

Hi rick

Back EMF of my motor is tested with DRV8872EVM. Results are found below:

1. When slow decay (two LS-FET, see path2 of figure4) is used for current flowing, no back EMF is produced.

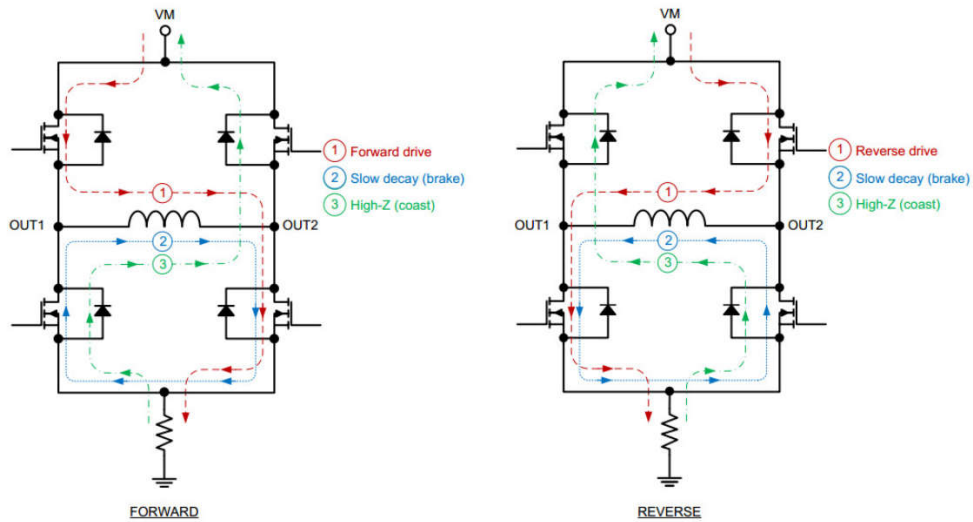
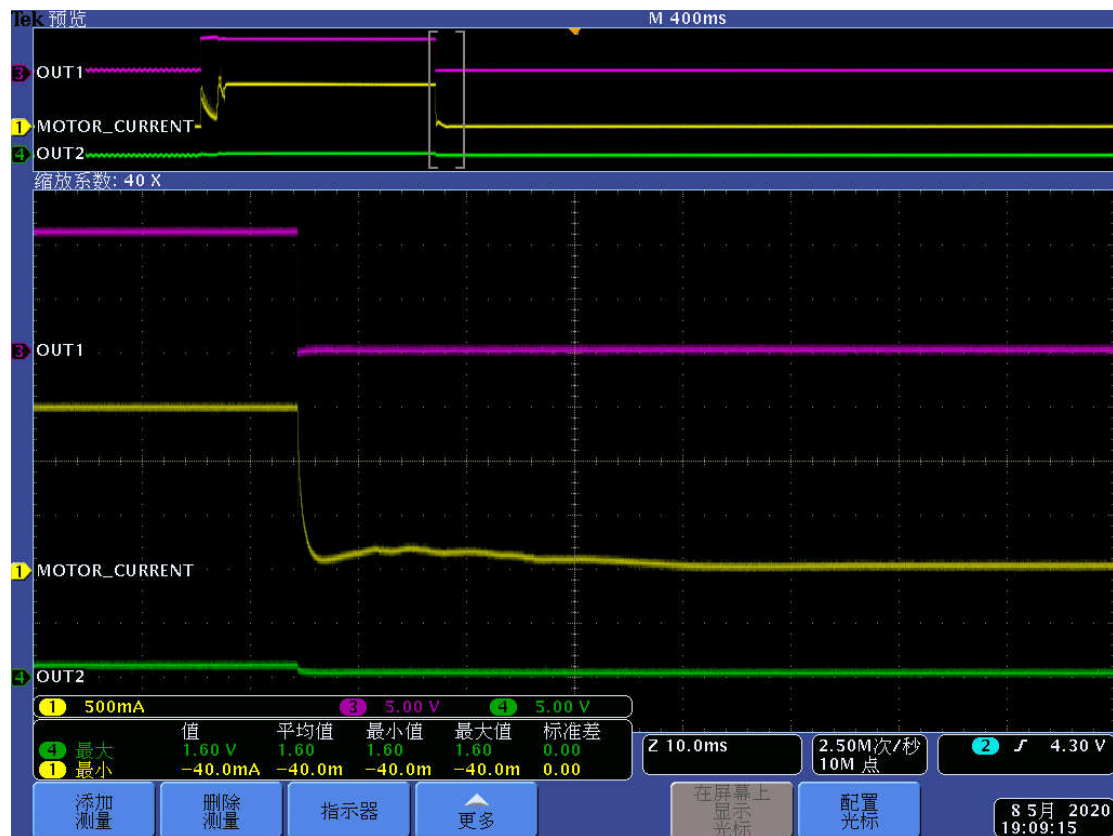
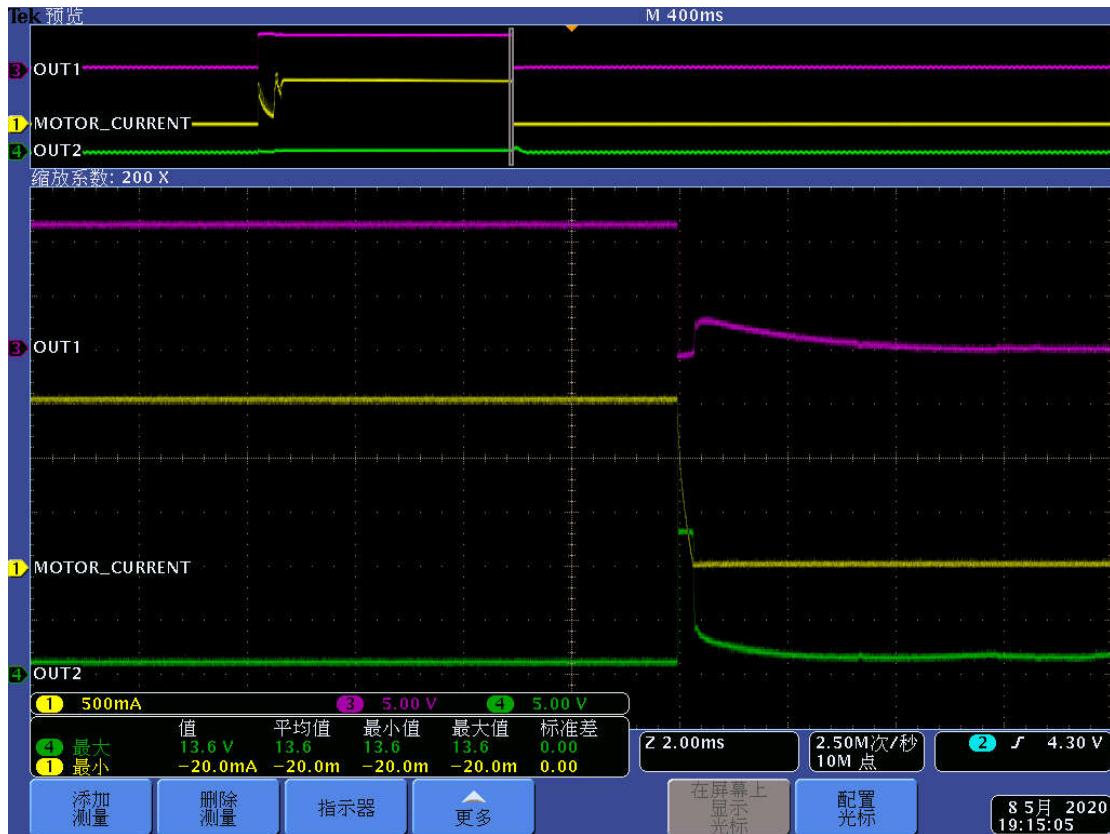


Figure 4. H-Bridge Current Paths



2. When fast decay (body diode, see path3 of figure4) is used for current flowing, back EMF is found to be -1V and 13V.



3. When no path (VM is in series a schottky externally as shown below, so path3 is not available) is used for current flowing, back EMF is found to be -1V and 16V.  
 My question: Why this -1V and 16V back emf exists only 0.3ms, Since there is no current flowing path?

