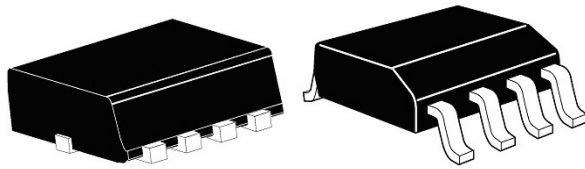


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**INFO** The TMC32NP-MLP is a miniature N & P channel MOSFET complementary pair, ideally suited for motor drive applications. It perfectly complements the TMC239A-LA / TMC249A-LA stepper motor drivers, in order to build a 2A (4 devices) / 4A (8 devices) stepper motor driver the size of a stamp.

The TMC32NP2-SM8 is a miniature N & P channel MOSFET full bridge, ideally suited for motor drive applications. It perfectly complements the TMC239A-SA / TMC249A-SA stepper motor drivers, in order to build a 1.5A / 2.5A peak current capability (5 seconds) stepper motor driver on a two layer PCB. Using just one small fullbridge, a DC motor can be operated in four quadrant mode.

The evaluation board has different stepper driver MOSFET configurations and allows SPI control via a TMC428A-EVAL board as well as step / direction control using a TMC401.

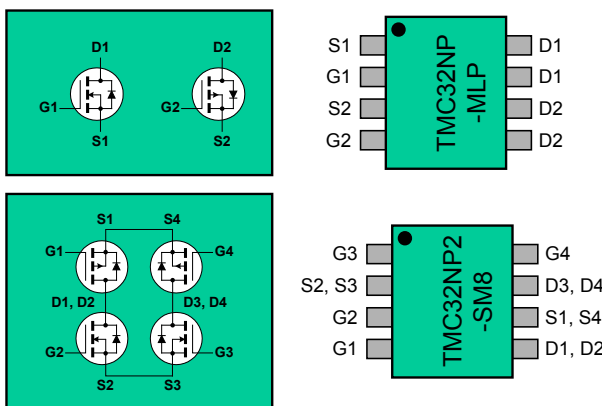
# TMC32NP-MLP

# TMC32NP2-SM8

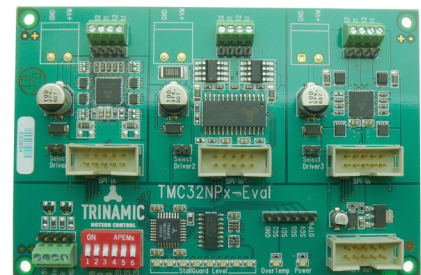
Complementary 30V MOSFET  
Half Bridge / Full Bridge

### MAIN CHARACTERISTICS

- ELECTRICAL DATA N TYPE**
  - 0.12 Ω RDSon max. @ VGS= 10V
  - 0.18 Ω RDSon max. @ VGS= 4.5V
- ID= 2.9A max. cont. current (MLP)
- ID= 2.7A max. cont. current (SM8)
- 30V VBRDSS max.
- ELECTRICAL DATA N TYPE**
  - 0.21 Ω RDSon max. @ VGS= -10V
  - 0.33 Ω RDSon max. @ VGS= -4.5V
- ID= -2.1A max. cont. current (MLP)
- ID= -2.0A max. cont. current (SM8)
- -30V VBRDSS max.
- HIGHLIGHTS**
  - extremely compact package
  - low on resistance
  - low gate charge
- APPLICATIONS**
  - stepper motor drives
  - DC motor drives
- PACKAGE**
  - chip size 2x3 mm<sup>2</sup> dual die package MLP
  - 8 pin SOT223 6.7x7 mm<sup>2</sup> package SM8
  - RoHS compliant



10 mm



ORDER CODE	DESCRIPTION
TMC32NP-MLP	Complementary 30V MOSFET half bridge (MLP package)
TMC32NP2-MLP	Complementary 30V MOSFET full bridge (SM8 package)
<b>Related product:</b>	<i>These devices ideally complement the TMC239 &amp; TMC249</i>
TMC32NPx-EVAL	Evaluation board for TMC401-PI, TMC249A-LA & TMC32NP-MLP, TMC249A-SA & TMC32NP2-SM8 and TMC249A-LA & TMC34NP-PSO