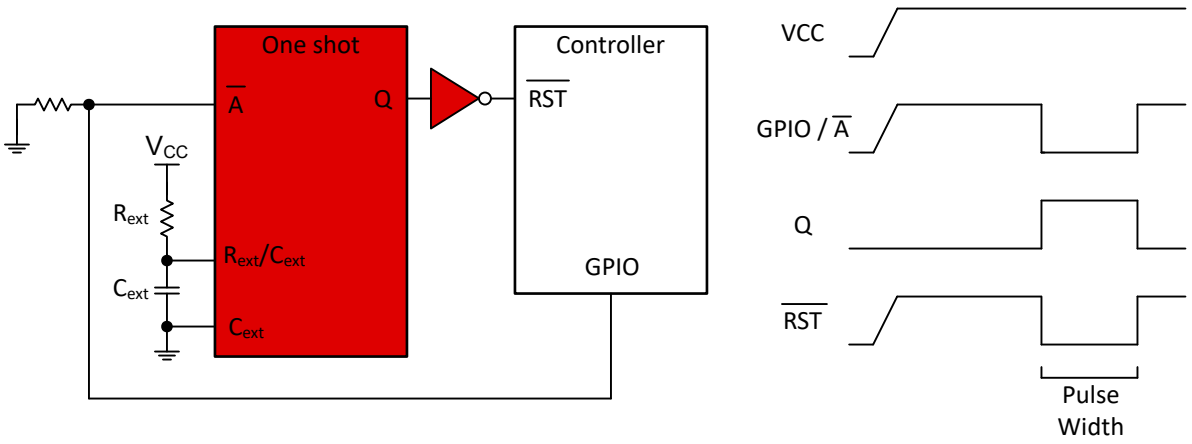
Product Overview

Configurable Timed Reset Using Discrete Logic

System controllers can use GPIO pins to reset other components if a fault is detected; however, system controllers generally cannot reset themselves or their entire system. By using a monostable multivibrator, the system controller can reset the entire system.



- Either falling-edge or rising-edge trigger configurations can be used for this application. See the data sheet of your selected multivibrator for details
- A pullup or pulldown resistor is required to return the input signal to a valid state once the system controller turns off. The recommended value for this resistor is 10 kΩ.
- Retriggerable or non-retriggerable monostable multivibrators can be used for this operation
- *[FAQ] [H] Monostable Multivibrators - Top Questions Answered*
- *[FAQ] How does a slow or floating input affect a CMOS device?*
- *[FAQ] Where do I find maximum power dissipation for a device?*
- Ask a question on our *E2E™ forum*

Part Number	AEC-Q100	V_{CC} Range	Function	Features
SN74LVC1G123		1.65 V–5.5 V	Single channel multivibrator	Retriggerable, Schmitt-trigger inputs
SN74LV123A		2 V–5.5 V	Dual channel multivibrator	Retriggerable, Schmitt-trigger inputs, inverted output
SN74LV123A-Q1	✓			
SN74LV221A		2 V–5.5 V	Dual channel multivibrator	Schmitt-trigger inputs, inverted output
SN74LV221A-Q1	✓			
SN74AHC1G04		2 V–5.5 V	Single channel inverting buffer	
SN74AHC1G04-Q1	✓			

For more devices, browse through the *online parametric tool* where you can sort by desired voltage, channel numbers, and other features.

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