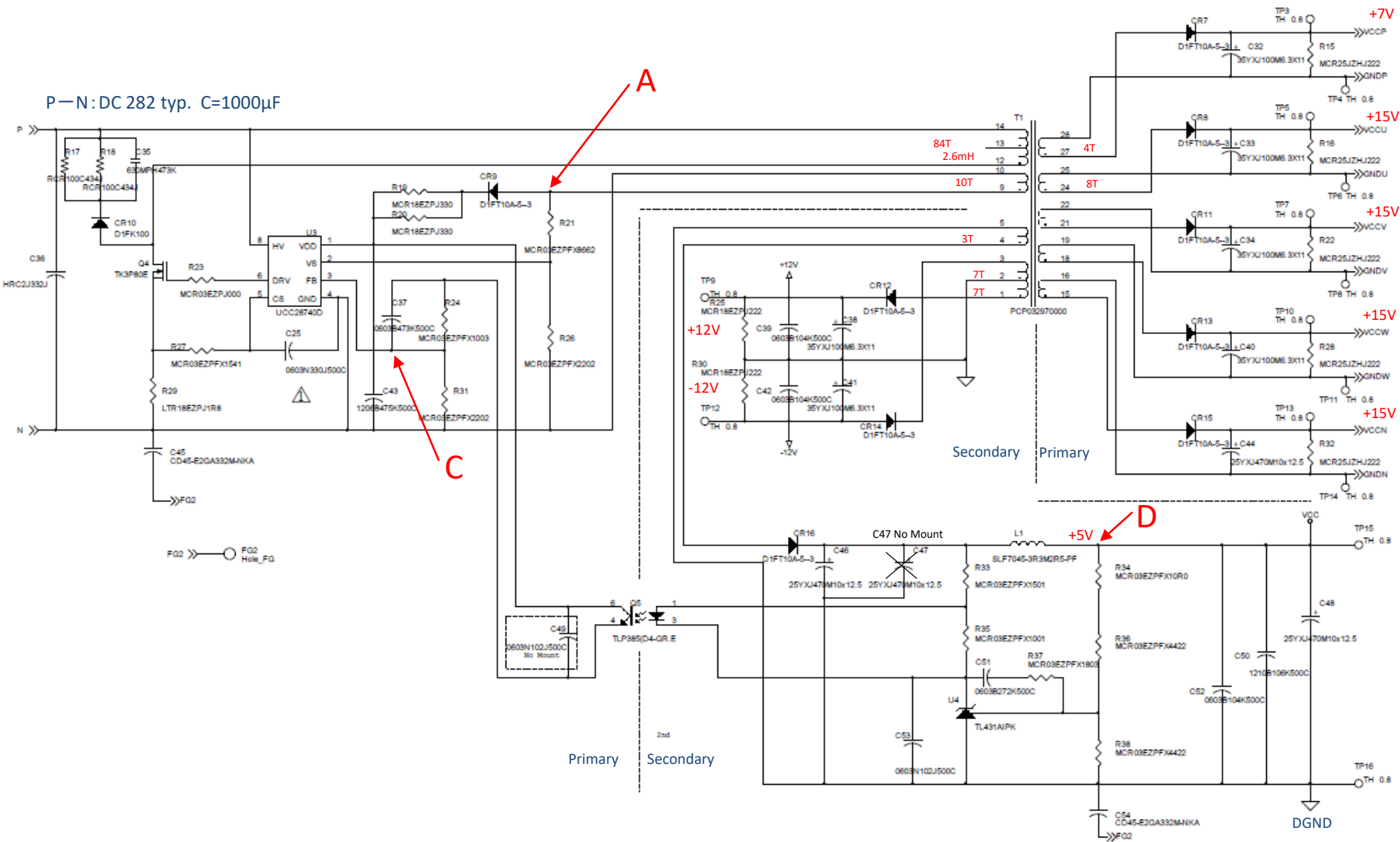


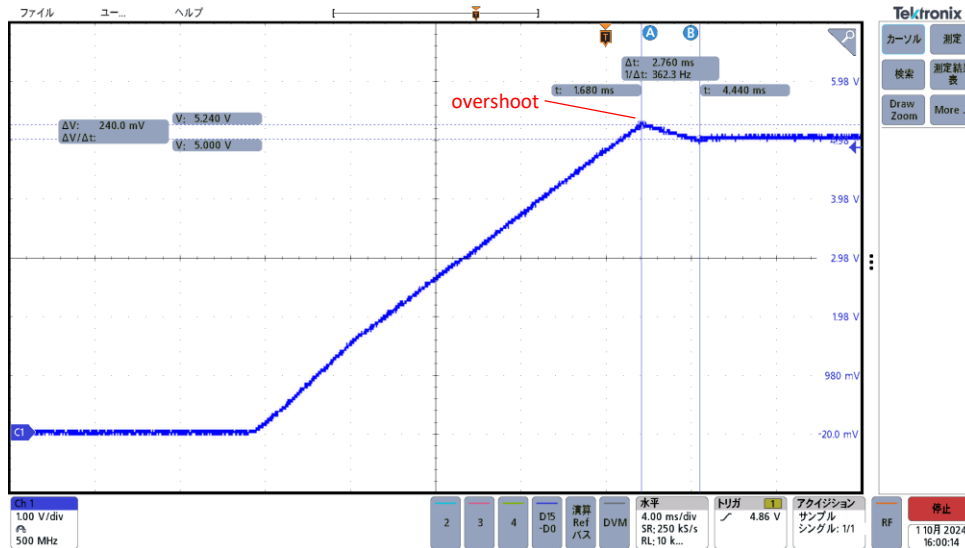
The following circuit is constructed using UCC28740.

The voltage waveforms at points A (between CR9A and N), C (between UCC28740_FB and N) and D (Vcc - DGND) were observed during power-on. I have a question about this waveform.

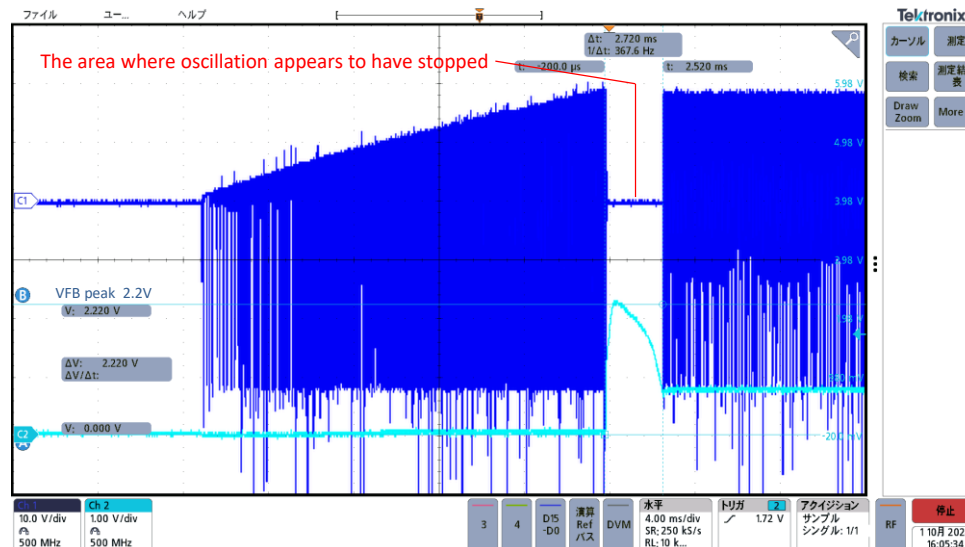


Q1. V_{cc} (+5 V) is overshooting when the power supply starts up. At this time, the voltage value of the FB at point C has increased to around 2 V, so the IFB should be above 23 μA . Therefore. Can we assume that the waveform at point B, where oscillation appears to have stopped, is oscillation fixed at the lowest frequency? And are there any problems with this behaviour?

(Is it safe to assume that there is no possibility of detecting a protective function and stopping oscillation?)



CH1 : Point D (V_{cc} - DGND)



CH1 : Point A (between CR9A and N)

CH2 : Point C (between UCC28740_FB and N)

Q2. Is there any way to avoid Vcc overshoot?

(I tried changing the phase compensation RC of the TLP431 in the circuit diagram, but this did not improve things.)