

DESCRIPTION

The PT5115 is a monolithic 4-Channel CMOS H-bridge motor driver. It can drive one stepper motor, two DCM and two coils. There also are several other flexible system solutions left to be utilized. The current consumption can be hold at quite low level during standby or operation. And the active power supply voltage range is from 2.7~5.5V. So the device is ideal for portable and battery powered applications.

The PT5115 is available in QFN24 (4mm × 4mm) package. Performance is specified for -20°C to +85°C temperature range.

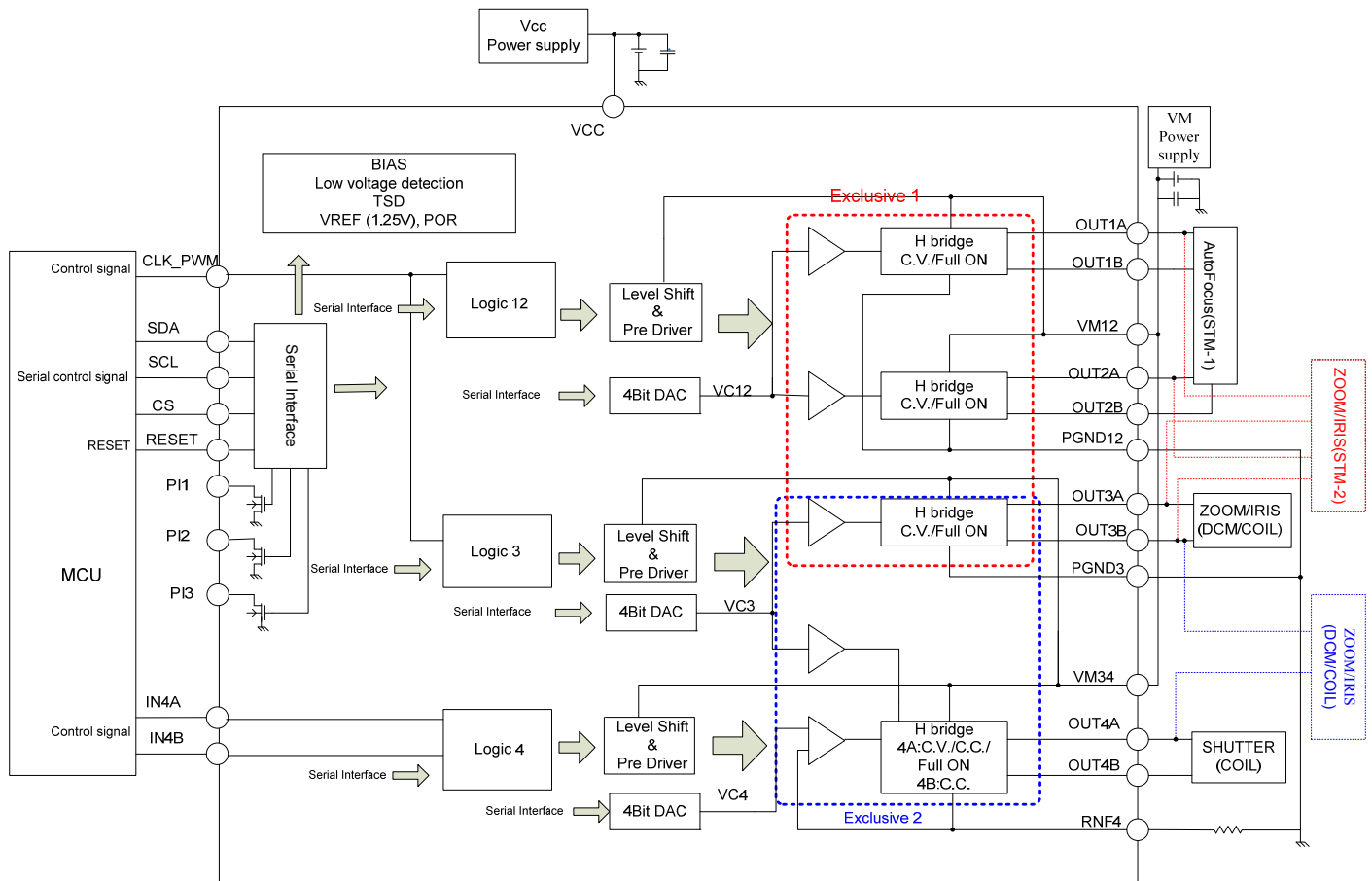
APPLICATIONS

- DSC

FEATURES

- Independent 4channel H-bridge, 3 full-swing drivers and 1 constant-current driver, all of those drivers with brake function.
- Versatile and flexible control mode - DC/stepper motor alternative, Full-swing/ Constant-Voltage/ Constant-Current selected
- Special Exclusive Control mode optional
- Constant-Voltage set by DAC: 1.8V~4.8V 0.2V/Bit Accuracy ± 5%
- Constant current set by DAC: 150mV~300mV 10mV/Bit Accuracy±5%
- Under voltage lockout circuit - Shut down the internal circuit at VCC=1.8V (Typ.)
- Thermal shut down circuit - Shut down the internal circuit at 150°C Hysteresis 30°C
- Available in small package QFN24 (4mm × 4mm)

BLOCK DIAGRAM



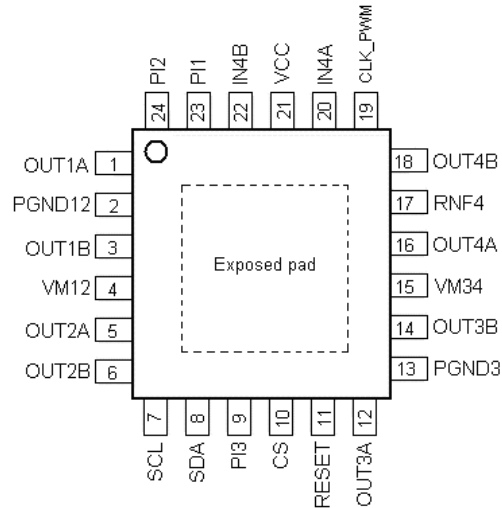
Notes:

