

# Generate a Clock Signal from a Crystal Oscillator

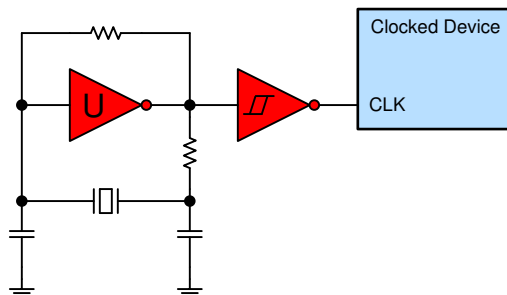


Figure 1-1. Using an Unbuffered Inverter and Schmitt-Trigger Inverter to Generate a Clock Signal From a Crystal Oscillator

## Design Considerations

- Drive crystal oscillators directly
- Can be disabled with added logic
- Allows for selectable system clocks with multiple crystals
- Outputs a clean and reliable square wave
- See the [Use of the CMOS Unbuffered Inverter in Oscillator Circuits Application Report](#) for more information about this use case.
- Need additional assistance? Ask our engineers a question on the [TI E2E™ logic support forum](#)

## Recommended Parts

Part Number	Automotive Qualified	V <sub>CC</sub> Range	Features
<a href="#">SN74LVC2GU04-Q1</a>	✓	1.65 V — 5.5 V	Dual unbuffered inverter
<a href="#">SN74LVC2GU04</a>			
<a href="#">SN74AHC1GU04</a>		2 V — 5.5 V	Single unbuffered inverter
<a href="#">SN74AUC1GU04</a>		0.8 V — 2.7 V	Single unbuffered inverter
<a href="#">SN74LVC1G17-Q1</a>	✓	1.65 V — 5.5 V	Single Schmitt-trigger buffer
<a href="#">SN74LVC1G17</a>			

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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