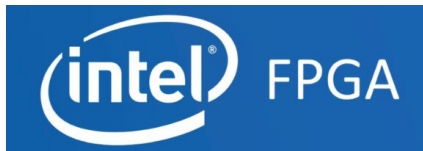


Precision high voltage pulse generation technology from OTEC makes delivery of pulsed energy a reality.



"The most flexible, safe and reliable high voltage pulse delivery system ever conceived. Thanks OTEC".

– Chief Scientist

Marx High Voltage Pulse Generator

The generation of high voltage pulses for use in pulsed energy systems requires attention to design detail. The safe delivery of precision high voltage pulses is made possible by the combination of OTEC's high current, bipolar Marx generation stack coupled with OTEC's custom FPGA based timing generation technology. Optically coupled high speed IGBT Drivers and low inductance conduction paths with safety feedback and automatic load control make precision high voltage pulse generation both possible and medically safe.

Programmable Precision Pulse Control

Precision pulse control of 6 Kilovolt, 30 Amp bipolar high voltage pulses is made possible by OTEC's unique FPGA precision pattern timing generation control logic. Sub-microsecond complex waveforms may be automatically generated upon command from a single trigger. Shown below are six kilovolt pulses into 50 Ohms.



Scalable High Voltage Generation Design

Designed originally for the bipolar output of six kilovolts into fifty ohms, OTEC's generator and precision control circuitry can accommodate almost any voltage, current and output timing required. Applications such as Laser Optics, Plasma Generation and more can greatly benefit from OTEC's unique design approach.

Orchid Technologies: Precision Marx Generator

The development of custom electronic products for our OEM clients is OTEC's entire business. The design of Precision High Voltage Marx Generators with rapid design cycles, demanding technical requirements, and unforgiving schedules sets us apart. Call Orchid Technologies today!

