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MEMO

Date	25/09/2015	**Ref**	ESA-TECQTM-MO-1082
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To	Industry, PCB/SMT WG	**Copy**	S. Heltzel, T. Ghidini

Subject: New requests for ECSS qualification of PCB manufacturers by ESA

Qualification of Printed Circuit Board (PCB) manufacturers for space is specified in ECSS-Q-ST-70-10C. The role of qualification authority has been fulfilled by ESA. Memo QT/2010/018 is the applicable procedure for new requests for qualification of PCB manufacturers. ESA issued memo QT/2014/287/SH to put on hold new requests for qualification pending the revision of the applicable ECSS standards.

The ECSS-Q-ST-70-10C and ECSS-Q-ST-70-11C have been kicked-off for revision in August 2014. The initial target date of August 2015 is delayed to July 2016 as a consequence of detailed discussions on acceptability and the significant revision required to bring both outdated standards in-line with present technology. ESA, in collaboration with the PCB/SMT WG, is in the process of redefining a common approach regarding the qualification.

The supply chain for PCBs has been under pressure for a variety of reasons. The qualification of new PCB manufacturers in 2013 and recently in Sep 2015 improved the situation, but the pressure on the supply chain still remains.

In order to compensate for the delay in the release of ECSS-Q-ST-70-10C and ECSS-Q-ST-70-11C ESA will accept new requests for qualification of new PCB manufacturers and will assess the maturity of new dossiers for the qualification, provided the following conditions are met:

- The dossier covers all points from the memo QT/2010/018 including the business plan. The dossier has been reviewed and approved by the customer.
- The customer has performed and documented the sample evaluation of the PCB technology under qualification.
- The customer has conducted a successful audit and documented the compliance to requirements in an audit check list and MoM. The audit includes the review of PIDs, compliance to ECSS-Q-ST-70-10C, -11C and -12C, as well as compliance to applicable ESA memos issued on escies.org/pcb/.
- The customer has reviewed and approved the qualification test reports. Compliance to all requirements of clause 7 of ECSS-Q-ST-70-10C is recorded in a conformance matrix.

The ESA memo QT/2014/287/SH is consequently withdrawn.

Dossiers shall be submitted by the PCB manufacturer to ESA by email to stan.heltzel@esa.int before 30 October 2015. ESA shall respond to the applicants by 15 Nov at the latest.

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