

## DESCRIPTION

The PT5126 is 1 Full-On Drive H-Bridge channel with three different packages. The driver features wide range operating from 2V to 24V and low power consumption by fast switching speed.

- PWM control, Max. input frequency: 200KHz.
- Operating temperature range: -40 to +85°C
- Charge-pump less
- Shoot-through current protection
- Built-in protection circuits
  - Under Voltage Lock Out
  - Thermal Shut Down

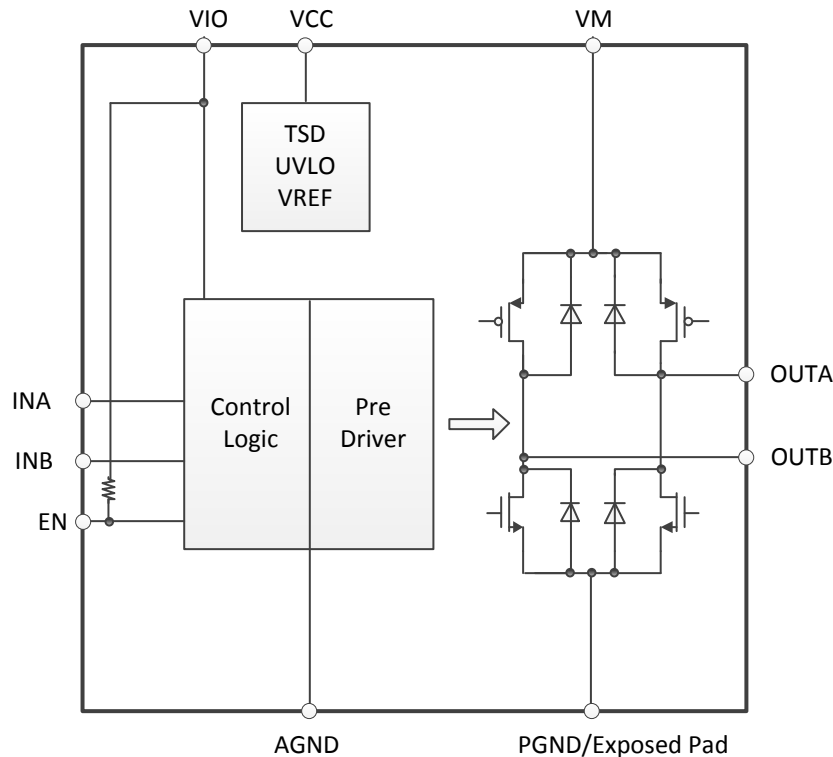
## FEATURES

- It is low consumption by BCD process adoption
- Three different small packages: QFN16(3x3), TSSOP14, ESOP8
- Wide power-supply voltage range:
  - Logic (VIO): 1.62V to VCC
  - Control (VCC): 2.7V to 5.5V
  - Motor (VM): 2.0V~24V
- High DC output current: Max.=2.8A
- Ultra low RDS(on)(TOP+BOT): 0.49ΩTYP@25°C, 1A
- Low current consumption when power-down: <0.05μA @25°C

