

XC8111AA01MR Evaluation Board User Manual

6Vmax, 1A Load switch IC with ideal diode function

CAUTION

ENGINEERING EVALUATION PURPOSES ONLY

This evaluation board is made for the purpose of the product evaluation. It is strictly prohibited to use this evaluation board for any other purpose.

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It is also important that you evaluate all our products carefully before mass

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Evaluation Board Picture



Evaluation Board SPEC

PARAMETER		SYMBOL	MIN.	TYP.	MAX.	UNITS
Input Voltage	Applied voltage to V_{OUT} : 0V ~ 1.5V	V_{IN}	1.5	-	6.0	V
	Applied voltage to V_{OUT} : 1.5V ~ 6.0V		0.0	-	6.0	
Output Voltage	Applied voltage to V_{IN} : 0V ~ 1.5V	V_{OUT}	1.5	-	6.0	V
	Applied voltage to V_{IN} : 1.5V ~ 6.0V		0.0	-	6.0	
Output Current ($T_a=25^\circ\text{C}$)	$1.5\text{V} \leq V_{IN} \leq 1.7\text{V}$	I_{OUT}	-	-	300	mA
	$1.7\text{V} < V_{IN} \leq 6.0\text{V}$		-	-	1000	mA

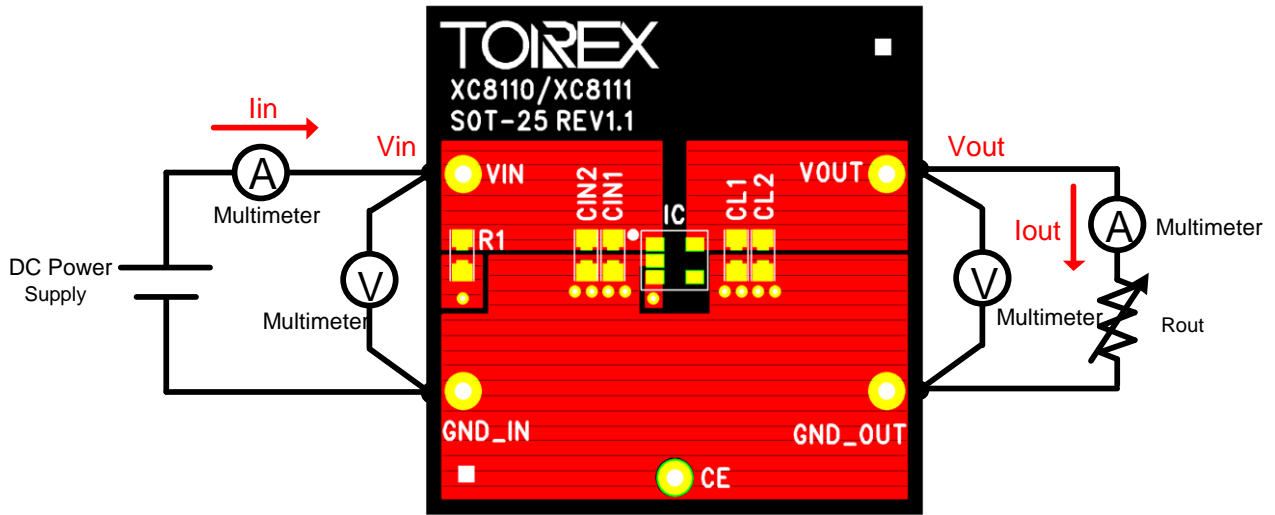
XC8110/XC8110 Series Features

- Input Voltage Range 1.5V ~ 6.0V
- Max Output Current 1000mA
- Ideal Diode function
 - Forward Voltage 20mV
 - Quiescent Current 3.6 μ A
 - Stand-by Current 0.65 μ A
- ORing connection available
- Built-in protection function (Over Current, Thermal Shutdown)

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Quick Start Procedure

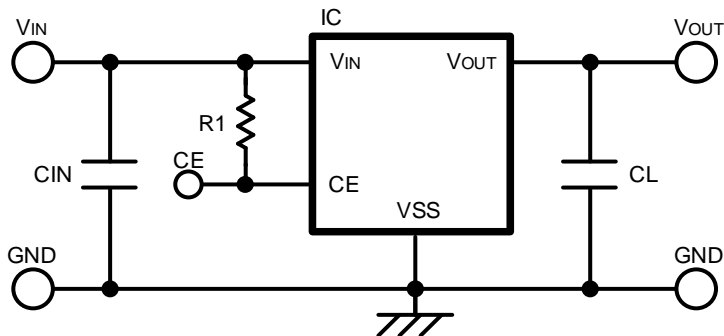


Active : CE="H" (1.2V~6.0V)
 Stand-by : CE="L" (0V~0.3V)

