Abstract Submitted
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A Pulsed Magnetron Driver for the Lithium Tokamak Experiment[1] TIMOTHY ZIEMBA, KENNETH E. MILLER, ALEX HENSON, JAMES PRAGER, ILIA SLOBODOV, SATBEER SINGH, Eagle Harbor Technologies, Inc. — Eagle Harbor Technologies (EHT), Inc. has designed and built a pulsed magnetron driver that will be delivered to the Lithium Tokamak Experiment (LTX) at the Princeton Plasma Physics Laboratory. Earlier in the program, EHT developed and tested a 10-kV solid-state switch. To build the magnetron driver, EHT has stacked four of the 10-kV switches in series to achieve the 40-kV output. The driver can produce 40 kV for 5 ms and source up to 100 A. The rise time of the output pulse has been tailored for the specific magnetron at LTX. EHT has also developed short-circuit protection that will shut down the magnetron driver in less than 1 s. EHT will present results of the development of the pulsed magnetron driver during the Phase II program.

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