lens modification. Feel free to contact me on butterflybikers@btv.cz for more informations.

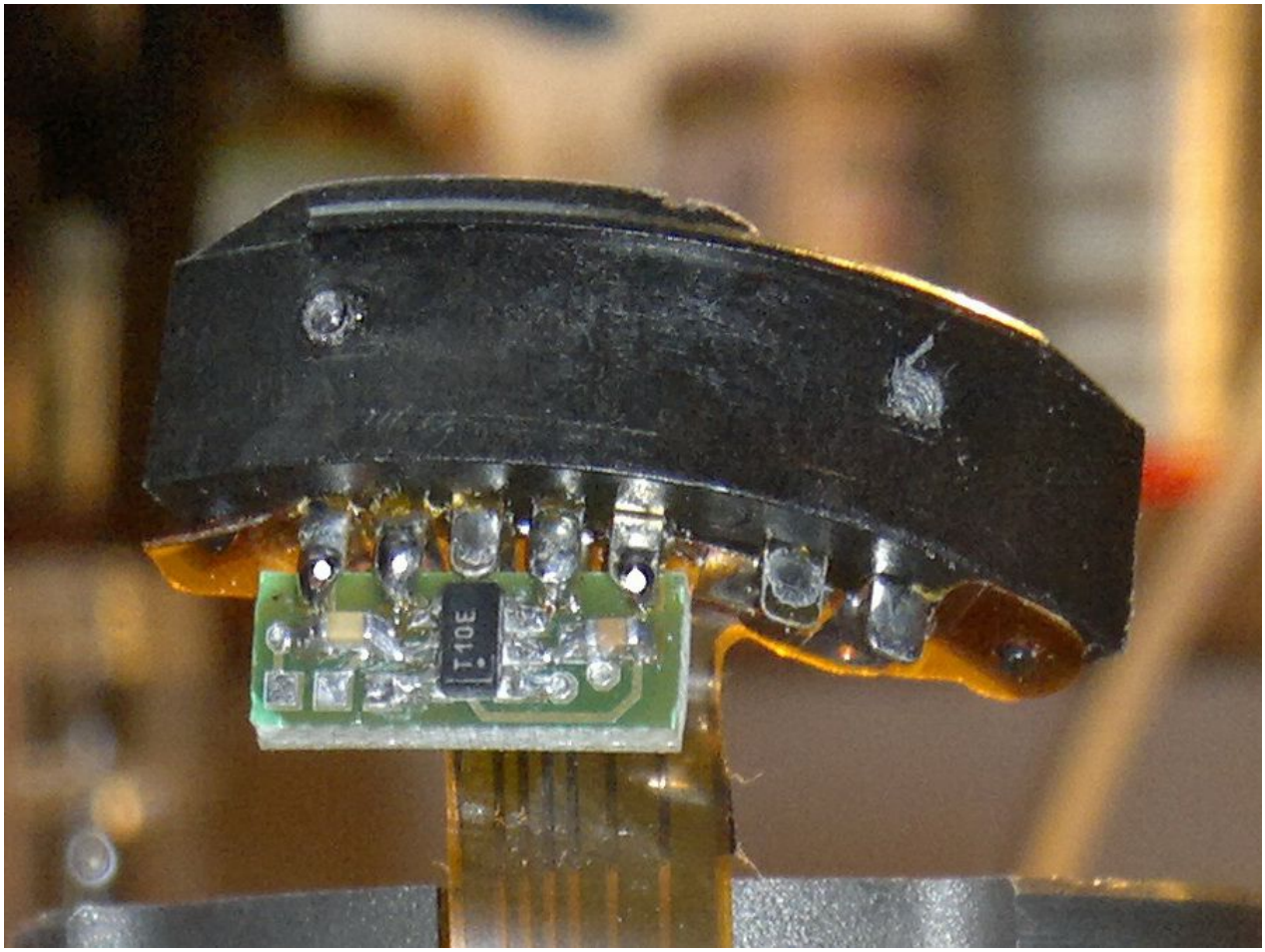
1. Open lens to get lens contacts to hand

