

DESIGN NOTE 014

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# Voltage monitor circuit configuration



# Abstract

A short overview about a voltage monitor circuit configuration which is applicable for any product with a remote control pin.

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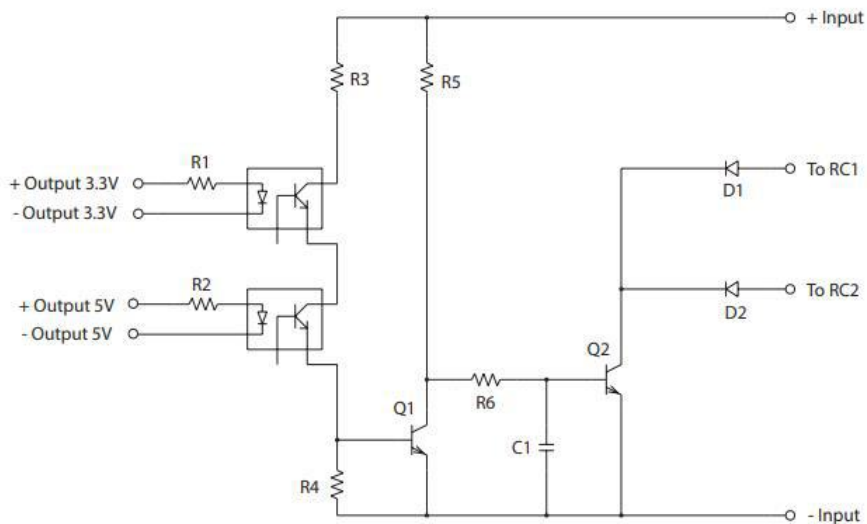
# Voltage monitoring circuit configuration

In some applications it is necessary to monitor the output voltages and shut down all converters if any of these fails. The enclosed example shows how to monitor two outputs.

Increasing the number of monitored outputs is simply done by adding an optocoupler for each additional output in series with the base of Q1. R5 and C1 in the circuit diagram are used to set a time constant delaying the voltage monitoring during start-up. The values used in the example provide approximately 60 ms delay. Consult the converter's datasheet to determine the required delay for your application. The circuit is latching and requires that the input voltage be toggled off-on to restart the converters.

Component values	
R1	1.8 kΩ
R2	3.6 kΩ
R3	1 MΩ
R4	510 kΩ
R5	1 MΩ
R6	12 ohm
C1	4.7 μF
D1, D2	BAS 70
Q1, Q2	MMBTA 42L

Table 1: Component values



Picture 1: Circuit diagram



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**EMEA (Headquarters)** | Torshamnsgatan 28 A, 16440 Kista, Sweden

**APAC** | 33 Fuhua Road, Jiading District, Shanghai, China 201818

**Americas** | 6201 America Center Drive, San Jose, CA 95002, USA

✉ [pm.info@flex.com](mailto:pm.info@flex.com)

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