

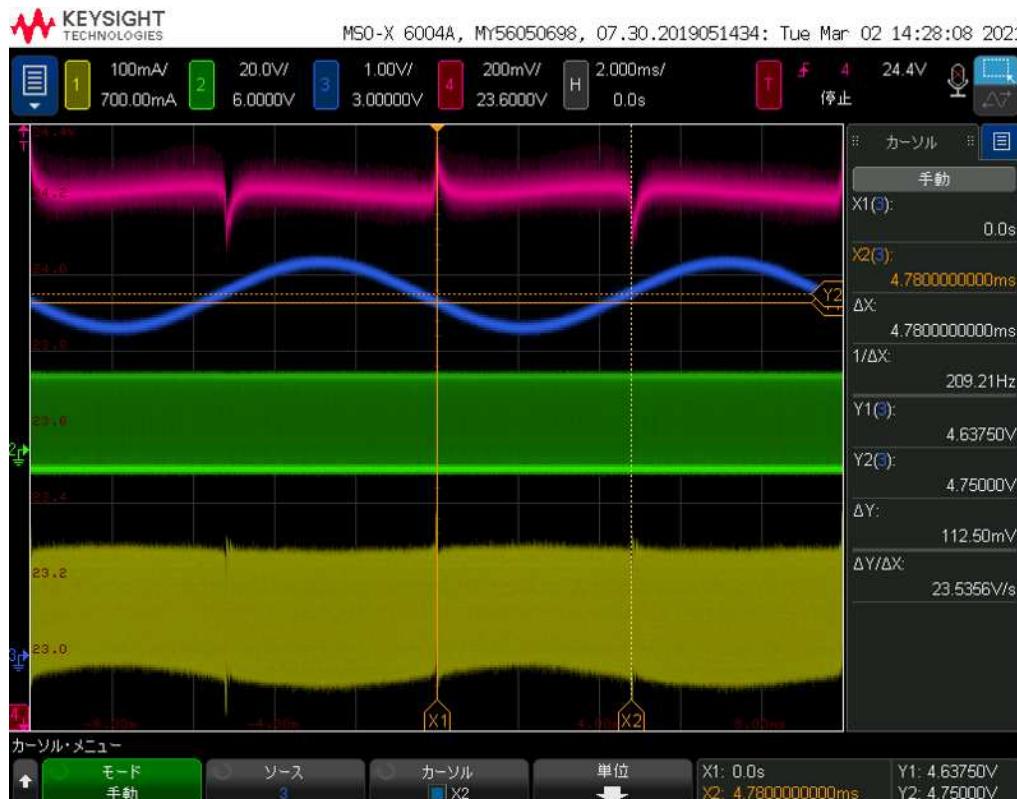
# TPS61170EVM-280 evaluation

Test condition:

