



Spread Spectrum Configuration
 Enables pseudorandom variations in switching frequency to reduce output noise.
 Connect SS_SET directly to ground to enable and through a resistor to ground to reduce output voltage ripple caused by SS.
 See Eqn. 4, page 22 for details.
 The default configuration is set for 5Vout @ 5A, 2.2MHz switching. 20k is a safe bet for Rss.

Frequency Selection
 Switching frequency can be adjusted between about 200kHz and 2.2MHz. Higher frequencies mean smaller inductors, but less efficient switching.
 Connect to Vcc for 400kHz, ground for 2.2MHz switching, and use $R_{RT} = 0.0366 \cdot f_{sw} - 0.52$ to calculate the value of the desired resistor in kilohms.
 The default configuration is 2.2MHz to minimize inductor size and PCB footprint.

Mode Selection
 Connect this pin to ground for automatic mode, where the converter will switch from PWM to PFM at light loads.
 Connect to Vcc for PFM mode, which operates at a fixed frequency regardless of load.
 Alternatively, connect pin 12 to Vcc and pin 11 to ground to synchronize multiple regulators.
 The default configuration is auto mode.

Sheet: /VP IO Power Supplies/	
File: Industrial_PSU_Full.kicad_sch	
Title:	
Size: A4	Date:
Kicad E:ID.A. kicad (6:0:9-0)	
	Rev:
	Id: 2/6