## APPLICATION

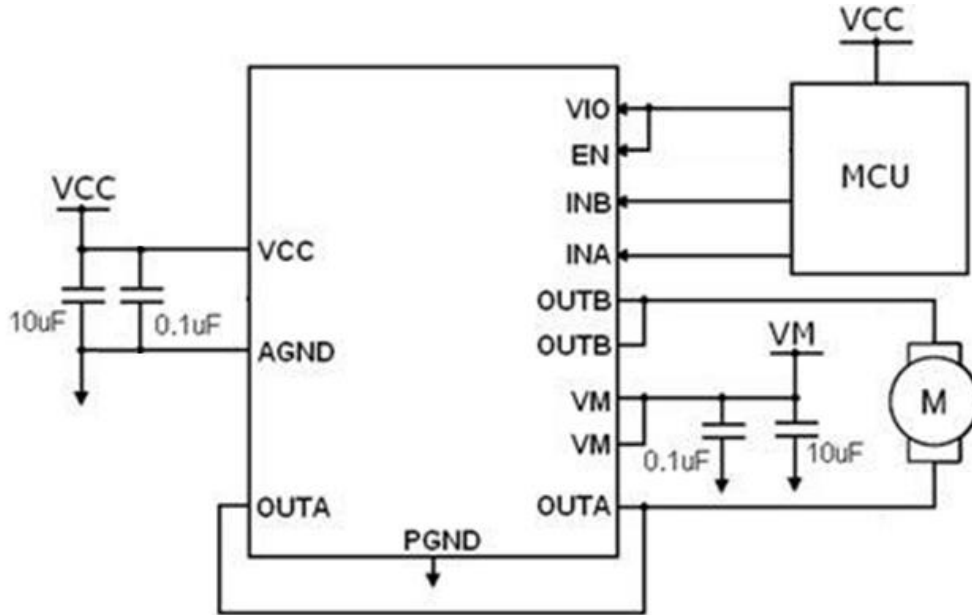
- Lens for DSLR
- Auto icemaker or dumper drive for refrigerator
- HV bi-direction DC Motor
- Intelligent electronic lock

