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Our ref. **ESA-TECMSP-LE-016990-
rev1**

Noordwijk, 20/02/2020

VISA: T Rohr (TEC-MSP)

Subject: Qualification status of PCBs with ENIPIG from TESAT

Dear Ms Leucht,

TESAT submitted a PCB with ENIPIG finish and Invar technology to ESA for qualification renewal in Sep 2019.

The sample is evaluated in ESA-TECMSP-RP-016261. Minor dielectric cracks and low copper peel strength were observed. This triggered a group 6 evaluation. This is concluded to be acceptable as all observations are within the limits specified in ECSS-Q-ST-70-60.

TESAT has passed an audit by ESA in Oct 2019 with successful outcome as minuted in ESA-TECMSP-MIN-016566. TESAT accepted an action to evaluate the corrosion rating of ENIPIG during outgoing inspection, as already specified in ESA-TECMSP-LE-014379.

TESAT is considered qualified by ESA in accordance with ECSS-Q-ST-70-60C for the manufacture of rigid sequential epoxy PCBs in accordance with the following PIDs:

63.1500.570.41PID iss H.1 **until 1 Feb 2021**, which includes ENIPIG finish, Invar and microvias

Best regards,

Stan Heltzel
Materials & Processes Section