

ground should be placed at this center tap as shown in the application drawings. In the layout example, the pin is configured to work with the HSS pin using the cyclic sensing wake capability of the device.

- **Pin 18 (HSS):** This pin is the high-side switch output
- **Pin 19 (LIMP):** This pin as a high-side switch that is used for a limp home function that provides V_{SUP} to an external circuit which is not shown.
- **Pin 20 (VBAT):** This pin is used for battery monitoring is comes from the battery prior to the blocking diode. It has a $470\ \Omega$ resistor (R5) in series and a $100\ nF$ capacitor (C6) to GND.

Note

All ground and power connections should be made as short as possible and use at least two vias to minimize the total loop inductance.

9.4.2 Layout Example

This is a layout example for the TLIN1431x-Q1 configured for SPI control supporting following:

- Cyclic Sensing using the WAKE pin and HSS pin
- Digital wake output, WKRQ pin.

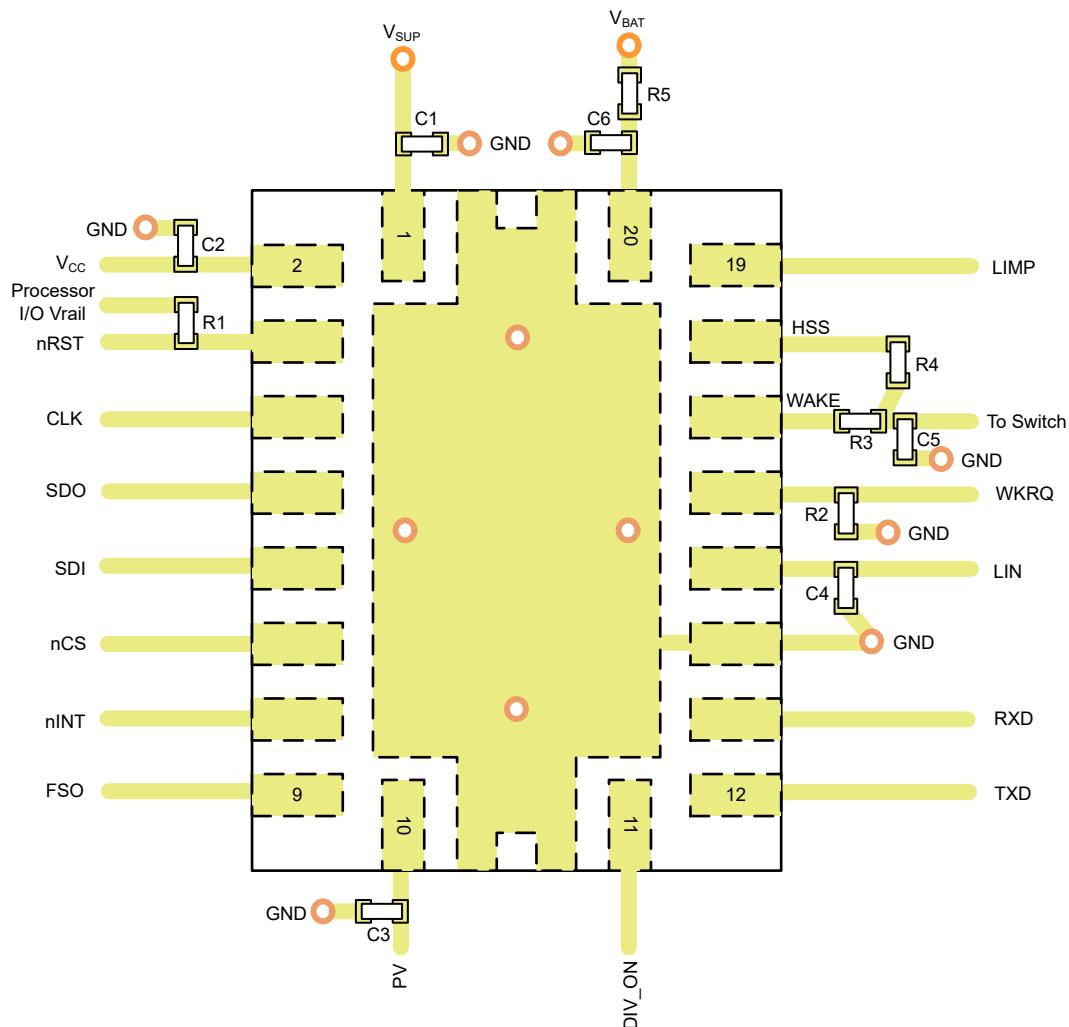


Figure 9-14. Layout Example