Issue: If the input voltage of the TPS drops below ~11V, Q11 on Schematic LAT-DS-02390 turns partially off and the power dissipated in the device exceeds the rating and may burn up. The Gate-Source voltage must at least be 4V according to the data-sheet of the MOSFET transistor. That voltage is derived from the voltage divider R35/R34. Thus the input voltage must be at least 10.67V to ensure that the device is completely on when the power is enabled via Q4.