

RedyKit User Guide UG-089

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RedyKit for the ADP2140 600 mA, 3 MHz Buck and 300 mA LDO

FEATURES

All-voltage option for evaluation
Surface-mount ADP2140 parts that can be easily soldered
Additional parts for prototyping

ADP2140CPZ-REDYKIT CONTENTS

- 1 each ADP2140CP-EVALZ evaluation board with buck $V_{\text{OUT}} = 3.3 \text{ V}$, LDO $V_{\text{OUT}} = 1.8 \text{ V}$
- 1 each ADP2140CP-EVALZ evaluation board with buck $V_{OUT} = 1.8 \text{ V}$, LDO $V_{OUT} = 1.2 \text{ V}$
- 15 ADP2140 additional voltage options in a labeled bag



Figure 1. RedyKit Package

GENERAL DESCRIPTION

The ADP2140CPZ-RedyKit[™] allows simplified prototyping and evaluation and is available for every standard fixed output voltage option in the ADP2140 product family. This allows the user to evaluate the voltage options with one easy-to-order kit.

All surface-mount ADP2140 parts come sorted and stored in the kit with the Analog Devices, Inc., part number and fixed output voltage clearly printed on each zip-top bag (see Figure 1).

The kit can be used in the engineering lab to evaluate required voltage options. If other voltage options must be evaluated, a different part from the kit can be easily soldered onto one of the evaluation boards supplied with the kit.

The ADP2140CPZ-RedyKit is available with 3.3 V buck and 1.8 V LDO and 1.8 V buck and 1.2 V LDO evaluation boards. The kit also contains additional parts for prototyping. The kit enclosure, which contains individually packaged parts and the two evaluation boards, is packaged in an ESD foam pad inside a treated cardboard box that measures 8.7" (L) \times 7.9" (W) \times 1.75"(H), that is, 22 cm (L) \times 20 cm (W) \times 4.5 cm (H).

The ADP2140 evaluation board user guide, UG-122 can be found at www.analog.com.

TYPICAL APPLICATION CIRCUITS

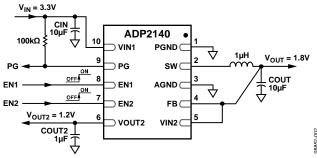


Figure 2. Typical ADP2140 Application Circuit

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REVISION HISTORY

2/11—Rev. 0 to Rev. A

6/10—Revision 0: Initial Version

EVALUSTION BOARD SCHEMATIC AND LAYOUT

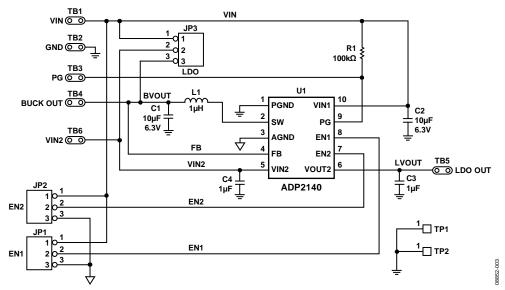


Figure 3. Evaluation Board Schematic

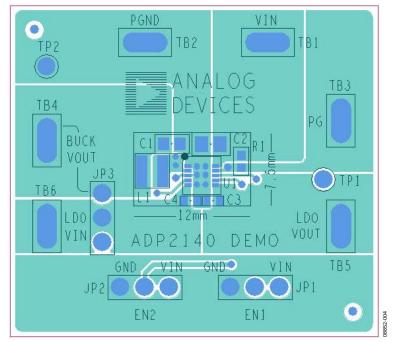


Figure 4. Evaluation Board Layout

REDYKIT BILL OF MATERIALS

Table 1.

Qty	Model	Buck Voltage	LDO Voltage	Description
1		3.3	1.8	Evaluation board
1		1.8	1.2	Evaluation board
2	ADP2140ACPZ1228	1.2	2.8	10-Lead LFCSP_WD
2	ADP2140ACPZ1233	1.2	3.3	10-Lead LFCSP_WD
2	ADP2140ACPZ1533	1.5	3.3	10-Lead LFCSP_WD
2	ADP2140ACPZ1815	1.8	1.5	10-Lead LFCSP_WD
2	ADP2140ACPZ1833	1.8	3.3	10-Lead LFCSP_WD
2	ADP2140ACPZ2518	2.5	1.8	10-Lead LFCSP_WD
2	ADP2140ACPZ3312	3.3	1.2	10-Lead LFCSP_WD
2	ADP2140ACPZ3315	3.3	1.5	10-Lead LFCSP_WD
2	ADP2140ACPZ3325	3.3	2.5	10-Lead LFCSP_WD
2	ADP2140ACPZ3328	3.3	2.8	10-Lead LFCSP_WD
2	ADP2140ACPZ1218	1.2	1.8	10-Lead LFCSP_WD
2	ADP2140ACPZ1528	1.5	2.8	10-Lead LFCSP_WD
2	ADP2140ACPZ1812	1.8	1.2	10-Lead LFCSP_WD
2	ADP2140ACPZ18812	1.875	1.2	10-Lead LFCSP_WD
2	ADP2140ACPZ3318	3.3	1.8	10-Lead LFCSP_WD



SD Caution

ESD (electrostatic discharge) sensitive device. Charged devices and circuit boards can discharge without detection. Although this product features patented or proprietary protection circuitry, damage may occur on devices subjected to high energy ESD. Therefore, proper ESD precautions should be taken to avoid performance degradation or loss of functionality.

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