

## estec

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# MEMO

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## **Subject:** Alternative sources for Printca PCBs

The closure of Printca is described in ESA Alert EA-2014-MAT-6A. Users are recommended to identify an alternative source. The up-to-date qualification status of PCB manufacturers is available on:

https://escies.org/webdocument/showArticle?id=798&groupid=6

The overview below provides alternatives for technology that has been manufactured by Printca giving details on material types and technology. The status of each manufacturer is valid at the time of issue and is subject to change. Users are recommended to verify the status on ESCIES and with the PCB manufacturer.

#### A1) Non-sequential HTg epoxy 370HR

This technology was qualified at Printca in June 2014 for a duration of 1 year. This technology with 370HR is qualified at Systronic. This technology with IS420 is qualified at TESAT.

#### A2) Sequential rigid polyimide Arlon 85N

This technology was qualified at Printca in June 2014 for a duration of 1 year. This technology with Arlon 85N is qualified at Invotec. This technology with Arlon 35N is qualified at Systronic.

#### A3) Sequential rigid-flex polyimide Arlon 85N

The qualification of this technology expired at Printca on Feb 2014 as a result of EA-2014-EEE-3-B.

This technology with Arlon 85N is qualified at Invotec.

This technology with Arlon 35N is qualified at Systronic.

## A4) Sequential rigid Thermount Arlon 85NT / polyimide Arlon 85N

This technology was qualified at Printca in June 2014 for a duration of 1 year. Obsolescence of Thermount has been announced in EA-2006-MAT-06-A.



To accommodate the short term need for Thermount, it is recommended to contact Invotec. PCBs in Thermount shall be submitted to a project qualification and IST testing on flight panels, in accordance with memo QT/2014/148/SH "RFA justified by project qualification using group 6", available on escies.org/pcb/.

Long term recommendation to users is to phase out obsolete technology by replacing it with standard polyimide or by new materials with low in-plane CTE.

## A5) Double sided Duroid RT6002

This technology was qualified at Printca in June 2014 for a duration of 1 year. Similar technology with Duroid RT5880 is qualified at Systronic. Similar technology with Duroid RT6002 is available at Systronic and at Invotec, i.a.w. QT/2014/148/SH.

## A6) Multilayer CLTE/Speedboard and CLTE/polyimide

This RF technology was project qualified by Printca.

Speedboard is obsolete.

Multilayer RF technology with RT6002 is available at Systronic, i.a.w. QT/2014/148/SH. Users are recommended to replace obsolete materials and to perform a qualification with a qualified PCB manufacturer.

#### A7) Via-in-pad footprint for area array device using via plugging and cap plating of through holes

This technology was project qualified by Printca. Via plugging (pre-resin filling) technology is available from Invotec, i.a.w. QT/2014/148/SH.