

Date: Sun, 05 Mar 2006 20:43:16 -0800
Subject: Re: Reminder Quals Question 2006
From: Gregory Kovacs <kovacs@cis.stanford.edu>
To: Diane Shankle <shankle@ee.Stanford.EDU>

Diane,
Here you go.

Best,
Greg

G. Kovacs Quals Question 2006

Area: Circuits

The student was shown a schematic depicting two components, an N-channel power MOSFET and an inductor, in series, with the inductor tied between a positive supply voltage and the drain of the MOSFET. The student was offered the MOSFET datasheet. The source of the MOSFET was grounded. The gate was driven by a squarewave of sufficient amplitude to fully turn the MOSFET "on" and "off." He or she was asked to describe the operation of the circuit and predict the output voltage waveform. The student was then shown actual oscilloscope photographs of the circuit in operation and asked to compare his/her predictions to what was actually observed.

On 3/1/06 8:58 AM, "Diane Shankle" <shankle@ee.Stanford.EDU> wrote:

> Hi,
>
> Reminder!
>
> Please send me your Quals question.
>
> Thanks and Enjoy Your Day,
> Diane