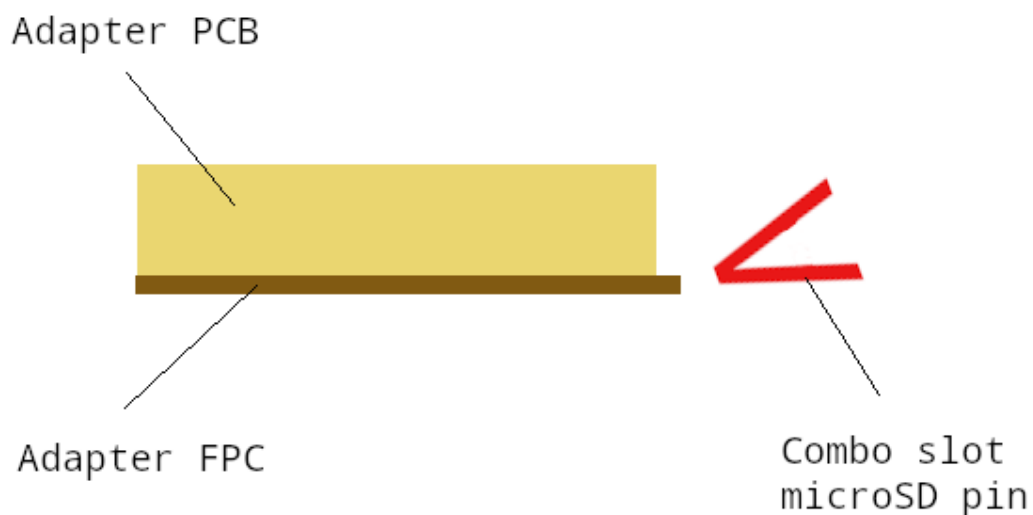


Proposed fix for the PinePhone microSD adapter/extender

Good news! The procedure for fixing the PinePhone microSD adapters/extendors is really simple and quick to do, and with a bit of practice one adapter can be fixed in a couple of minutes. Let me explain a bit what's the actual issue first, i.e. what caused bent pins when the adapter was used.

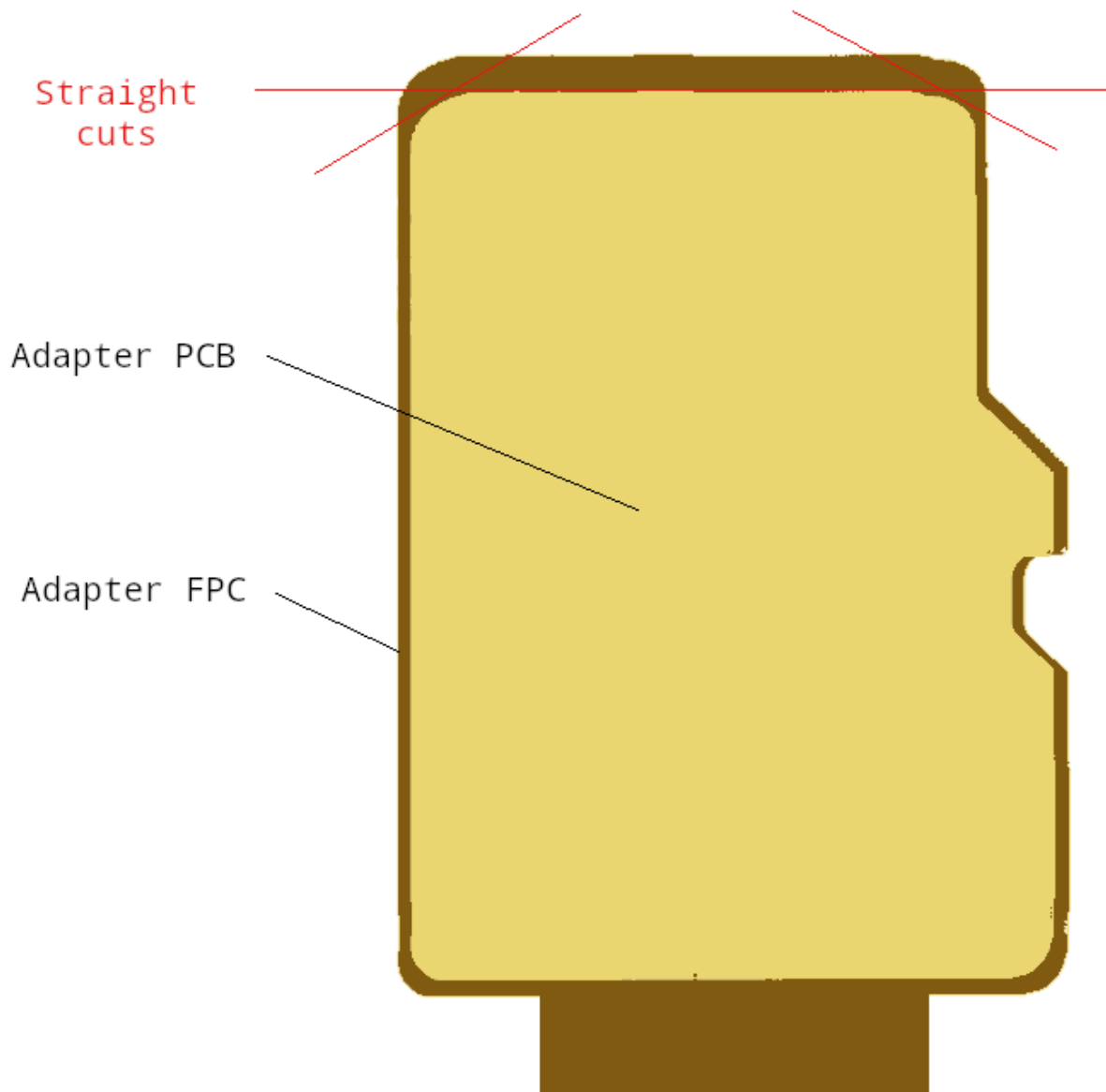
First of all, I can now confirm that the issue with bent pins that some people reported is real, but I'm not sure how often would inserting the adapter into the PinePhone's microSD slot actually cause bent pins. Perhaps often enough that using the unmodified adapter is unsafe. The issue is present because the male microSD side of the adapter's FPC is slightly larger than the small PCB that's of the same shape as the microSD card. As a result, there's a small "lip" on the mating edge of the male side of the adapter, which catches on the pins in the microSD slot and, in some cases, bends them. The "lip" and the profile of the microSD pins are visible in the picture below.



