

LMG1020 output wave for EPC2001C

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Hi TI,

How to get a 400ps Tr when LMG1020 connected to a GaNFet ?

After tested LMG1020 output signal, I found that the output signal is almost same with datasheet description (Tr, Tf = 400ps) when there is no load. However, when LMG1020 connected to a GaNFet (EPC2001C), the output wave changed to very bad (Tr, Tf > 3ns).

I have tried out different R1, R2 include 0R, 2R, 10R, but all don't work.

I have two evaluation boards, one is EPC9126, another is made by ourselves. All board have the same results.

Monitored Laser output by a high speed PD, Tr = 3ns.

We want to reduce Laser's Tr < 1ns.

I think if the trigger signal Tr for GaNFet is about 3ns, I could not get Tr < 3ns.

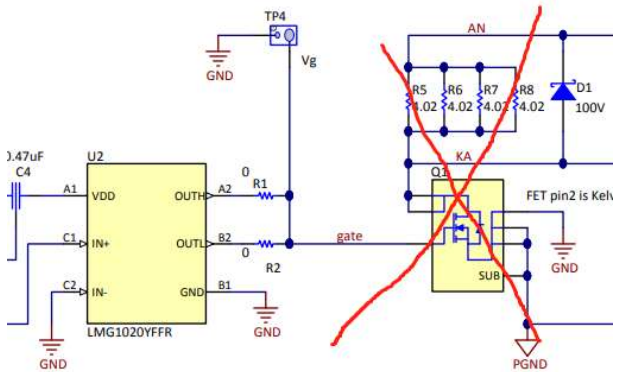
Please give some advices to reduce Tr when LMG1020 connected to a GaNFet.

Thank you.

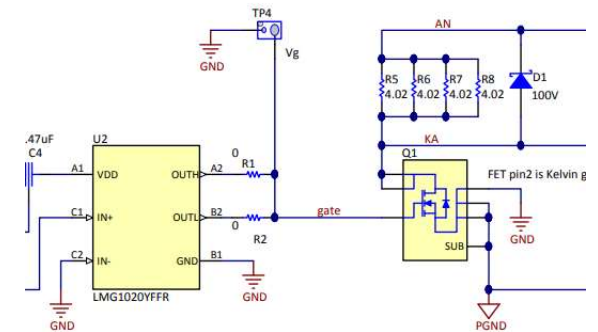
Sincerely,

Tianlei

Vg : Tr = 500ps, R1 = R2 = 2ohm, Q1 = NC



V_g : $T_r=6\text{ns}$, $R_1=R_2=2\text{ohm}$, $Q_1 = \text{EPC2001C}$



Laser output : response of a high speed PD (2G)

$T_r = 3\text{ ns}$

