

Current Sense Amplifier

BD14211G-EVK-001

BD14211G-EVK-001 is an evaluation board for BD14211G-LA, which is ROHM's current sense amplifier. This user's guide explains BD14211G-EVK-001.

About BD14211G-LA

BD14211G-LA is a current sense amplifier. BD14211G-LA has wide common mode voltage range from -0.2V to 26V. It measures voltage drops across shunt resistor and outputs analog voltage. Gain is 50 V/V. The BD14211G-LA key features are:

- Wide Common Mode Voltage Range
- High Accuracy
- Low Offset Voltage
- Low Input Bias Current

For more detailed information about the BD14211G-LA, refer to the datasheet.

About BD14211G-EVK-001

1. Board Information

- Size : 74mm x 44mm x 1.6mm
- Number of Layers : 2
- Material : FR-4 (~125°C)
- Copper Thickness : 2oz (70μm)

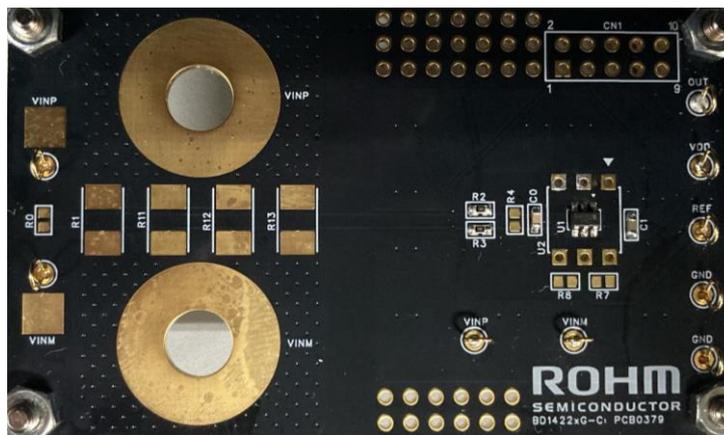


Figure 1. Pictures of BD14211G-EVK-001

2. Schematic Diagram

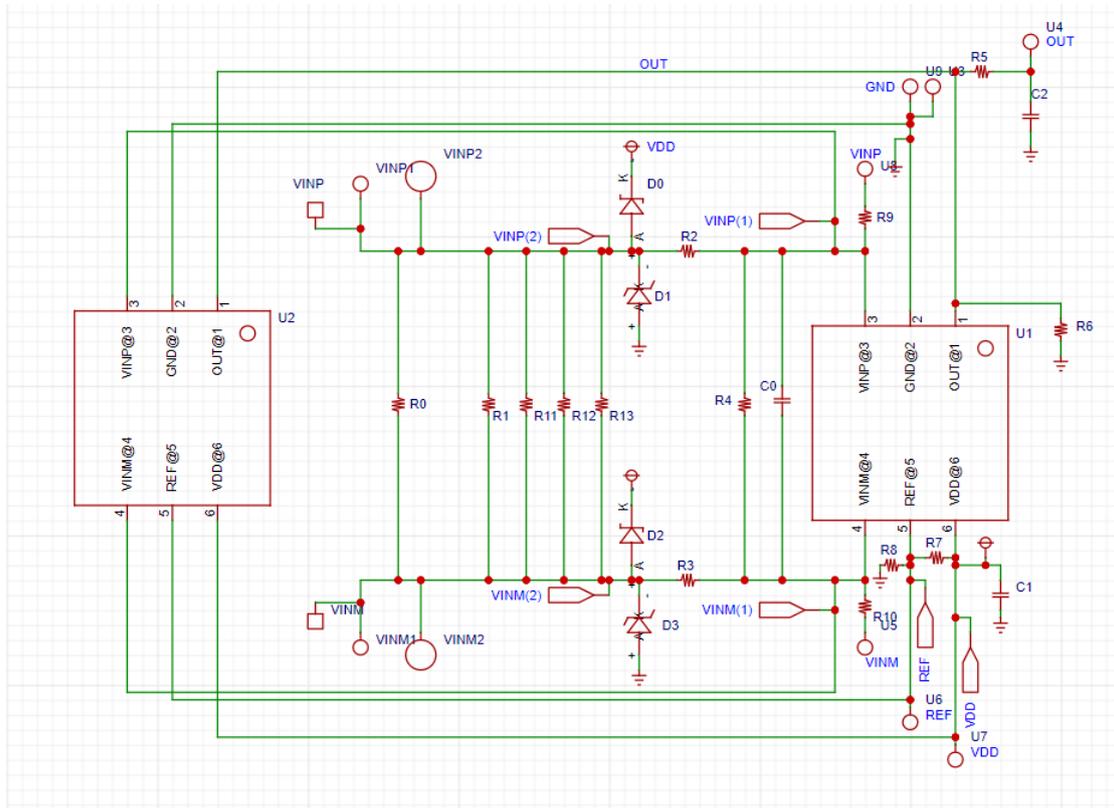


