

Gaasfet switch driver needed

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I need a switch driver that can switch in 1 to 3 nsec. Complementary drive outputs, 0 to -5 or -8 volts. Driving a SPDT Gaasfet switch.

I've tried differential A-to-D drivers but they are not fast enough. Input to the driver is from a cmos asic. Also looked at comparators with ECL output but they don't have the voltage swing.

Impellimax makes a driver but they want mucho\$.

Other constraints. Battery powered(low powered). Small size.

I'm looking at a discrete driver or biasing the Gaasfet switch.

Can bias the Gaasfet switch for a 5V ground and use 0 to 5V switch outputs for the driver. This will be at 4.5GHz. Anyone ever done this? What are the ramifications? Lost isolation? Bad RL? If I go this way, is CPWaveguide the way to go to minimize via inductance?

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