19-6406; Rev 0; 7/12

MAX34565 Evaluation Kit
Evaluates: MAX34565

General Description

The MAX34565 evaluation kit (EV kit) simplifies evaluation of the MAX34565 12V hot-plug switch. The EV kit is shipped with a 15Ω current-limit resistor (R2) installed, but this value can be changed from 12Ω to 30Ω to match the application. The EV kit is also shipped with a Kelvin current-sense arrangement, but this can be changed to a direct current-sense arrangement by adding a 0Ω jumper in the R3 position.

Note: The PCB used for the MAX34565 EV kit also supports the MAX34564. The two devices share the same footprint. **The PCB silkscreen shows the MAX34564, but if a white label exists on the top side of the PCB, the MAX34565, not the MAX34564, is mounted on the board.**

EV Kit Contents

- **MAX34565 EV Kit Board**

Component List

DESIGNATION	QTY	DESCRIPTION
C1	1	0.1µF, 25V X7R ceramic capacitor (0805) Venkel C0805X7R250-104KNE
C2	1	2.2µF, 25V X5R ceramic capacitor (0805) Murata GRM21BR61E225K
C3	1	270pF X7R ceramic capacitor (0805) Venkel C0805X7R500-271KNE
J1	1	Red banana jack
J2	1	Black banana jack
J3	1	Blue banana jack
R1	1	0Ω ±1% resistor (0805) Venkel CR0805-10W-000T
R2	1	15Ω ±1% resistor (0805) Venkel CR0805-10W-15R0FT
R3	1	Resistor, do not populate
TP1–TP7	7	Test points
U1	1	12V hot-plug switch (10 TDFN-EP*) Maxim MAX34565ETB+

*EP = Exposed pad.

Features

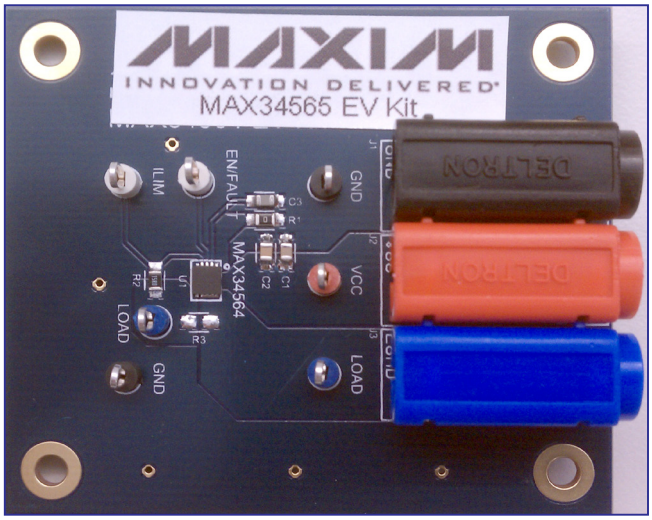
- **Quick Evaluation of the MAX34565**
- **Fully Assembled and Tested**
- **Ready for Operation Out of the Box**
- **Adjustable Current Threshold**
- **Supports Both Kelvin and Direct Current Sensing**
- **Labeled Test Points for Key Signals**
- **PCB Mounting Holes**

Equipment Needed

The following equipment is required to use the MAX34565 EV kit:

- 12V (6A) DC power supply
- Active or passive power load capable of sinking up to 6A

MAX34565 Evaluation Kit



Ordering Information appears at end of data sheet.

Getting Started

- Connect a high-power 12V (6A) DC power supply to the red (+) and black (-) banana jacks. Do not apply power.
- Connect a variable (0 to 6A) load between the blue (+) and black (-) banana jacks.
- Set the load to sink 1A.
- Turn on the 12V DC power supply.
- Check the DC voltage drop from VCC to LOAD. It should be approximately 70mV.
- Decrease the variable load value (increase the current flow) until current stops flowing. The trip point should be approximately 4.5A.
- The MAX34565 latches off and VCC must be powered cycled to reset the device.

