Note that special care must be taken when placing the bypass capacitor for the VIN pin. During hot shorts, there is a very large dV/dt on input voltage after the MOSFET turns off. If the bypass capacitor is placed right next to the pin and the trace from Rsns to the pin is long, an LC filter is formed. As a result, a large differential voltage can develop between VIN and SENSE. To avoid this, place the bypass capacitor close to Rsns instead of the VIN pin.