The above-described "lip" was slightly smaller on one of the two adapters that I got from you, due to small manufacturing variations. Though, it was still large enough to catch on the pins in the microSD slot. As a note, the "lip" itself was rather small on both adapters, but it was clearly visible when a magnifying glass was used to inspect the adapters.

The way I performed the fix was to cut off the "lip" and the small "ears" using really sharp, straight scissors, using the adapter's small PCB as a guide to align the scissors and perform the cuts. The resulting cuts were really nice and clean when inspected using a magnifying glass. I believe that the fix, including the inspection of the cuts using a magnifying glass, with a little

bit of practice can be performed in a couple of minutes. Please see the image below that shows the "lip", the small PCB, and the cuts in the FPC that I performed.

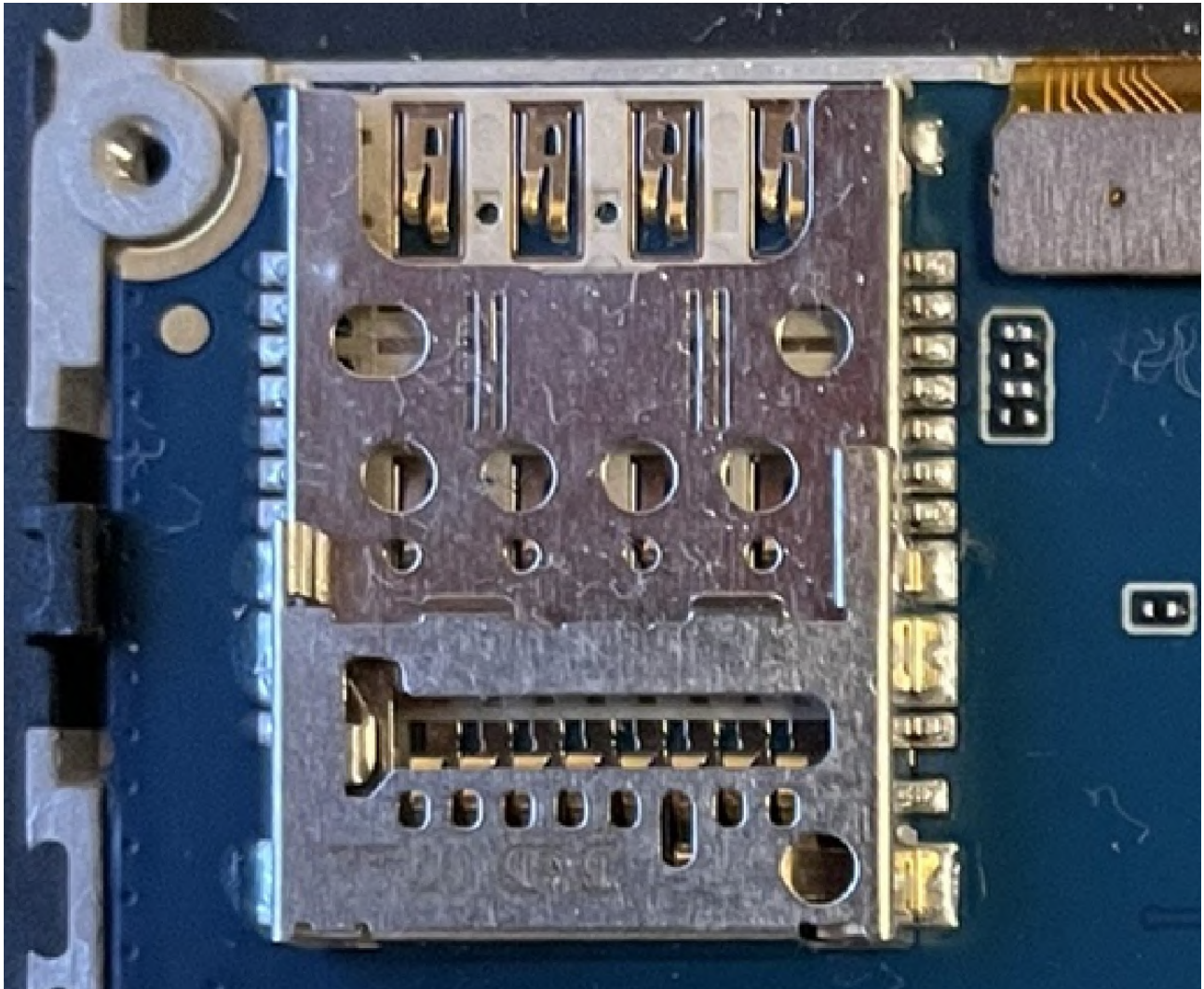