Figure 2. Schematic Diagram of BD14211G-EVK-001

3. Bill of Materials

Table 1. Bill of Materials of BD14211G-EVK-001

Part	Part Type	Manufacturer	Value	Size/Package	Description
U2	BD14211G-LA	ROHM Co., Ltd.	-	SSOP6	Current Sense Amplifier
C0	GRM033R71A103KA01D	Murata Manufacturing Co., Ltd.	0.01uF	1608(0603)	Capacitor
C1	GCM188L81H104KA57D	-	0.1uF	1608(0603)	Capacitor
C2	GRM188R71C102KA01D	-	0.001uF	1608(0603)	Capacitor
R2,R3	ESR03EZPF2000	ROHM Co., Ltd.	200Ω	1608(0603)	Resistor
R5	ESR03EZPJ512	-	5.1kΩ	5025(2010)	Resistor
R7, R8	ESR03EZPJ102	ROHM Co., Ltd.	1kΩ	5025(2010)	Resistor
R0,R1,R11,R12, R13,R4,R9,R10	N.M.	-	-	-	Resistor
D0, D1, D2, D3	N.M.	-	-	-	Zener Diode

Note: Only the materials used in BD14211G-EVK-001 are listed.

N.M. = Not Mounted

4. Layout (Top View)

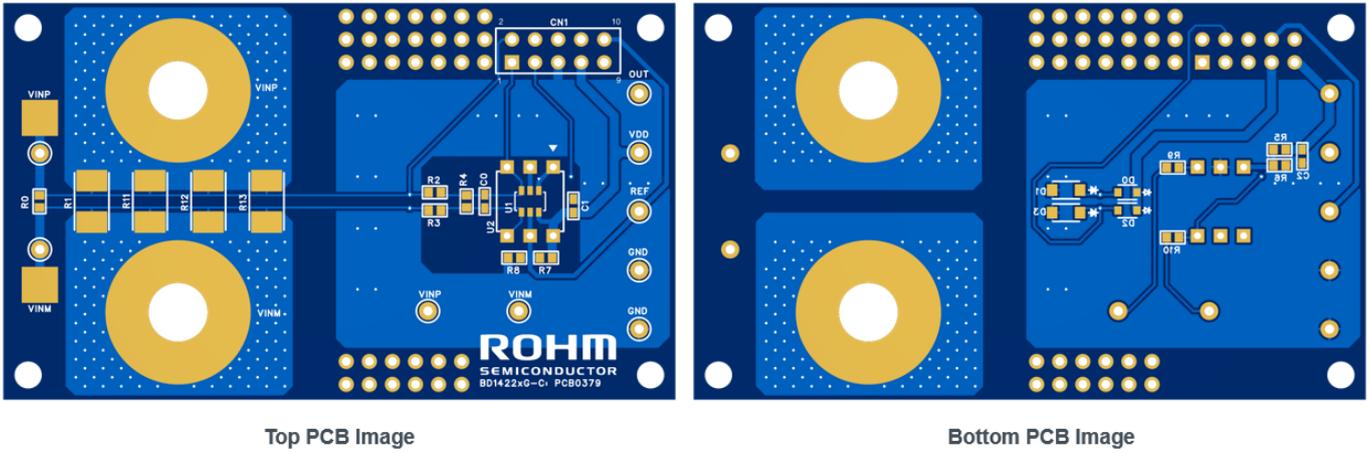


Figure 3. Layouts of BD14211G-EVK-001

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