

Abstract Submitted  
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**Development of a flexible circuit board for low-background experiments**<sup>1</sup> ALAN POON, PAUL BARTON, ANKUR DHAR, JOERN LARSEN, Lawrence Berkeley Natl Lab, JAMES LOACH, Shanghai Jiaotong University — Future underground rare-event search experiments, such as neutrinoless double-beta decay searches, have stringent requirements for the radiopurity of materials placed near the active detector medium. Parylene is a polymer that has a high chemical purity and the vapor deposition process by which it is laid down tends to purify it further. In this talk the technique to fabricate a low-mass, flexible circuit board, with conductive traces photolithographically patterned on a parylene substrate, is discussed. The performance of a proof-of-principle temperature sensor is presented.

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