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Schematic



BOM

Required Circuit Component

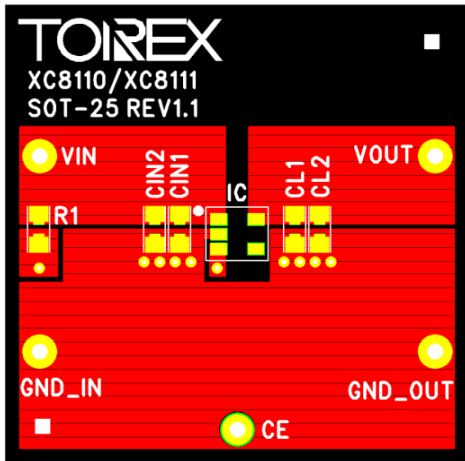
Item	Value	Description	Size [mm]	Part Number	Manufacture
IC	-	Load switch IC with ideal diode	SOT-25	XC8111AA01MR-G	TOREX
CIN1	0.1uF	Ceramic cap., 50V	1608	C1608X7R1H104K	TDK
CIN2	-	-	-	-	-
CL1	0.1uF	Ceramic cap., 50V	1608	C1608X7R1H104K	TDK
CL2	-	-	-	-	-
R1	-	-	-	-	-

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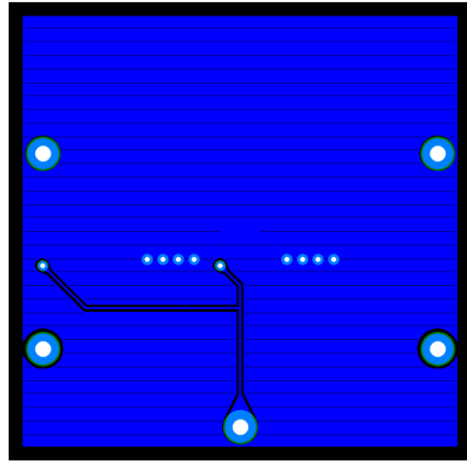
6Vmax, 1A Load switch IC with ideal diode function

PCB Layout

Layer 1



Layer 2

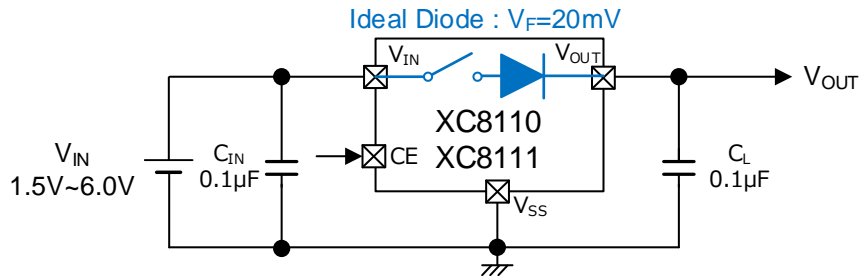


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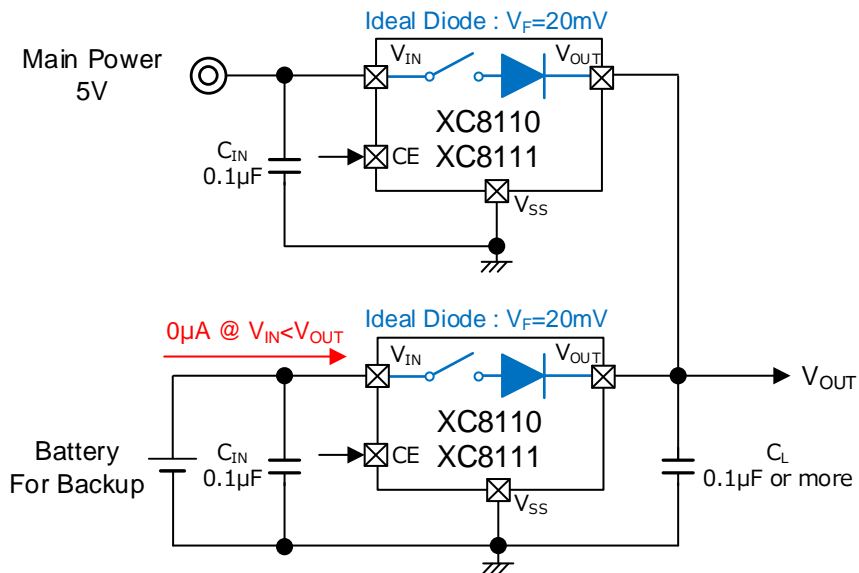
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【Appendix】 Typical Application Circuit

Diode / substitute for load switch



OR circuit: backup circuit, etc.



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