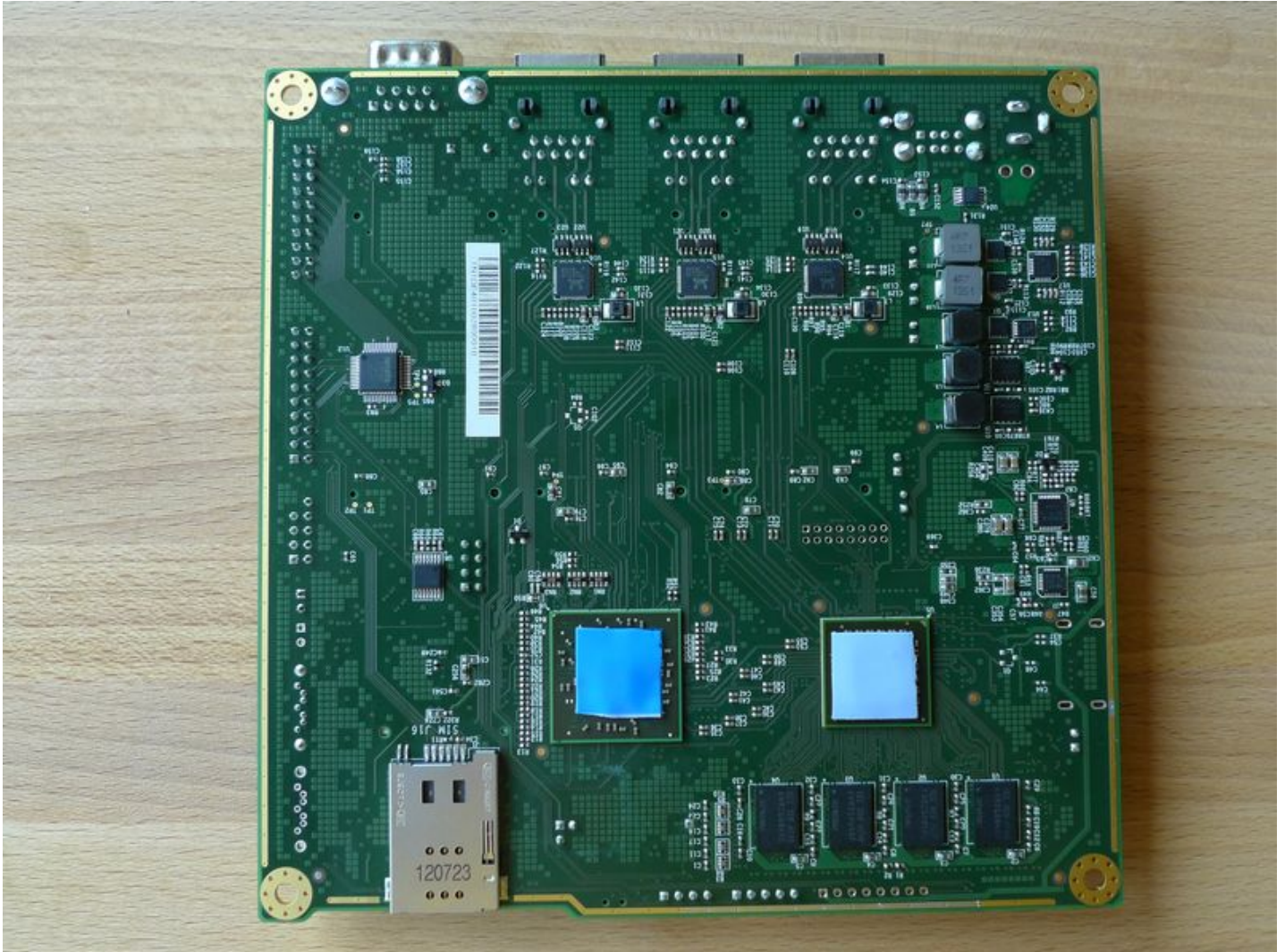


apu1c cooling assembly

The apu CPU and south bridge are passively cooled by heat conduction to the bottom of the enclosure. This assumes use of our enclosure. Third party enclosures should work if they are made from aluminium, and have a board standoff height of 5 mm. Based on our measurements, at full load the CPU runs a few degrees cooler in the black (case1d2blku) or red (case1d2redu) enclosures, compared to the plain anodized enclosure (case1d2u). There is a reason why heat sinks are usually black - better emissivity.

Remove DB9 hex nuts. Using a small x-acto knife or similar, peel transparent backing foil from the small heat spreaders. Apply to CPU and south bridge. Then peel the blue cover foil from the heat spreaders (shown removed on the right one).



