



estec

European Space Research
and Technology Centre
Keplerlaan 1
2201 AZ Noordwijk
The Netherlands
T +31 (0)71 565 6565
F +31 (0)71 565 6040
www.esa.int

Ciretec
att. J Jouffroy, site director
Zone d'activités, 1 rue Jean Monnet
45130 Saint Ay, France

Our ref. ESA-TECMSP-LE-6296

Noordwijk, 24/07/2017

VISA: T Ghidini (TEC-MS)
CC: A Bonzi (CNES)

ANORMAN
PP
Am.

Subject: Qualification Status of Ciretec

Dear Mr Jouffroy,

Ciretec of Elvia-group submitted samples of rigid and rigid-flex polyimide PCB technology to ESTEC for qualification renewal in Aug 2016. Insufficient coverage of tin-lead on hole corners was observed. This resulted in unacceptable solderability test. The results are reported in ESA-TECQTM-LAB-RP-002965 and ESA-TECQTM-LAB-RP-002967.

ESA requested corrective actions in letter ESA-TECQTM-LE-3689. Ciretec has responded to the actions in “ESA QUALIFICATION RENEWAL FOR RIGID AND RIGID-FLEX TECHNOLOGY” from Apr 2017. The investigation lead to an amendment of the solderability test. The acceptable third-party evaluations are shown in reports “1716a Ciretec PCB solderability evaluation” and “CQCI_17_078a”.

A second sample of rigid-flex PCB technology was submitted to ESTEC. It was found that coverage of tin-lead was still below 1 micron but the solderability was acceptable. The results are reported in ESA-TECMSP-LAB-RP-005362. The qualification renewal is considered acceptable.

Ciretec is considered ESA qualified in accordance with ECSS-Q-ST-70-10C for the manufacture of Printed Circuit Boards as follows:

Rigid sequential polyimide PCBs as per PID 2015-02 ind 1 **until 1 August 2018**

Rigid-flex sequential polyimide PCBs as per PID 2015-03 ind 2 **until 1 August 2018**

Best regards,

Stan Heltzel
TEC-MSP Materials & Processes Section