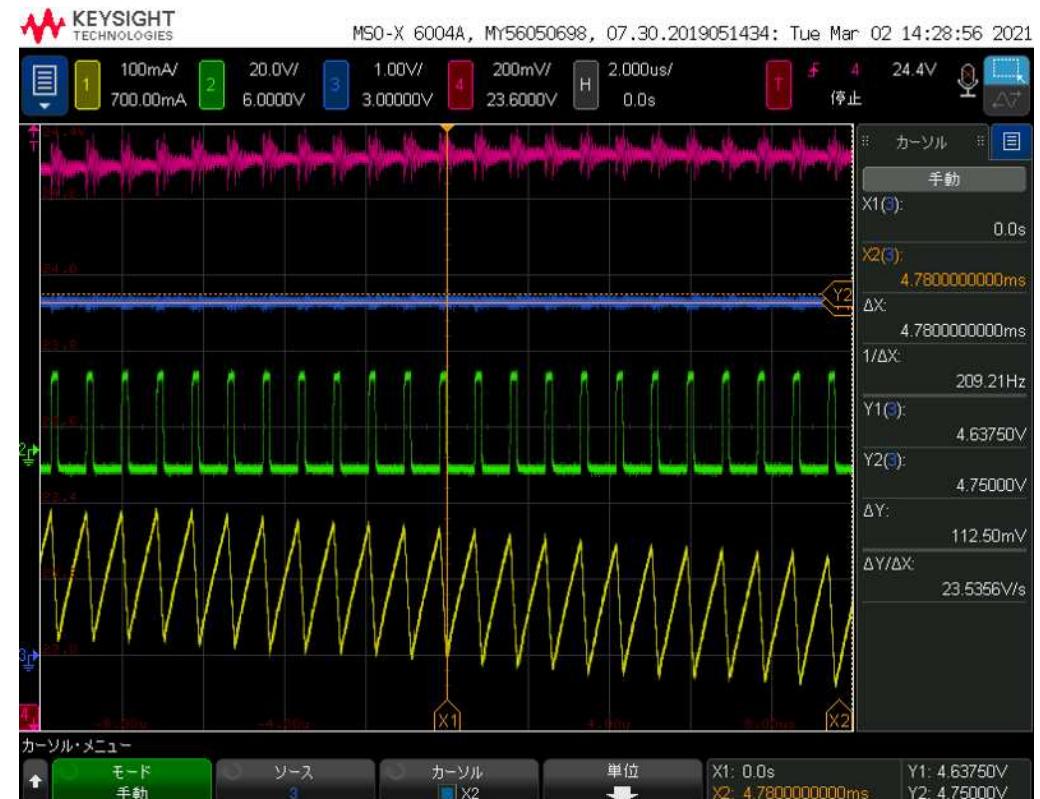
Vin=4.8V with 100Hz 200mVpp modulation

Iout=20mA

Ch1:Inductor current Ch2:SW voltage Ch3:Vin Ch4:Vout (DC 24.2V offset)

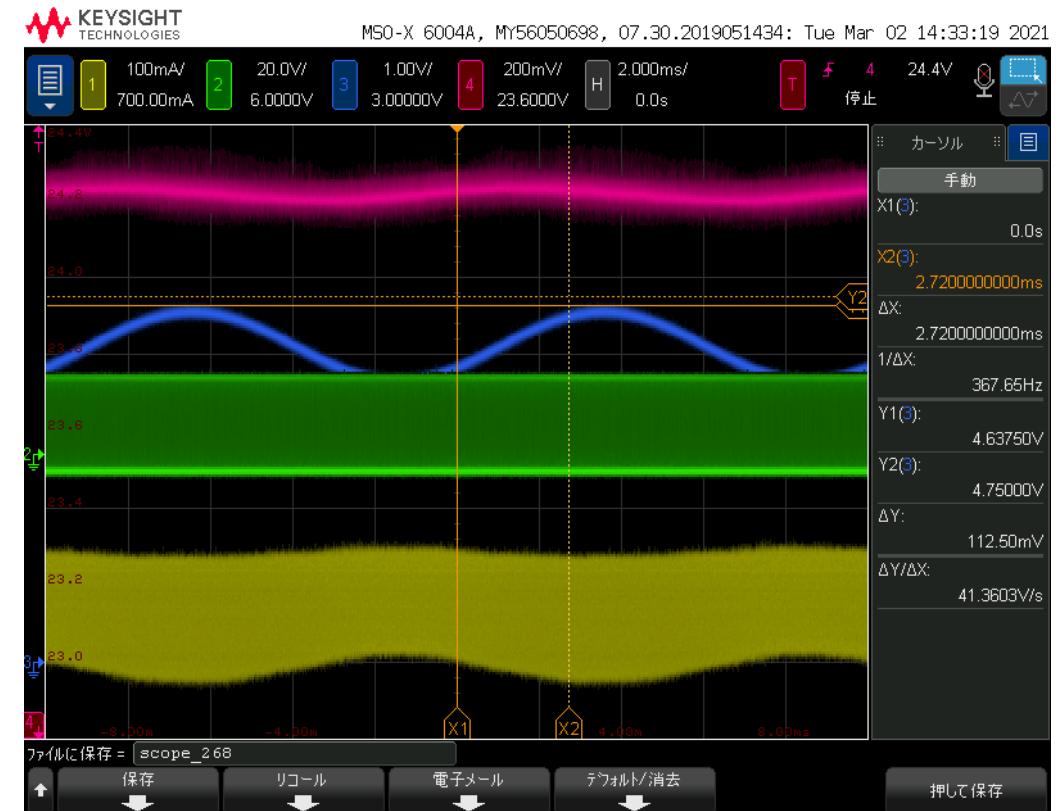
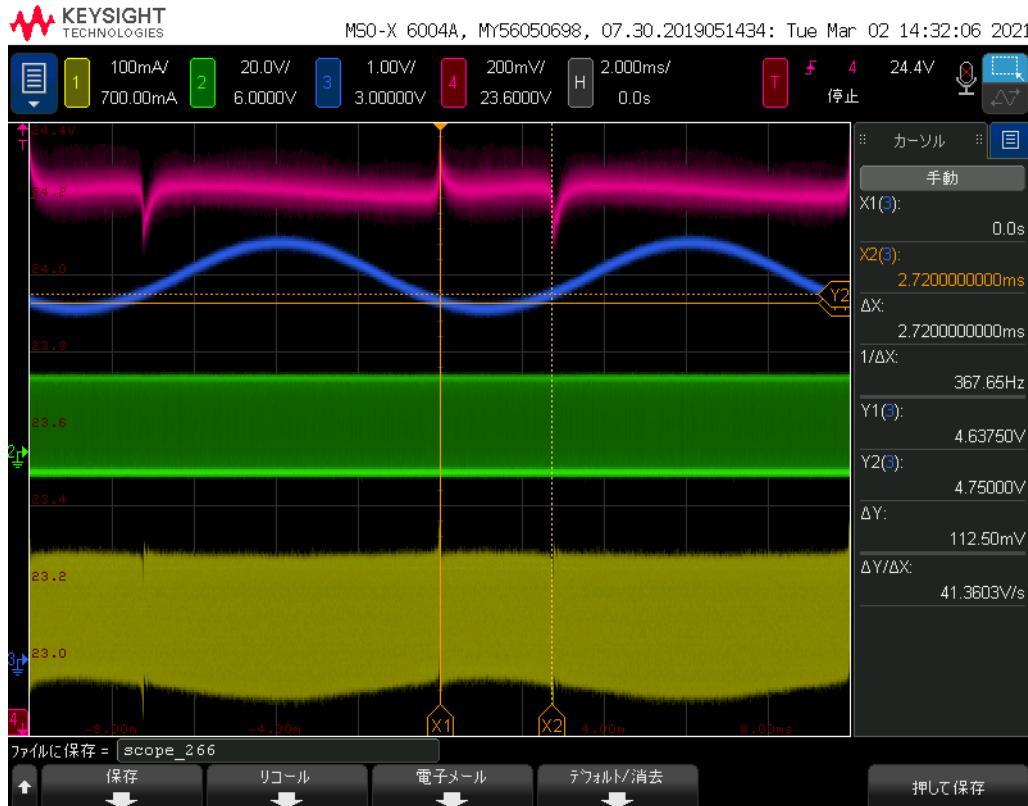