1. FS=Full-swing
2. CV= Constant-Voltage
3. CC=Constant-Current

ORDER INFORMATION

Valid Part Number	Package Type	Top Code
PT5115	24 pins, QFN	PT5115

PIN CONFIGURATION



Note: The Exposed PAD must be connect to GND

PIN DESCRIPTION

Pin Name	I/O	Description	Pin No.
OUT1A	O	CH1 output A	1
PGND12	GND	CH12 Power GND	2
OUT1B	O	CH1 output B	3
VM12	Power Supply	CH1/2 Power supply	4
OUT2A	O	CH2 output A	5
OUT2B	O	CH2 output B	6
SCL	I	Serial clock input	7
SDA	I	Serial data input	8
PI3	OUT	PI3 Output	9
CS	I	Serial data latch control	10
RESET	I	Logic reset	11
OUT3A	O	CH3 output A	12
PGND3	GND	CH3 Power GND	13
OUT3B	O	CH3 output B	14
VM34	Power Supply	CH3/4 Power supply	15
OUT4A	O	CH4 output A	16
RNF4	I/O	CH4 current sense input or Power GND	17
OUT4B	O	CH4 output B	18
CLK_PWM	I	Stepping motor clock for CH12/PWM input for CH3	19
IN4A	I	CH4 Input Control Pin	20
VCC	Power Supply	Small signal power supply	21
IN4B	I	CH4 Input Control Pin	22
PI1	OUT	PI1 Output	23
PI2	OUT	PI2 Output	24
PGND3/GND	GND	CH3 Power GND and pre driver GND	Exposed pad

IMPORTANT NOTICE

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PTC cannot assume responsibility for use of any circuitry other than circuitry entirely embodied in a PTC product. No circuit patent licenses are implied.

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