Note: Use short leads to minimize inductance. Doing so helps protect the MAX34565 from being exposed to voltages greater that the maximum allowable.

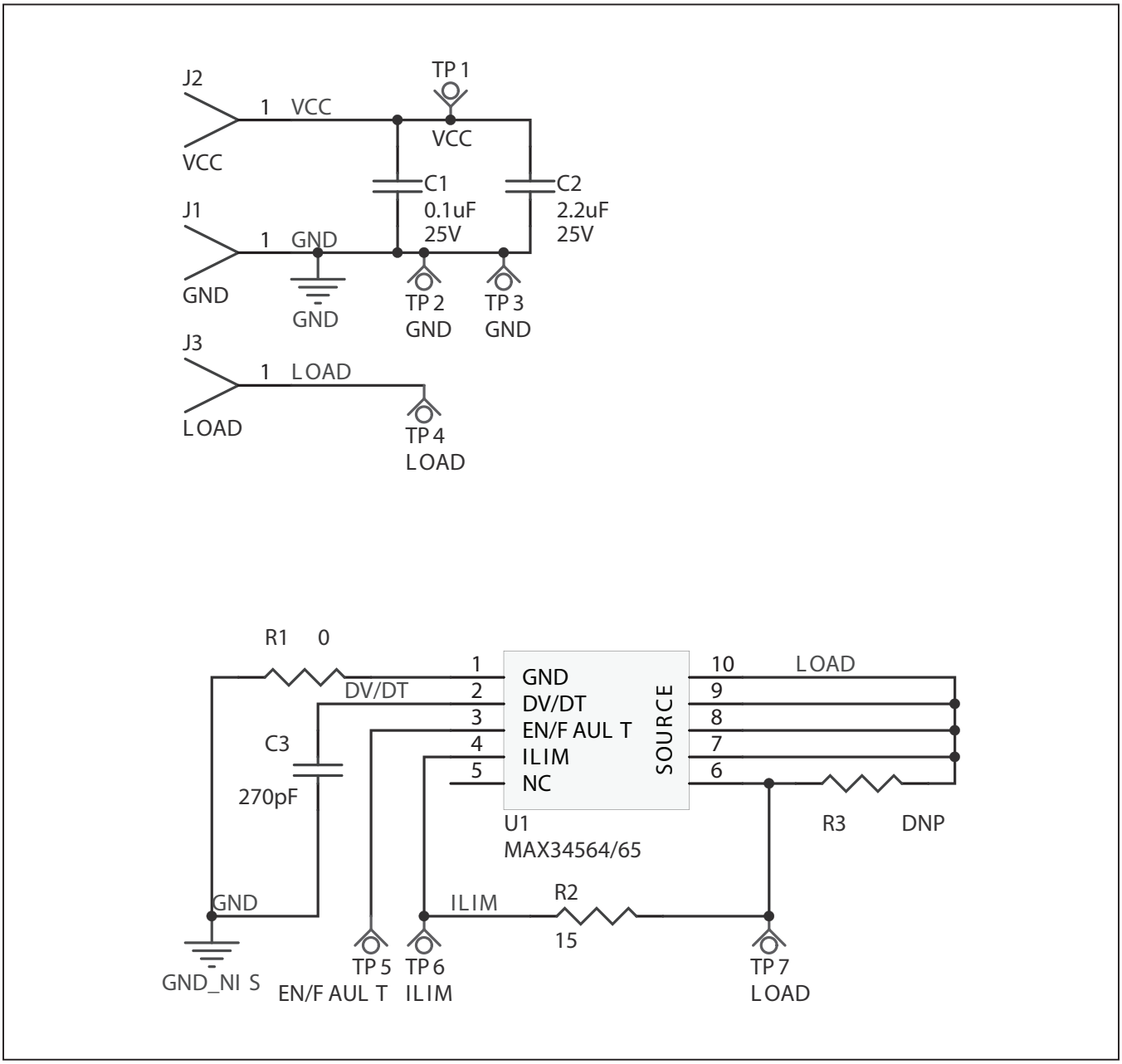


Figure 1. MAX34565 EV Kit Schematic

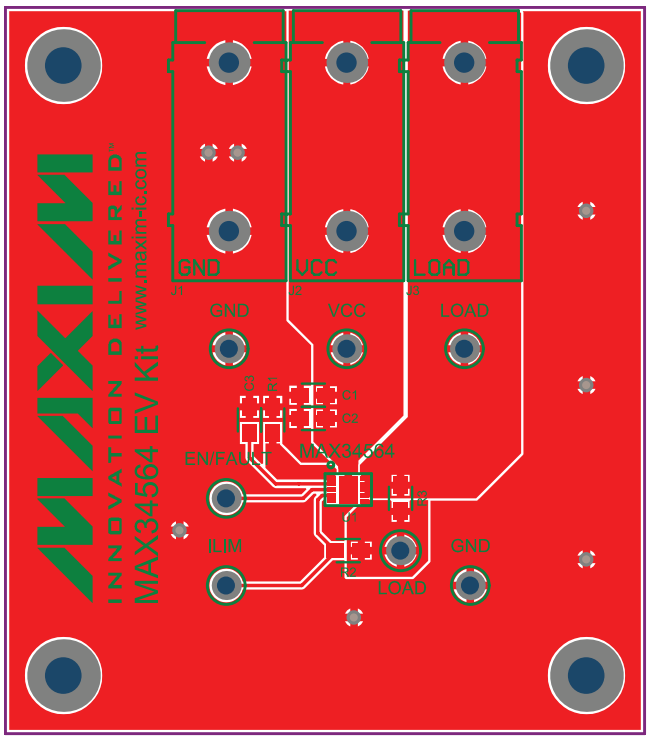


