

**Driver 6A 2-OUT High and Low Side Half Brdg Non-Inv  
Automotive 16-Pin SOIC T/R**

<b>Manufacturer:</b>	<a href="#">Texas Instruments, Inc</a>	<input type="text" value="UCC21520DWR Image"/>
<b>Package/Case:</b>	SOP16	Images are for reference only
<b>Product Type:</b>	Drivers	<input type="button" value="Inquiry"/>
<b>RoHS:</b>	RoHS Compliant/Lead free 	
<b>Lifecycle:</b>	Active	

### General Description

The UCC21520 and the UCC21520A are isolated dual-channel gate driver with 4-A source and 6-A sink peak current. It is designed to drive power MOSFETs, IGBTs, and SiC MOSFETs up to 5-MHz with best-in-class propagation delay and pulse-width distortion.

The input side is isolated from the two output drivers by a 5.7-kVRMS reinforced isolation barrier, with a minimum of 100-V/ns common-mode transient immunity (CMTI). Internal functional isolation between the two secondary-side drivers allows a working voltage of up to 1500 VDC.

Every driver can be configured as two low-side drivers, two high-side drivers, or a half-bridge driver with programmable dead time (DT). A disable pin shuts down both outputs simultaneously when it is set high, and allows normal operation when left open or grounded. As a fail-safe measure, primary-side logic failures force both outputs low.

Each device accepts VDD supply voltages up to 25 V. A wide input VCCI range from 3 V to 18 V makes the driver suitable for interfacing with both analog and digital controllers. All the supply voltage pins have undervoltage lock-out (UVLO) protection.

With all these advanced features, the UCC21520 and the UCC21520A enable high efficiency, high power density, and robustness in a wide variety of power applications.

## Key Features

Universal: Dual Low-Side, Dual High-Side or Half-Bridge Driver

Operating Temperature Range  $-40$  to  $+125^{\circ}\text{C}$

Common-Mode Transient Immunity (CMTI) Greater than 100 V/ns

Surge Immunity up to 12.8 kV

Isolation Barrier Life  $>40$  Years

4-A Peak Source, 6-A Peak Sink Output

TTL and CMOS Compatible Inputs

3-V to 18-V Input VCCI Range to Interface with Both Digital and Analog Controllers

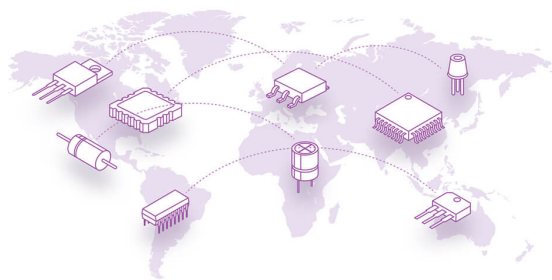
Up to 25-V VDD Output Drive Supply

Programmable Overlap and Dead Time

Rejects Input Pulses and Noise Transients Shorter than 5 ns

Fast Disable for Power Sequencing

Safety-Related Certifications:



## Recommended For You

---

### UCC28064ADR

Texas Instruments, Inc

SOP16

### UC3637N

Texas Instruments, Inc

DIP-18

### UCC27517DBVR

Texas Instruments, Inc

SOT23-5

**UCC2946IPWRQ1**

Texas Instruments, Inc  
TSSOP8

**UCC28730QDRQ1**

Texas Instruments, Inc  
SOP7

**UCC21222QDRQ1**

Texas Instruments, Inc  
SOP16

**UCD9090QRGZRQ1**

Texas Instruments, Inc  
VQFN-48

**UCC27531QDBVRQ1**

Texas Instruments, Inc  
SOT23-6

**UCC27511AQDBVRQ1**

Texas Instruments, Inc  
SOT23-6

**UCC2803QDRQ1**

Texas Instruments, Inc  
SOP8

**UCC28951QPWRQ1**

Texas Instruments, Inc  
TSSOP24

**UCC21320QDWKRQ1**

Texas Instruments, Inc  
SOIC-14

**UCC27322QDGNRQ1**

Texas Instruments, Inc  
HVSSOP-8

**UCC28950QPWRQ1**

Texas Instruments, Inc  
TSSOP24

**UCC2808AQDR-2Q1**

Texas Instruments, Inc  
SOP8