

DESCRIPTION

The PT6724 is a 16-channel current sink driver for LED clusters. It contains a serial buffer and data latches which convert serial input data into parallel output format. At output stage, sixteen regulated current ports are designed to provide uniform and constant current sinks for driving LEDs. The output current is determined by an external resistor and the brightness control code, both set by users. PT6724 can be used to control LEDs intensity with output enables as PWM input function. PT6724 provides users with great flexibility and performance. Users may adjust the output current from 3mA to 45mA which gives users flexibility in controlling the light intensity of LEDs. The PT6724 guarantees to endure maximum 17V at the output port.

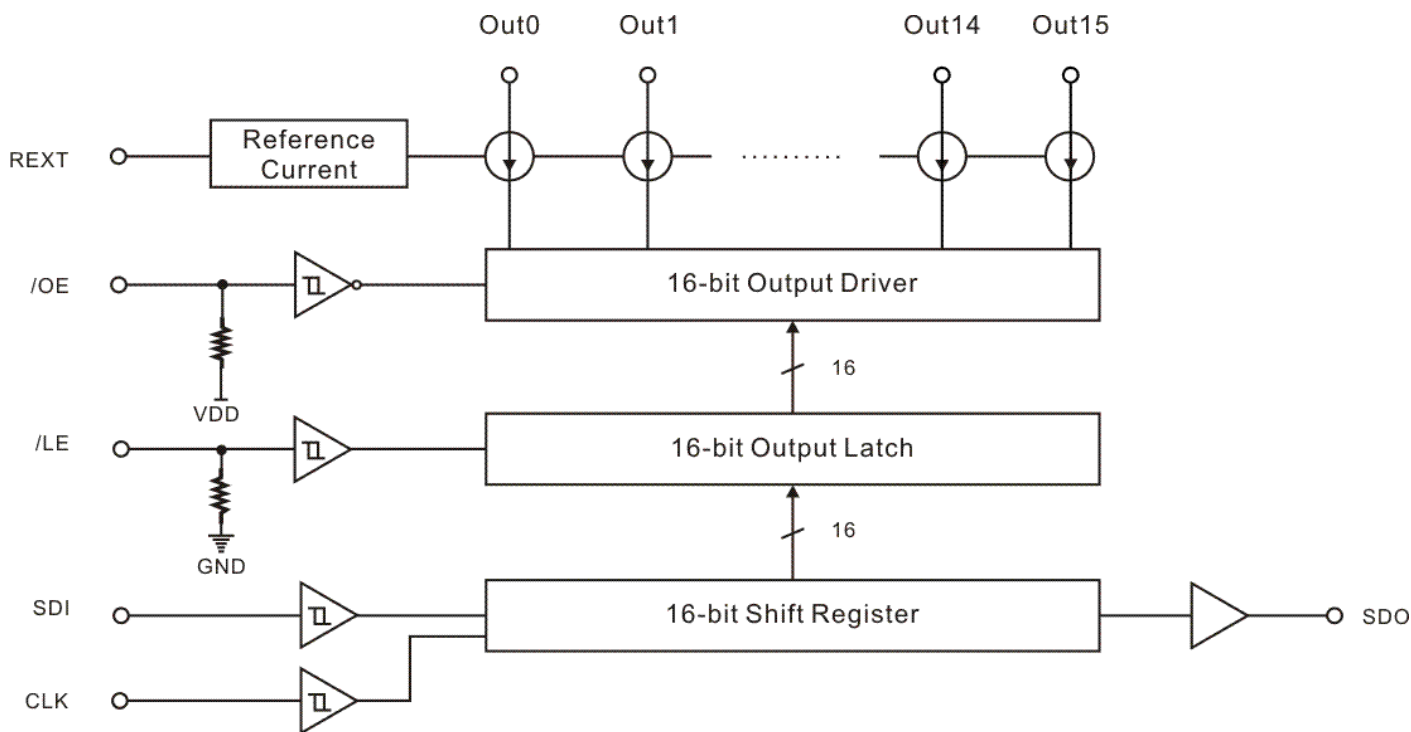
FEATURES

- 16-channel constant current sink output
- Output current invariant to load voltage change
- Serial data in/parallel data out
- Constant output current range: 3~45mA
- Output current accuracy:
 - ICs skew: < 3%(max)
 - Bits skew: < 2.5%(max)
- 3~5.5V supply voltage
- 25 MHz clock frequency
- Package: SOP24/SSOP24/QFN24/DIP24

