

**Applied Physics Laboratory**

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June 25, 2013

**To:** Distribution

**From:** Reid Gurnee



**Subject:** EPI-Lo Anode Board Peer Review Action Items

**Description:** On June 21<sup>st</sup>, 2013 the EPI-Lo team held a peer review for the Anode Board. This memo lists the attendees and all recorded action items with responsible actionee and due date.

**Attendees:**

Alexandra Dupont  
Elena Adams  
Helmut Seifert  
John Dickinson  
John Goldsten  
Ken Nelson  
Patrick Hill  
Ralph McNutt  
Reid Gurnee  
Scott Weidner

**Action Item List:**

<b>Identification Number</b>	<b>Reviewer</b>	<b>Actionee</b>	<b>Area of Concern</b>	<b>Concern</b>	<b>Recommended Action</b>	<b>Date Opened</b>	<b>Due Date</b>
1	Reid Gurnee	Ken Nelson	PCB board/Embedded Capacitors	Concern about embedding HV capacitor within board.	Work with Ron and/or Steve B. to verify embedded capacitor will not fail. Consider looking at standard HV cap testing/temp cycling, testing at higher voltages, possibly looking at x-rays for voids, etc. Need to execute well documented test plan early in program.	6/21/2013	7/12/2013
2	Reid Gurnee	Ken Nelson	Kapton separation		SwRI uses Kapton 8525 (DuPont Pyral?) with dielectric strength of ~6kV/mil. Consider using this material or compare it with our planned material.	6/21/2013	7/12/2013
3	John Goldsten	Ken Nelson	Resistor value	Time constant of individual pads. Collection pad voltage can change due to signal change and then subsequent hits splash over.	Can we make the resistor smaller to deal with higher rate situations? Need to look at capacitance to ensure it is ok.	6/21/2013	7/12/2013
4	Reid Gurnee	Ken Nelson	Derating		3X is not a lot of derating for materials. Consider changing or justifying	6/21/2013	7/12/2013
5	John Goldsten	Ken Nelson	Arcing		Determine how to test ground plane arcing. Look at the size of discharge as if you completely dissipated full bypass caps.	6/21/2013	7/12/2013
6	Scott Weidner	Ken Nelson	Parylene coating		Investigate the plasma-etch step for in-house Parylene	6/21/2013	7/12/2013

**Distribution:**

**Internal:**

Alexandra Dupont  
Elena Adams  
Helmut Seifert  
John Goldsten  
Ken Nelson  
Kevin Heffernan  
Patrick Hill  
Ralph McNutt  
Reid Gurnee

ECMS Archives

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