U504 1.0mohm [11] FWD_IIN+ | C534 100nF/1005/50V R574 30K/1005/0.5% [11] FWD_IIN-TP534 +2.0V INA186A2QDCKRQ1 R570 20K/1005/0.5% R594 10K/1005/1% A1:25V/V A2:50V/V [9] A_B+_IMON < A4: 200V/V A5:500V/V C548 22nF/1005/50V

It is connected to the buck-boost converter input side to sense a bidirectional current.

[Issue]

The OUT pin voltage is measured normally during low current operation. (1.6V@-9A, 2.0V@0A, 2.8V@15A)

At a current exceeding the above conditions, the OUT pin voltage is fixed to 1.6 V downward/ 2.8 V upward.

However, when a DC current is applied and tested, the OUT pin voltage is output according to the current value without a problem.

[Waveform]

The waveform below is the result under condition of VREF=GND. You can see that the OUT pin voltage no longer rises from 0.671V.

