

Systronic
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France

Our ref. ESA-TECMSP-LE-025515 rev. 1

Noordwijk, 30/11/2021

VISA: S Heltzel, T Rohr (TEC-MSP)

Subject: Initial qualification rigid full PTFE and rigid mixed PTFE polyimide PCBs from Systronic

Dear Mr Mougnot,

Systronic submitted a qualification for rigid non-sequential full PTFE (Duroid RT6002) PCBs and rigid sequential mixed PTFE (Duroid RT6002) polyimide (Arlon 35N) PCBs.

The test results are documented in the Systronic qualification reports "SY 1033-20 Qualification Rigid Sequential mixed PTFE - Polyimide V5" and "SY 1054-21 Qualification Rigid Full PTFE - V3". The qualification results were reviewed and approved by ESA as well as Systronic's main customers. A close-out meeting held on 2 Nov 2021 concluded the successful outcome of the qualification.

Systronic also submitted samples to ESA for evaluation in December 2020. The evaluation results are reported in ESA-TECMSP-TR-022464 and ESA-TECMSP-TR-023939. The test report ESA-TECMSP-TR-022464 showed four deviations, which have been investigated by Systronic in the qual report SY 1033-20 V5. After this investigation, only one deviation was considered non-compliant with the specification: copper wedge voids larger than the defined acceptance criteria. The test report ESA-TECMSP-TR-023939 showed also copper wedge voids larger than the defined acceptance criteria. This has been investigated by Systronic in the qual report SY 1054-21 V3. The additional investigations performed by Systronic showed that these wedge voids are not detrimental to the reliability for this technology. This deviation is recorded in the Systronic PID 8 and PID 10 with the mention that it shall be reported in the CoC as an observation.

Systronic is considered qualified in accordance with ECSS-Q-ST-70-60C for the manufacture of Printed Circuit Boards as follows:

- Rigid non-sequential full PTFE (Duroid RT6002) PCBs as per PID 8 rev. 12 until 1 November 2023
- Rigid sequential mixed PTFE (Duroid RT6002) polyimide (Arlon 35N) PCBs as per PID 10 rev. 13 until 1 November 2023

Best regards,

Jussi Hokka
Materials & Processes Section