Figure 2. MAX34564/MAX34565 EV Kit PCB Top

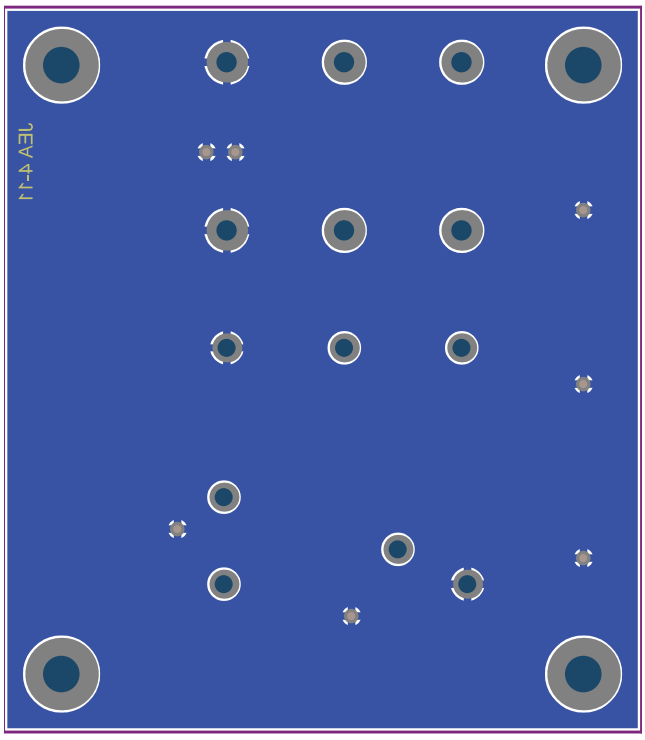


Figure 3. MAX34564/MAX34565 EV Kit PCB Bottom

Ordering Information

PART	TYPE
MAX34565EVKIT#	EV Kit

#Denotes RoHS compliant.

Revision History

REVISION NUMBER	REVISION DATE	DESCRIPTION	PAGES CHANGED
0	7/12	Initial release	—