## BLOCK DIAGRAM

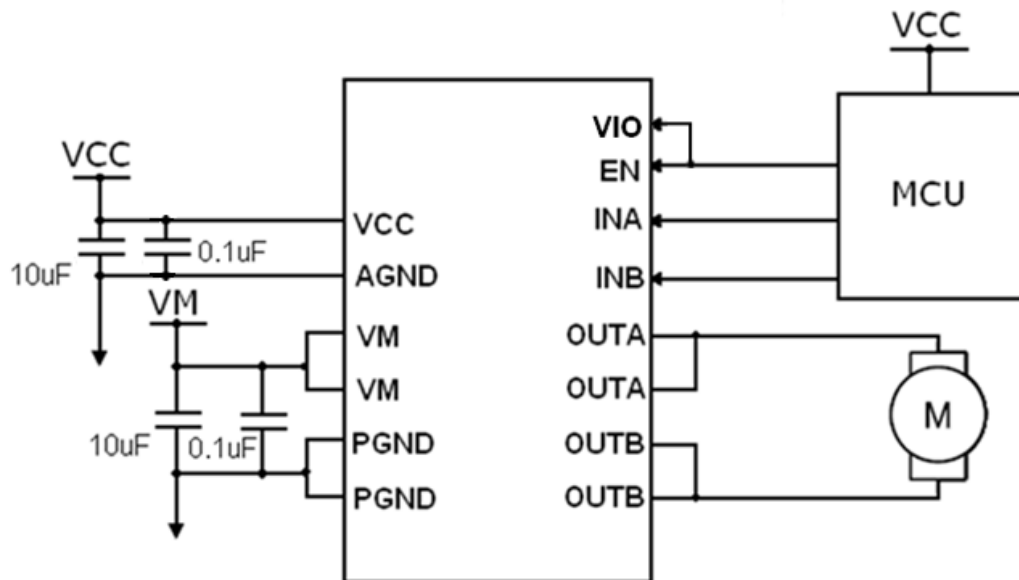


# APPLICATION CIRCUITS

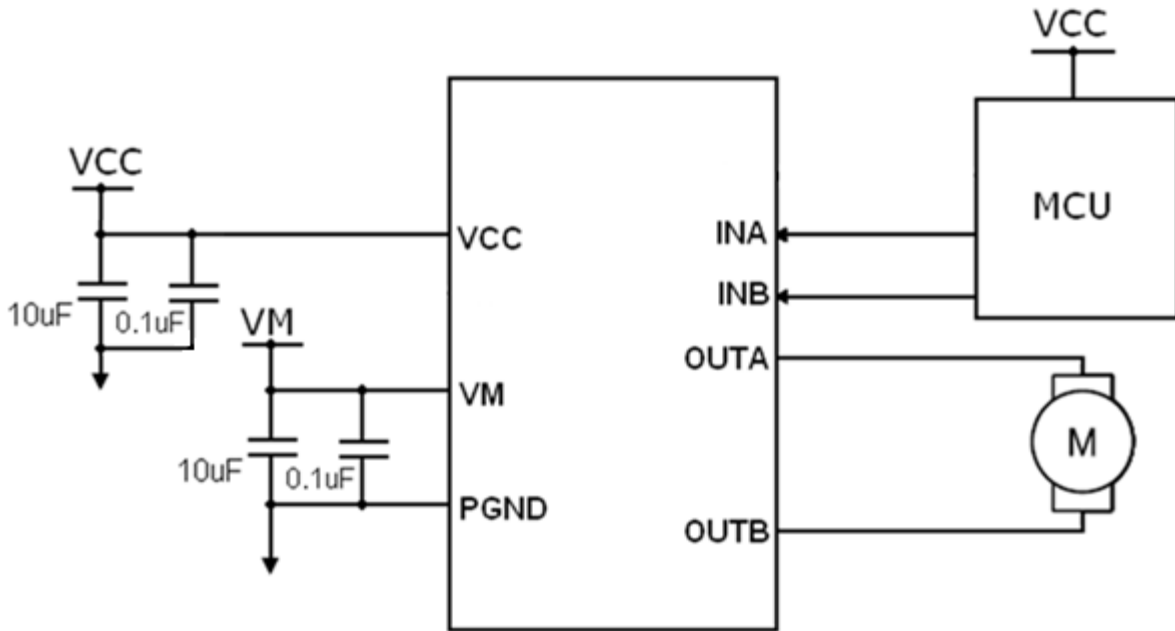
## QFN16



## TSSOP14



**ESOP8**

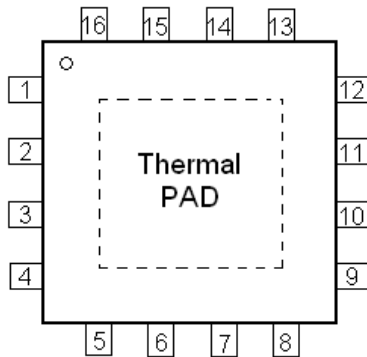


## ORDER INFORMATION

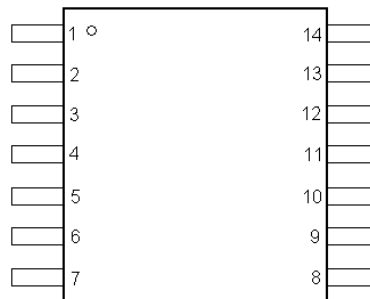
Valid Part Number	Package Type	Top Code
PT5126	16 pins, QFN	PT5126
PT5126-TX	14 pins, TSSOP	PT5126-TX
PT5126-ES	8 pins, ESOP	PT5126-ES

## PIN CONFIGURATION

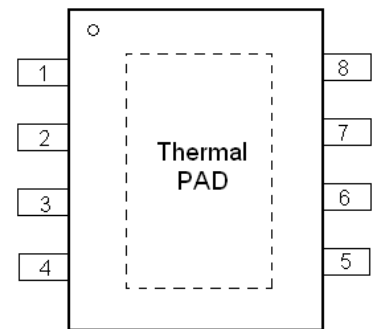
### QFN16



### TSSOP14



### ESOP8



## PIN DESCRIPTION

Pin Name	I/O	Description	Pin No.		
			QFN16	ESOP8	TSSOP14
NC	-	NC pin	1, 3, 4, 5	-	-
AGND	GND	Logic GND	2	1	1
VCC	Power	Power supply for Logic circuit	6	2	2
VIO	Power	Power supply for IO Logic	7	-	3
OUTA	O	H-Bridge output terminal A of the driver	8, 9	4	5, 6
VM	Power	Power supply for driver	10, 11	3	4, 11
OUTB	O	H-Bridge output terminal B of the driver	12, 13	5	9, 10
INA	I	Control input	14	6	12
INB	I	Control input	15	7	13
EN	I	Logic Enable [300KΩ pull up for VIO]	16	8	14
PGND	GND	Power MOS GND	Thermal PAD		7, 8

## IMPORTANT NOTICE

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