APPLICATION NOTE

Performance Issues With The SKY7230x-21 Series of Frequency Synthesizers

Skyworks SKY72300, SKY72301, and SKY72302 spur-free, fractional-N frequency synthesizers are subject to the following performance issues:

1. Operation with the VCCcp_main (pin 10) or VCCcp_aux (pin 19) pin signals at 5 V results in excess power-down current consumption in the range of 300 µA.

   The only way to reduce this leakage current is to remove or reduce the VCCcp_main or VCCcp_aux supply voltage during a power-down condition.

2. At elevated operating temperatures with all VCC pins (pins 6, 10, 16, 19, 24, and 26) above 3.0 V, power-down current consumption exceeds the typical power-down value as stated in each of the device Data Sheets (at +85°C and VCC = 3.3 V, the typical measured power-down value is 60 µA).

   To prevent leakage current during a power-down condition at elevated temperatures, the supply voltage should be kept below 3.0 V.