As a note, I also trimmed the small "lips" that were present around the other edges of the adapter's PCB on the male side, but that totally isn't mandatory. Only the "lip" on the mating edge is troublesome.

Both adapters that I got survived the fix perfectly fine, but I'd like to get another one, please, so I can have it as a spare part. I'll install both of the adapters I already got permanently into my PinePhone and PinePhone Pro, so I'd really, really like to have one more as a spare part.

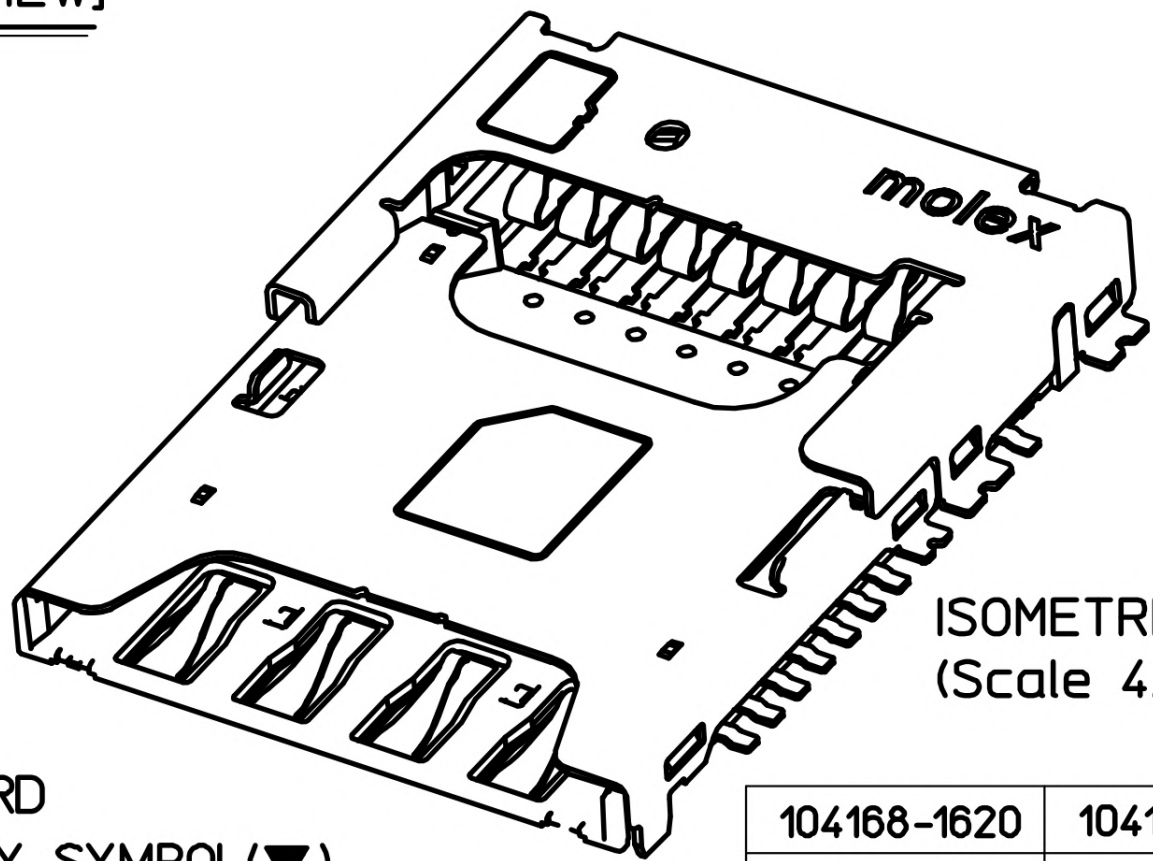
The remaining pictures show the way pins inside the microSD slot look like, as an additional illustration of the shape of the pins.

I got the pictures from different places and different community members, but the best pictures came from @biktorgj's attempt to replace the broken combo slot in his PinePhone Pro, which unfortunately ended up in lifted pads on the mainboard and no longer functional combo slot.





VIEW J



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