

## 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.

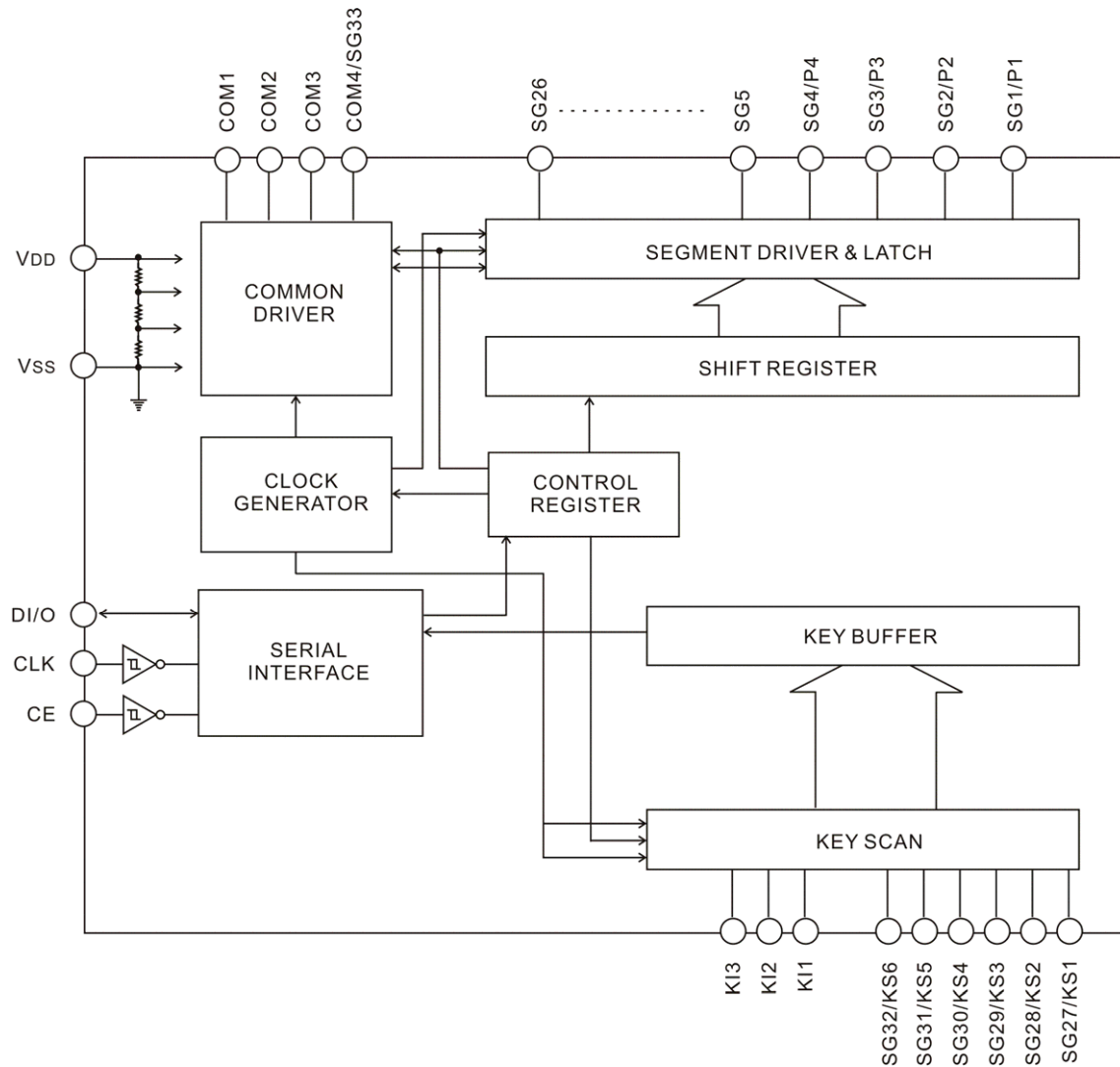
## APPLICATION

- Frequency Display for Electronic Tuners

