

Features

- Floating high-side driver in bootstrap operation to 600V
- Drives two N-channel MOSFETs or IGBTs in a half bridge configuration
- Outputs tolerant to negative transients
- Wide logic and low side gate driver supply voltage: 10V to 20V
- Wide logic supply voltage offset voltage: -5V to 5V
- Logic input (HIN and LIN) 3.3V capability
- Schmitt triggered logic inputs with internal pull down
- Undervoltage lockout for high and low side drivers
- Extended temperature range: -40°C to +125°C

Description

The TF21064M is a high voltage, high speed gate driver capable of driving N-channel MOSFETs and IGBTs in a half bridge configuration. TF Semiconductors's high voltage process enables the TF21064's high side to switch to 600V in a bootstrap operation.

The TF21064M logic inputs are compatible with standard TTL and CMOS levels (down to 3.3V) to interface easily with controlling devices. The driver outputs feature high pulse current buffers designed for minimum driver cross conduction. The TF21064M is offered in PDIP-14 and SOIC-14(N) packages and operates over an extended -40 °C to +125 °C temperature range.



SOIC-14(N)





PDIP-14

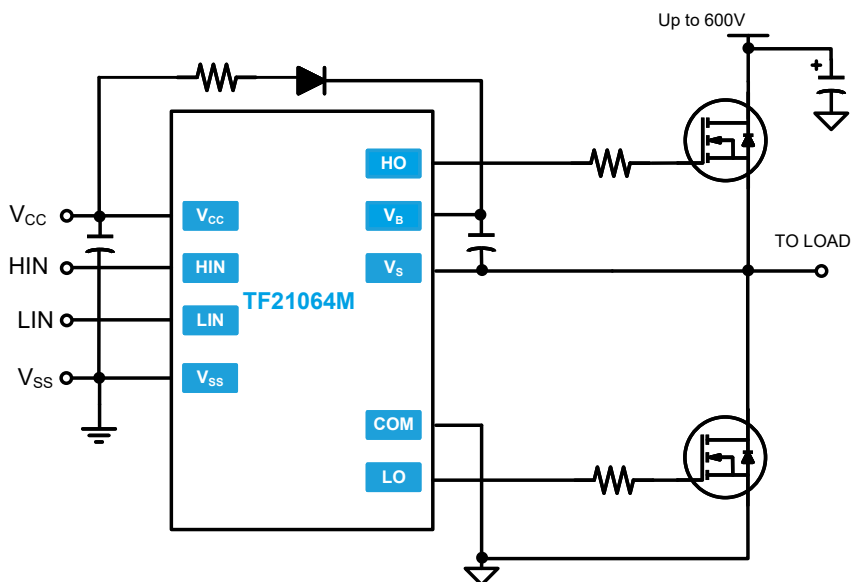
Applications

- DC-DC Converters
- AC-DC Inverters
- Motor Controls
- Class D Power Amplifiers

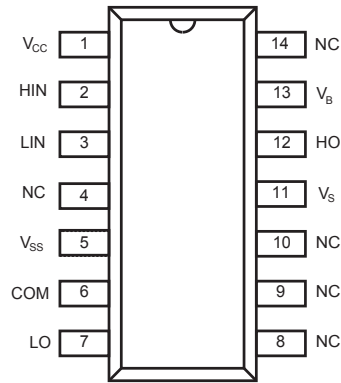
Ordering Information

PART NUMBER	PACKAGE	PACK / Qty	YearYear WeekWeek
			MARK
TF21064M-TUU	SOIC-14(N)	Tube / 50	 YYWW TF21064M Lot ID
TF21064M-TUH		T&R / 2500	
TF21064M-3BS	PDIP-14	Tube / 25	 YYWW TF21064M Lot ID

Typical Application



Pin Diagrams



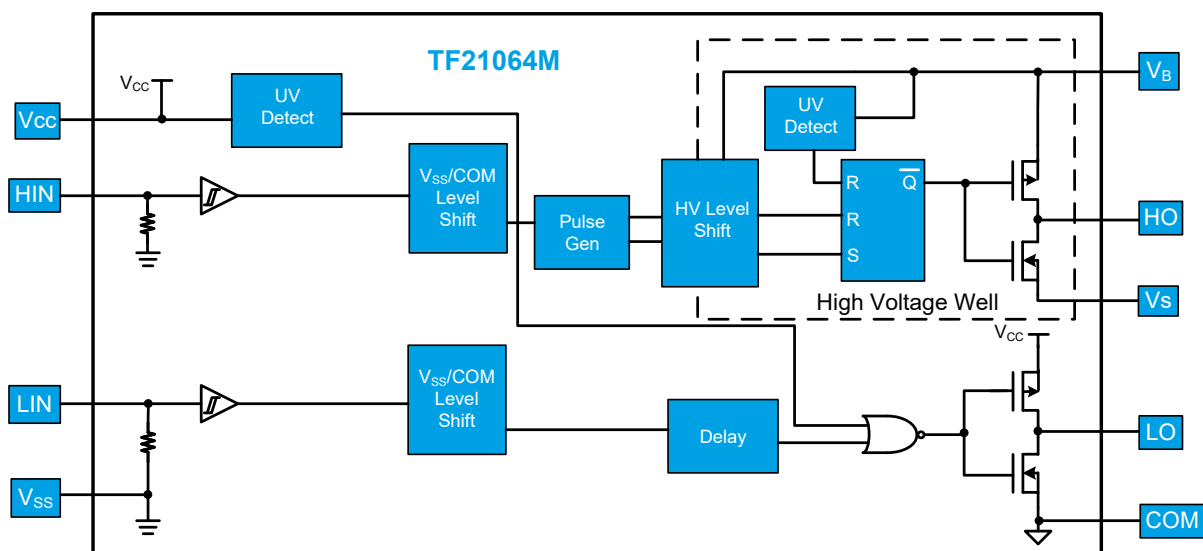
Top View: SOIC-14, PDIP-14

TF21064M

Pin Descriptions

PIN NAME	PIN DESCRIPTION
HIN	Logic input for high-side gate driver output, in phase with HO (referenced to VSS).
LIN	Logic input for low side gate driver output, in phase with LO (referenced to VSS)
VSS	Logic ground
NC	No connect
COM	Low-side return
LO	Low-side gate drive output
V _{CC}	Low-side and logic fixed supply
V _B	High-side floating supply
HO	High-side gate drive output
V _S	High-side floating supply return

Functional Block Diagram



Revision Table

Rev.	Change	Owner	Date
AI 1.0	First release, datasheet	D. Walton	12/10/2022

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