18V Vin, 12A, High Efficiency Synchronous Step

PIN FUNCTIONS (Continued)

NAME	NO.	PIN FUNCTION

THERMAL INFORMATION (Continued)

PARAMETER	THERMAL METRIC	FCTQFN2X3-12L	UNIT

ELECTRICAL CHARACTERISTICS (Continued)

SYMBOL	PARAMETER	TEST CONDITION	MIN	TYP	MAX	UNIT
Protection						

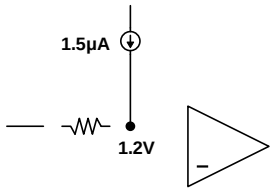
OPERATION

Overview

Enable and Under Voltage Lockout Threshold

$$V_{rise} = 1.2 \quad (1 + \frac{R1}{R2}) - 1.5\mu A \quad R1$$

$$V_{fall} = 1.1 \quad (1 + \frac{R1}{R2}) - 1.5\mu A \quad R1$$



Output Voltage

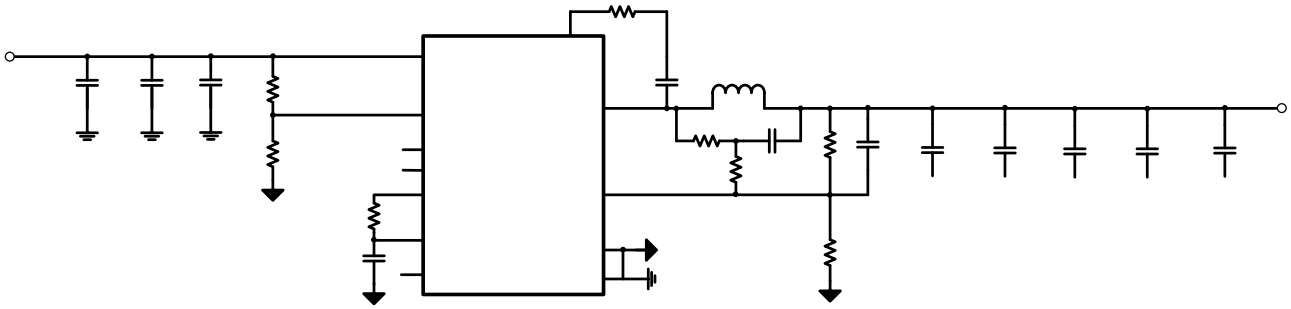
= (—— − 1)

Internal S $ re

D I I H F W L O J R PUBB ”€ Y–ñ 5..D'S0 • J X O D W H WÅ&x PPP WP Ê'0 WÄ v! a•

APPLICATION INFORMATION

Typical Application



Design Parameters

Design Parameters	Example Value

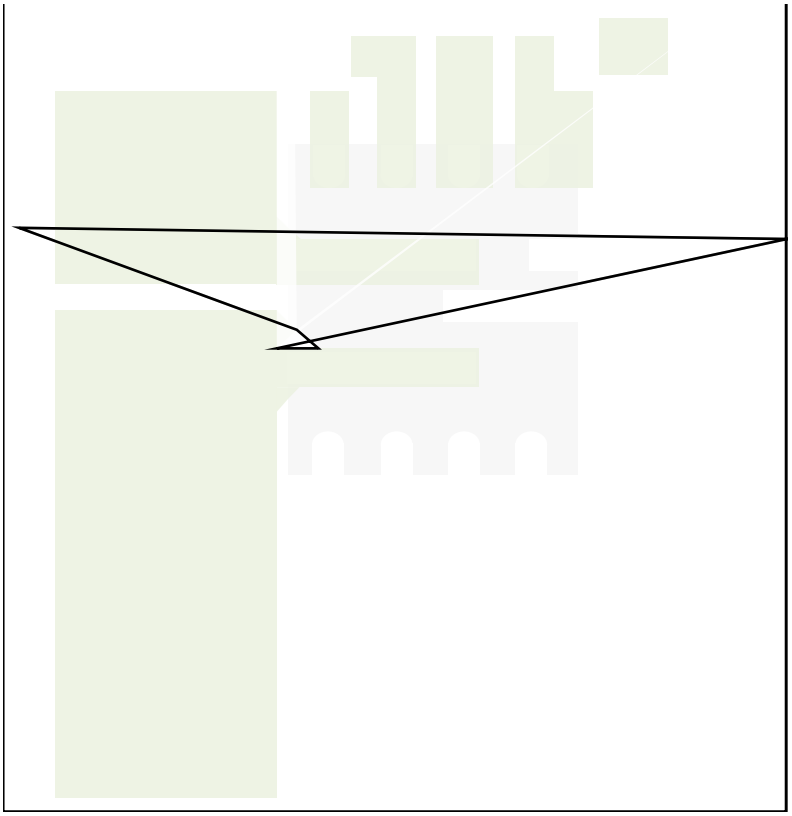
Output Capacitor Selection

Application Waveforms

Application Waveforms (Continued)

Layout Guideline

The bottom layer is a large ground plane connected to the ground plane on top layer by vias It is recommended to use 8mil diameter drill holes of thermal vias, but a smaller via offers less risk of solder volume loss. On applications where solder volume loss through the vias is of concern, plugging or tenting can be used to achieve a repeatable process.



PACKAGE INFORMATION