(symptom)
OUT of the TPS2121RUXR may drop momentarily.
This voltage drop occurs at the timing when the OUT supply source is switched.
The rate of occurrence is about 1 per 1500 supply source switching operations.
Judging from the voltage drop time (approximately 25ms), it is possible that the protection function of the device is operating.
However, when the symptom occurs, the input is supplied with a stable voltage and the output load current is also stable.
Also, there is no difference in the behavior of various inputs with and without OUT drop.
From this, it is possible that the device is malfunctioning.

(detail)
OUT (Figure 1-(1)) drops to around 1V to 2V for about 25 ms.
Since the recovery time is specified as 25 ms when the protection function is activated, it is considered to be related to the protection function.

Around the timing when PR1 (Figure 1-④) falls below CP2 (Figure 1-⑥) (when the supply source of OUT switches from IN1 to IN2), OUT drops.
Used under the condition of CP2≧VREF.

Voltage is stably supplied to IN1 (Figure 1-(2)) and IN2 (Figure 1-(3)) before and after OUT drops (within ±150 ms).

During the time before and after OUT drops (within ±150 ms), voltage is stably supplied to OV1 (Fig. 1-(5)) and OV2, which detect overvoltage, and both are below VREF.

The load current of OUT (Figure 1-⑦) is also stable. It is below I_LM (3.2 A).

There is no difference in the behavior of each input (PR1, CP2, OV1, OV2) and load current with and without OUT falling.
Figure 1 shows a drop. Figure 2 shows no drop.

OV2 voltage not measured. However, since it is a voltage obtained by dividing IN2 (DC_12V), it is judged that there is no problem with the stability and voltage value of OV2 from IN2.

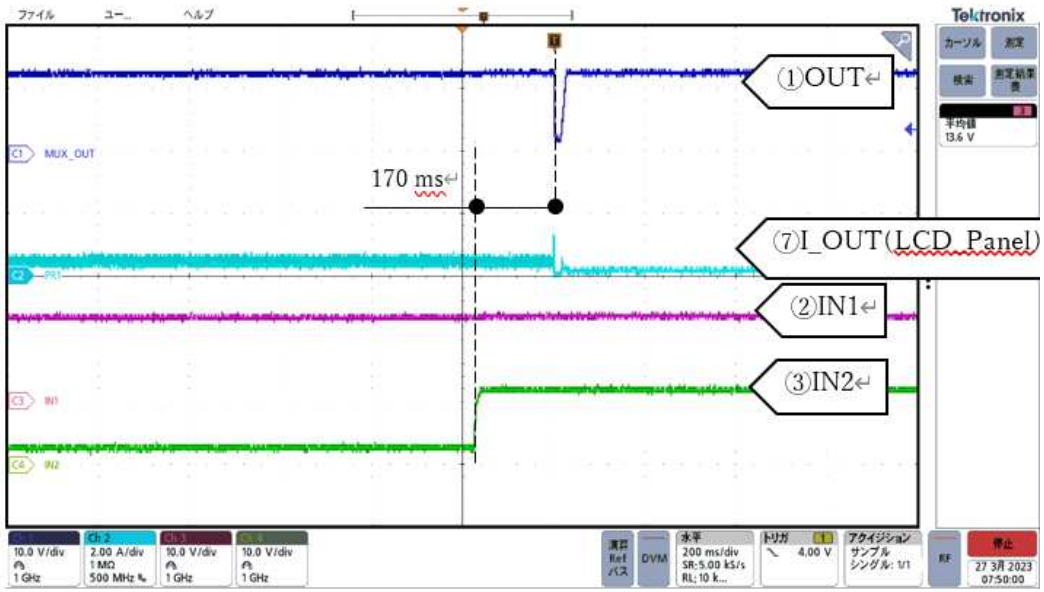

Fig1 : drop in OUT

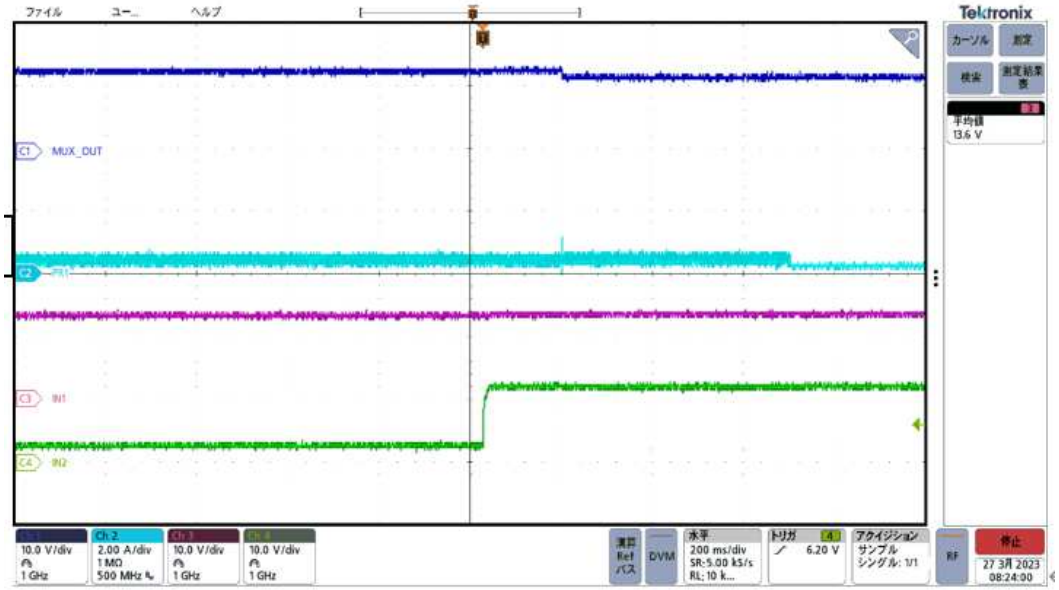

Fig2 : No drop in OUT