APPLICATION

- LED display/ RGB cluster control

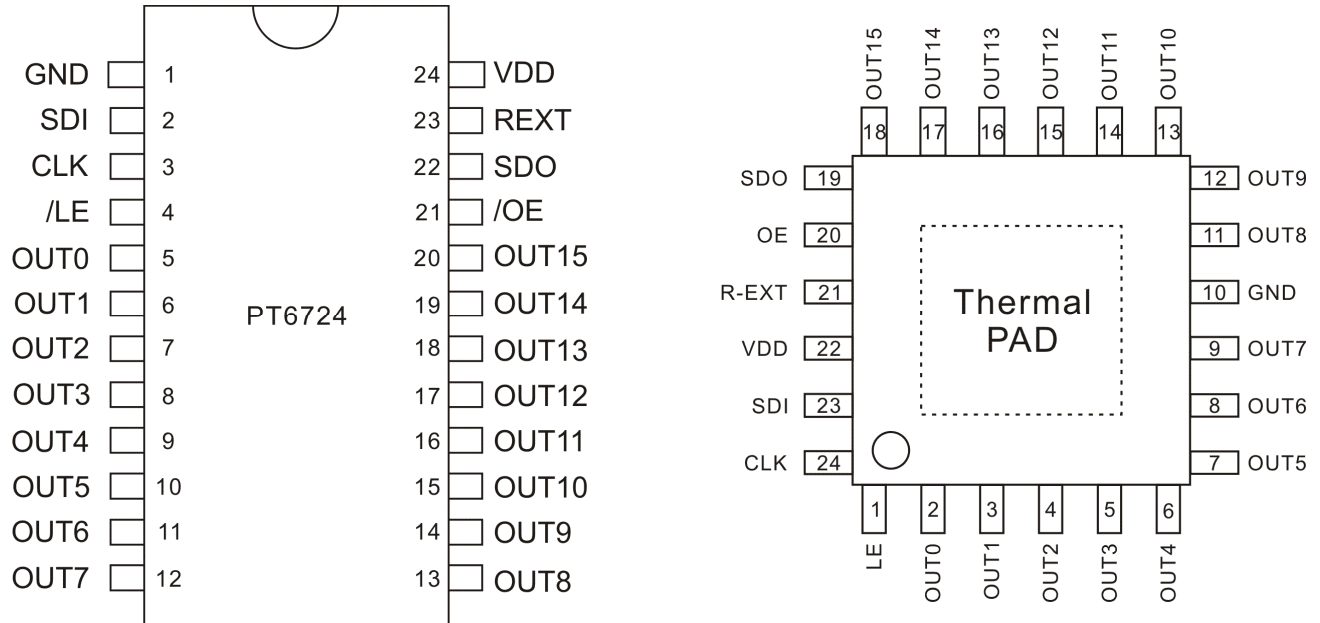
BLOCK DIAGRAM



ORDER INFORMATION

Valid Part Number	Package Type	Top Code
PT6724-S	24 Pins, SOP	PT6724-S
PT6724-X	24 Pins, SSOP	PT6724-X
PT6724-QF	24 Pins, QFN	PT6724-QF
PT6724	24 Pins, DIP	PT6724

PIN CONFIGURATION



PIN DESCRIPTION

Pin Name	Description	Pin No.	
		SOP/SSOP/DIP	QFN
GND	Ground terminal.	1	10
SDI	Serial input of data shift register.	2	23
CLK	Clock input of shift register, data is sampled at the rising edge of CLK.	3	24
/LE	Input terminal of latch enable. Data is latched when /LE is low. And data on shift register goes through when /LE is high.	4	1
OUT[0:15]	Open-drain, constant-current sink outputs.	5~20	2~15
/OE	Output enable signal. Output is enabled when /OE is forced to low.	21	20
SDO	Output terminal of serial-data output to the SDI of next PT6724.	22	19
REXT	External resistor terminal for setting up all output current.	23	21
VDD	Supply voltage terminal.	24	22