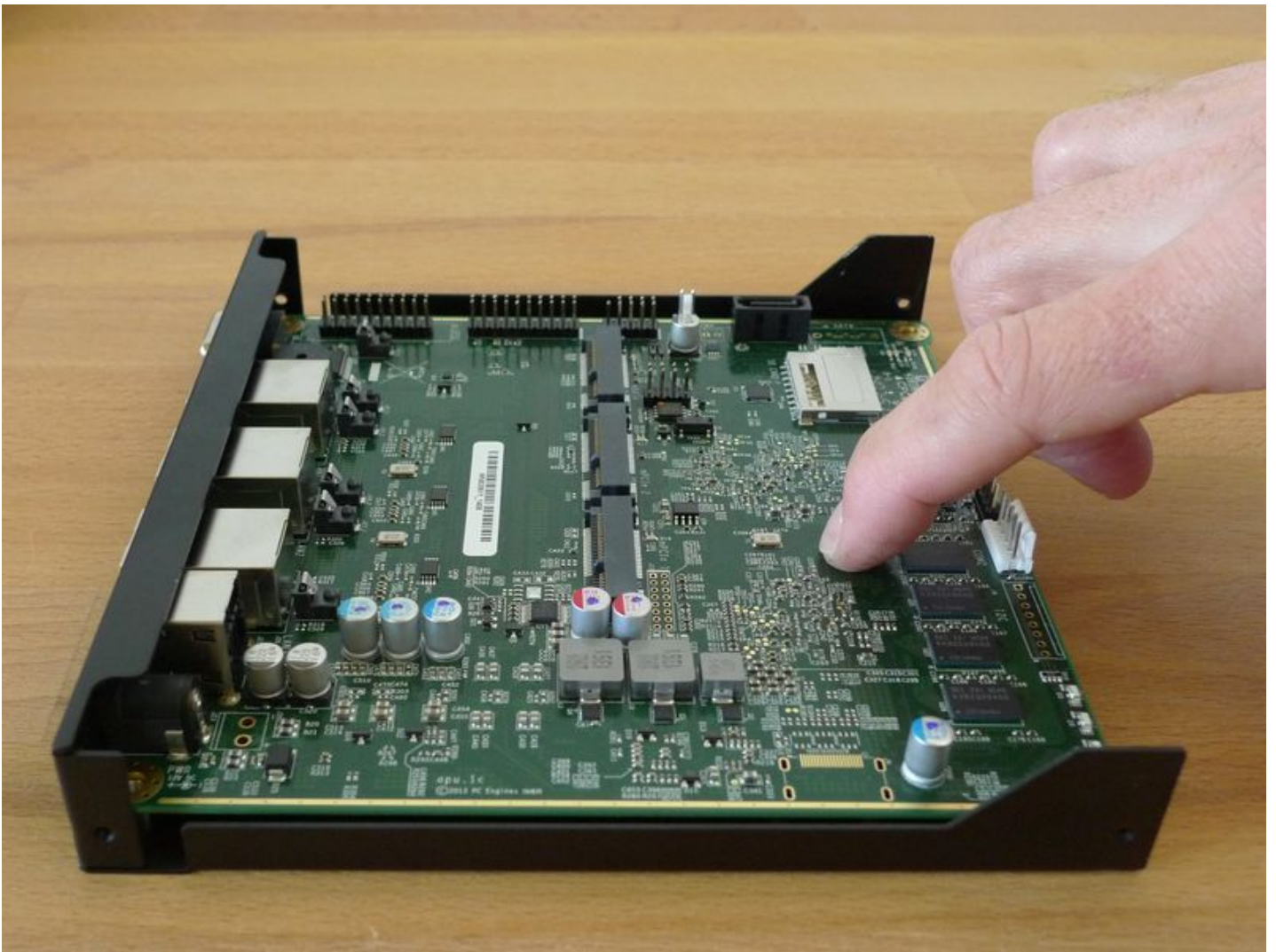
Place the alu heat spreader (blank side down) over CPU and south bridge. Make sure to avoid conflict with nearby through hole components. Peel the cover foil.



"Bottoms up" - hold the enclosure base upside down, feed the board DB9 and LAN connectors through the openings. Lightly press board and enclosure base together to stick the heat spreader in place.



Turn around and carefully press down around CPU and heat sink to get good contact between enclosure and heat spreader. Then insert screws and hex nuts.



Note: **Please avoid unnecessary disassembly**, the heat conductive pads are rather fragile. **Please contact us if you need replacements.** Spec for the thermal conductive pad: thickness 0.5 mm, thermal conductivity 6 W/mK or better. Due to the high power density of the CPU, pads with lower thermal conductivity will not work well.

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