

3.3 V OUTPUT, 0.2 A LVR

(SC1019-0)

DATA SHEET

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PRODUCT DESCRIPTION:

The SC1019-0 3.3 V output, 200 mA full load current LVR provides a fixed output voltage of 3.3 V for a wide range of input operating voltage from 3.7 V to 6 V. The LVR is stable with an external capacitor not lower than 4.7uF of ESR 0.1 ohm to 10 ohm. SC1019-0 is mainly intended for integration with digital, analog and RF chips.

FEATURES:

- **Line voltage: 3.7 V to 6 V**
- **Fixed output voltage 3.3 V**
- **200 mA maximum load current**
- **Low quiescent current of <1 mA**
- **Over temperature shut down mechanism**
- **Short circuit fold-back current limiting feature**
- **SCL 0.18μ CMOS technology**

APPLICATION:

- Battery operated systems
- Integrated solutions for analog, RF and digital chips

DEVICE SUMMARY:

Reference	Package	pins	Lead Finish	Description
SC1019-0	COB	4	Gold (ENIG)	Engineering Model

Table 1: Device Summary

BLOCK DIAGRAM:

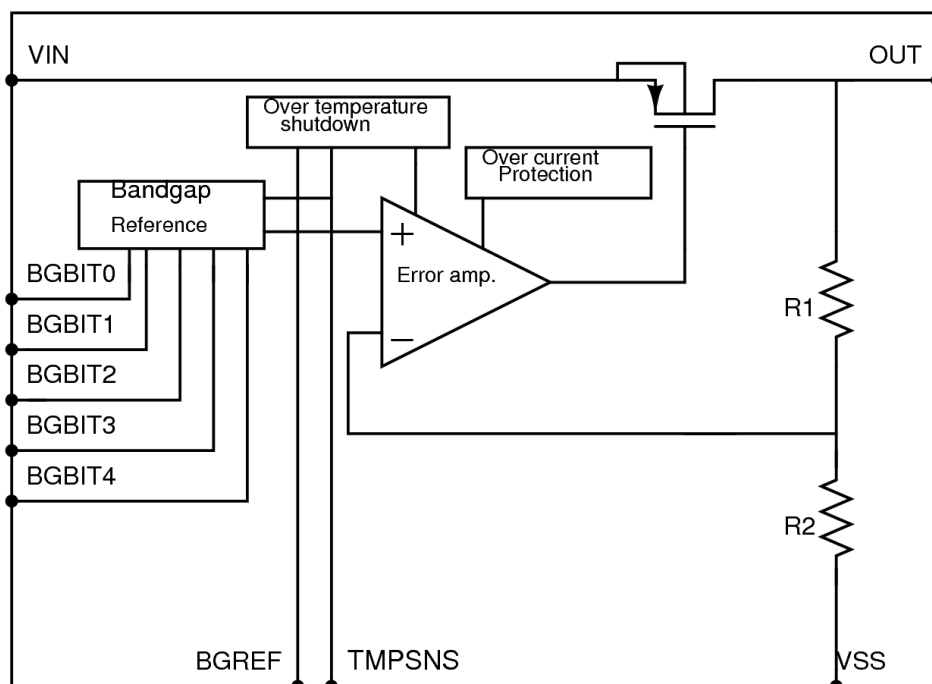


Figure-1: Device Pin Diagram



PAD CONFIGURATION:

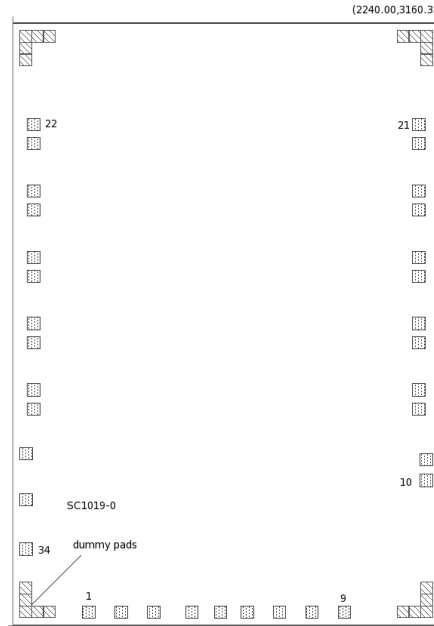


Figure-2: Device Pad Diagram

PIN DESCRIPTION:

Pin Name	Function	Remarks
bgbt4	Digital trimming bit, MSB	Digital trimming bits for varying bandgap reference output voltage. Voltages of vss or vdd to be applied.
bgbt3	Digital trimming bit	
bgbt2	Digital trimming bit	
bgbt1	Digital trimming bit	
bgbt0	Digital trimming bit, LSB	
vss	0V LVR ground	
vin	3.4 V to 6 V LVR input	
out	3.3 V LVR output	Ceramic capacitor of 10uF with ESR 0.1 ohm to 10 ohm to be placed at the output.
bgreg	Bandgap reference output	
tmpsns	Temperature sensor output	

Table 2: Pin Details



DC ELECTRICAL SPECIFICATIONS

Test condition: All Specifications: VIN =3.7V-6V, CIN = 1uF, COUT = 10µF, BGBIT = 11111 (MSB to LSB), unless otherwise specified. Full Load (FL) = 0.2A

Table with 5 columns: PARAMETER, TEST CONDITIONS, SC1019-0 (MIN, MAX), and UNITS. Rows include Nominal Voltage, Initial Accuracy, Load Regulation, Line Regulation, Dropout Voltage, Fold-back Current (IIN), Shutdown Temp. (simulated value), and Quiescent Current.

Table 3: DC Electrical Specification

Note: All parameters are calculated by using VNOM at VIN = 3.7V. Device will go in to Short circuit fold-back at twice of FL, i.e., 0.4A.

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