普 誠 科 技
Princeton Technology Corp.

DESCRIPTION

PT16556 is a General Purpose LCD Driver IC utilizing CMOS Technology specially designed for electronic tuners controlled by microcontroller. It can drive up to a maximum of 128 segment outputs and can control up to 4 general purpose output ports. Pin assignments and application circuit are optimized for easy PCB layout and cost saving advantages.
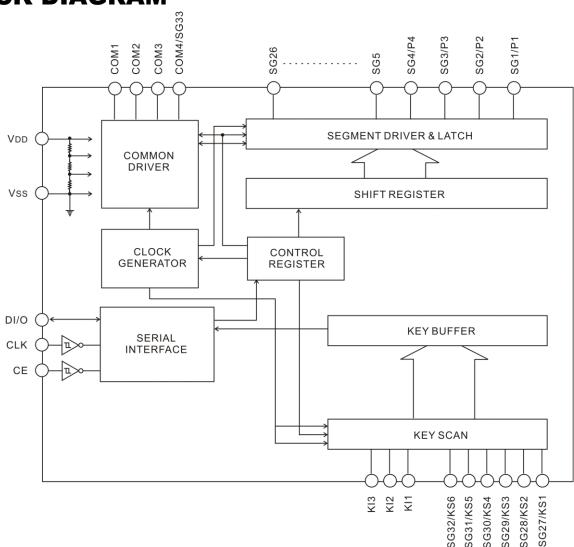
APPLICATION

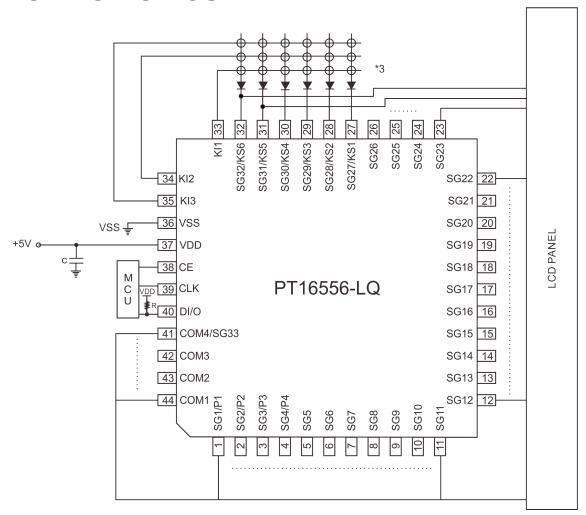- Frequency Display for Electronic Tuners

FEATURES

- CMOS Technology
- Up to 128 LCD Segments(4 Com X 32 Seg) with 18 key scan
- Up to 99 LCD Segments(3 Com X 33 Seg) with 18 key scan
- Up to 4 General Purpose Output Ports
- 1/4 ;1/3 Duty – 1/2 Bias or 1/4; 1/3 Duty – 1/3 Bias Drive Technique
- Power Saving Mode provided
- Power Supply Voltage: 2.7V ~ 6V
- CMOS/TTL compatible logic input pins
- AEC-Q100 Grade2 Compliant for Automotive Applications
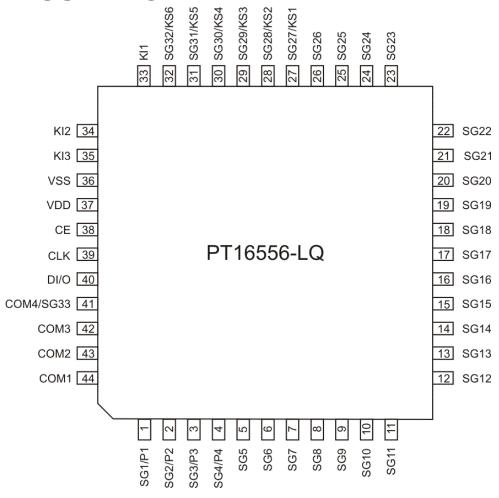- Available in 44 pins, LQFP

BLOCK DIAGRAM

APPLICATION CIRCUIT

Notes:
1. C ≥ 0.1μF
2. 10KΩ ≥ R ≥ 1KΩ
3. It suggests to add a diode on SGn/KSn pin when the multi-key function is in use.

ORDER INFORMATION

Valid Part Number	Package Type	Top Code
PT16556-LQ	44 Pins, LQFP	PT16556-LQ

PIN CONFIGURATION

PIN DESCRIPTION

Pin Name	I/O	Description	Pin No.
SG1/P1 ~ SG4/P4	O	Segment Driver Output/General Purpose Output Ports	1 ~ 4
SG5 ~ SG26	O	Segment Driver Output Pins	5 ~ 26
SG27/KS1 ~ SG32/KS6	O	Segment Driver Output/Key Scan Output Ports	27 ~ 32
KI1 ~ KI3	I	Key Scan Input Pins	33 ~ 35
VSS	-	Ground	36
VDD	-	Power Supply	37
CE	I	Chip Enable Pin	38
CLK	I	Clock Input Pin	39
DI/O	I/O	Data Input /Output Pin	40
COM4/SG33	O	Segment Driver Output/ Common Output Ports	41
COM1 ~ COM3	O	Common Driver Output Pins	44 ~ 42

Note: It must be noted that when the display is forcibly turned OFF, the serial data transfers can still be performed.

IMPORTANT NOTICE

Princeton Technology Corporation (PTC) reserves the right to make corrections, modifications, enhancements, improvements, and other changes to its products and to discontinue any product without notice at any time.
PTC cannot assume responsibility for use of any circuitry other than circuitry entirely embodied in a PTC product. No circuit patent licenses are implied.

Princeton Technology Corp.
2F, 233-1, Baociao Road,
Sindian Dist, New Taipei City 23145, Taiwan
Tel: 886-2-66296288
Fax: 886-2-29174598
http://www.princeton.com.tw