

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

Systronic Att. Mr P Pernot 6, avenue de l' atlantique Z.A. Courtaboeuf 91955 Les Ulis Cedex France

Our ref.

ESA-TECQTM-LE-0874

Noordwijk, 22/06/2015

VISA: T Ghidini (pp TEC-QT)

CC: W Veith, M Nikulainen, J-L Lortal (CNES)

Subject: Qualification Status of Systronic for Rigid-Flex Epoxy PCBs

Dear Mr Pernot,

Systronic performed delta qualification for rigid and rigid-flex High Tg epoxy PCBs using laminate PCL370HR from Isola. The qualification of the rigid technology was previously granted in QT/2014/252/SH. The present letter describes the qualification status for rigid-flex epoxy PCBs.

Systronic reported the delta qualification of rigid-flex epoxy in SY743/13. ESTEC reported the acceptable evaluation of a PCB sample in QT7845. The outcome of the evaluation is documented in QT/2014/230/SH and a conclusion is given in QT/2014/243/SH, which reports that IST testing was still a pending action. This was traced as AI-14-10, raised during the audit QT/2014/244/SH. In April 2015 a new audit was performed during which this action was adequately answered, as described in MoM ESA-TECQTM-MIN-0785.

Systronic is considered qualified in accordance with ECSS-Q-ST-70-10C for the manufacture of printed circuit boards as follows:

Rigid-flex non-sequential HTg epoxy

as per PID 4 v8

until 1-7-2016

Best regards, ¿Stan Heltzel

Materials Technology Section TEC-QTM