The optional components connected to pins 1, 4, & 5 can be as small as 0402, and are only used to adjust the compensation of the control loop when necessary:
- R11 increases the gain of the loop
- R1 & C1 increase the loop bandwidth
- R2 & C2 decrease the loop bandwidth
- C3 compensates for excess parasitic inductance in the output filter.

In most applications that need compensation adjustment only one or two of the above components are needed.

Connection A to the gnd plane is right after the output caps. If the output cap gnd can be connected directly to the load without going through any vias, connection A should be removed.

Pin 37 is the thermal PGND pad at the package center. Connecting it to the quiet GND plane will make a single connection point between PGND and AGND at the device.

For lowest output ripple, use up to 5x10μF/1206 caps in place of C4, & place smaller decoupling caps right at the load.

Use through-hole test point TP1 to connect AGND pin to the GND plane.

Input cap should only go to the input PGND pins.

Use up to 5x10μF/1206 caps in place of C4, & place smaller decoupling caps right at the load.

Use through-hole test point TP1 to connect AGND pin to the GND plane.

Input cap should only go to the input PGND pins.)