

DESCRIPTION

The PT16953 is a 16-channel current sink driver with error detection for LED display. 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 built-in current gain register could be used to adjust it. PT16953 also has 12/16 bit PWM registers for brightness control. Users may adjust the output current from 3mA to 40mA, which gives users flexibility in controlling the light intensity of LEDs. The PT16953 guarantees to endure maximum 40V at the output port.

FEATURES

- Serial data in/parallel data out
- 16-channel constant current sink output
- Current setting by external resistor
- 7-bit current gain register control
- Constant output current range: 3~40mA
- 12/16 bit PWM registers for brightness control
- Error detection for open and LED short
- Over temperature flag and thermal shutdown
- 3~5.5V supply voltage
- 30 MHz max. serial interface clock frequency
- 30 MHz max. external PWM clock
- Package: HTSSOP24

APPLICATION

- LED display / RGB cluster control

BLOCK DIAGRAM