Across 4.75V plus 10mV spike noise is observed.  
At 4.63V negative 10mV spike noise is captured.



Zoom in trig point, it is not skip mode.

# Changed Vin voltage

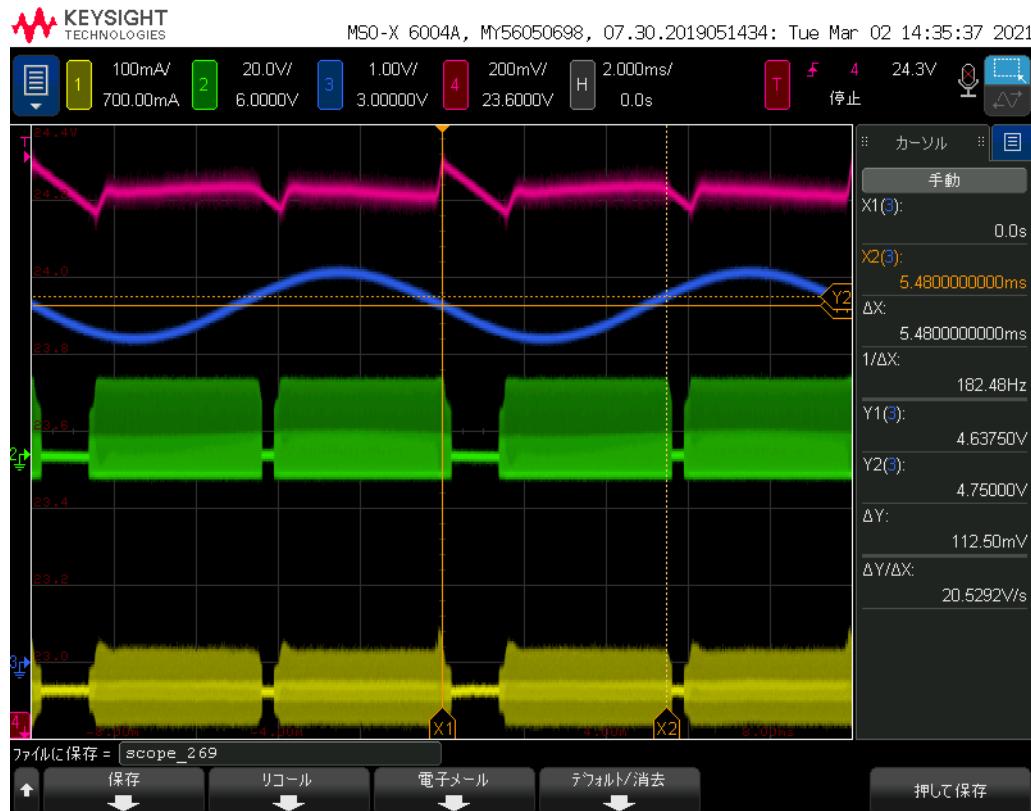


Even changed center voltage **still** at 4.75V,  
plus 10mV spike noise is observed.

**At 4.63V** negative 10mV spike noise is  
captured.

When move out this special Vin voltage  
area **no spike noise is observed.**

# For the reference



$I_{out}=0mA$

It is skip mode, but still spike noise is generated at same  $V_{in}$  voltage.