2. Remove solder from Dout pin (marked by red arrow). Use solder wick to remove it.

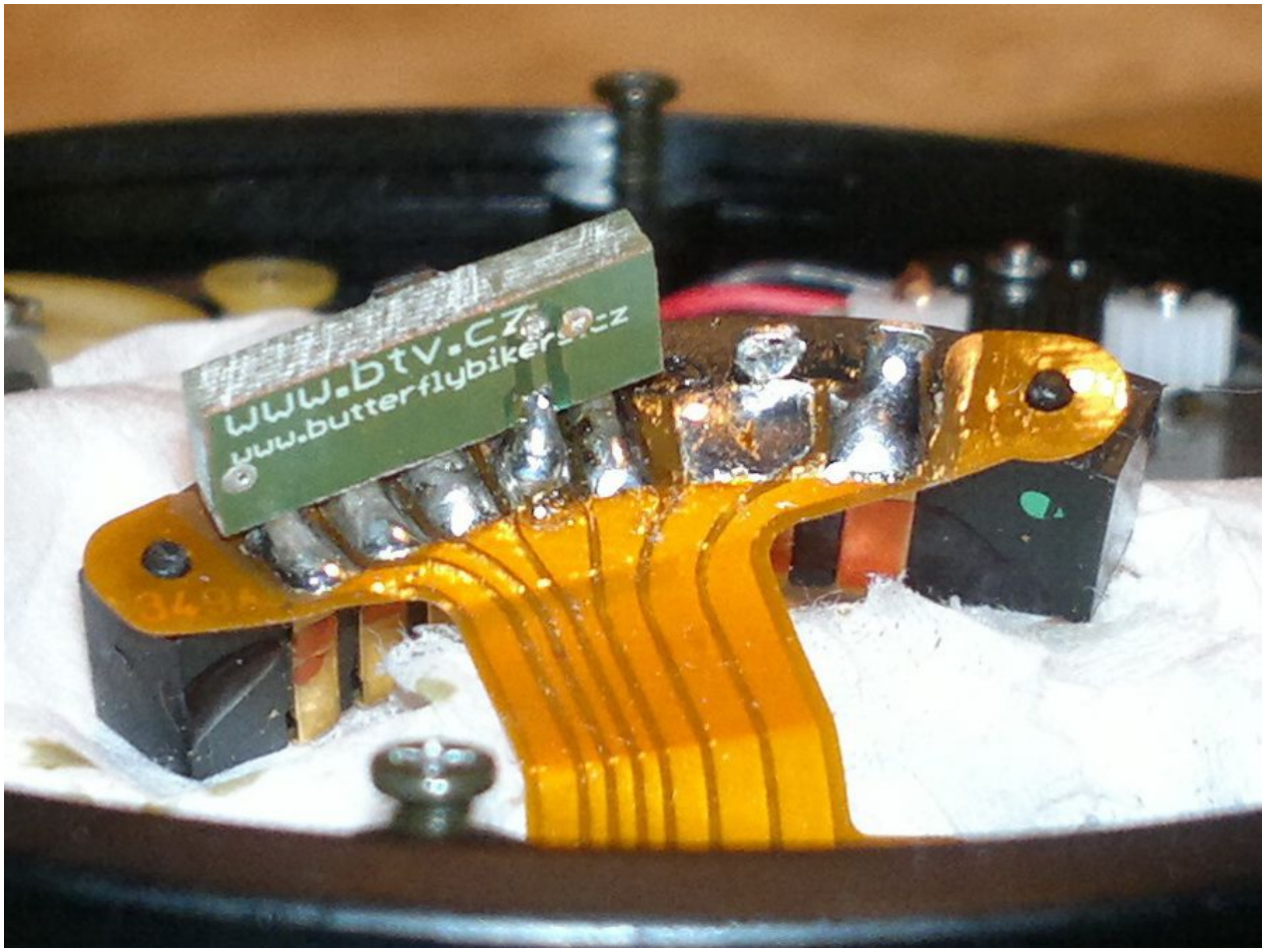
3. It is necessary to isolate pin and flex cable solder pad. To achieve this cut off 1mm of flex cable solder pad near pin. After this procedure there should be visible distance between solder pad and pin (highlighted by red rectangle).



4. Board needs to be connected as per image above. Dout input to board (marked by blue line) needs to be isolated from Dout output from board (marked by green line) Dout output from board is on bottom layer of board and connected to flex cable solder pad by wire which is supplied with board or can be connected by solder bridge.



5. Model A is designed to vertical installation as you can see on image. Also there is clearly visible how are solder pads on board soldered to individual pins as per diagram in step 4.



6. Dout from board is on bottom layer as mentioned in step 4. You can see here that pad is connected to flex cable solder pad by solder bridge. If you want you can make this connection by tiny wire which is part of package with board. Again make sure that Dout input to board and Dout output from board are not shorted by solder or by any other way. Check this by multimeter to be sure.

7. Now assemble lens and test it with camera. Following situations can happen:
a) Everything is working. Congratulations your job is done. Enjoy your lens.
b) Lens is not detected, camera shows 00 instead of aperture number. This means that lens is not getting data from camera. Check all connections and to be sure check with multimeter if there is no short circuit between pins.
c) Lens is detected but getting Error 01 as before modification. This means that data from Dout pin are not modified as requested. Check if lens contact pin Dout is not shorted to flex cable Dout solder pad. These needs to be isolated because MCU act as Man in the middle here.