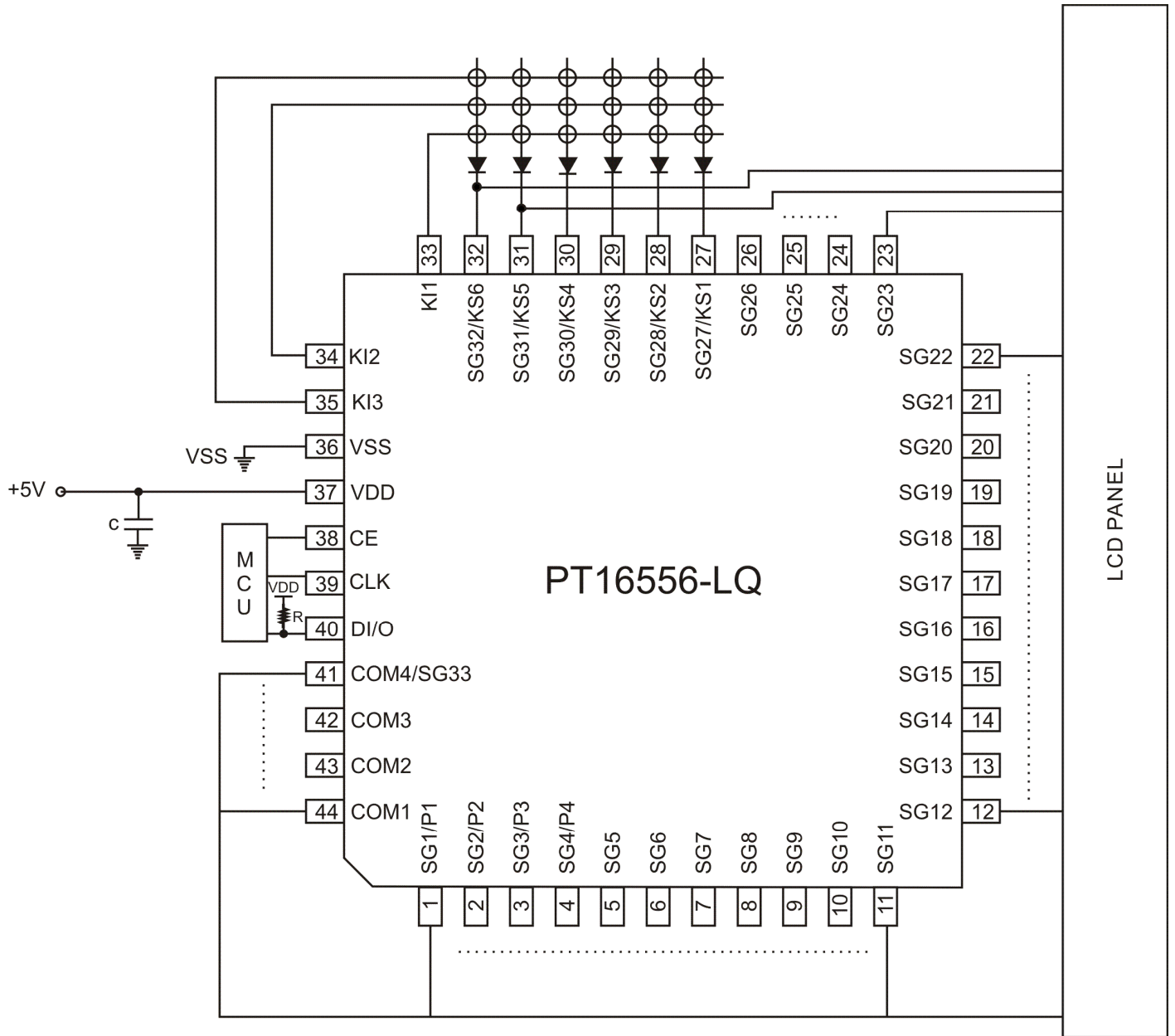
## FEATURES

- 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
- Available in 44 pins, LQFP

## BLOCK DIAGRAM



# APPLICATION CIRCUIT

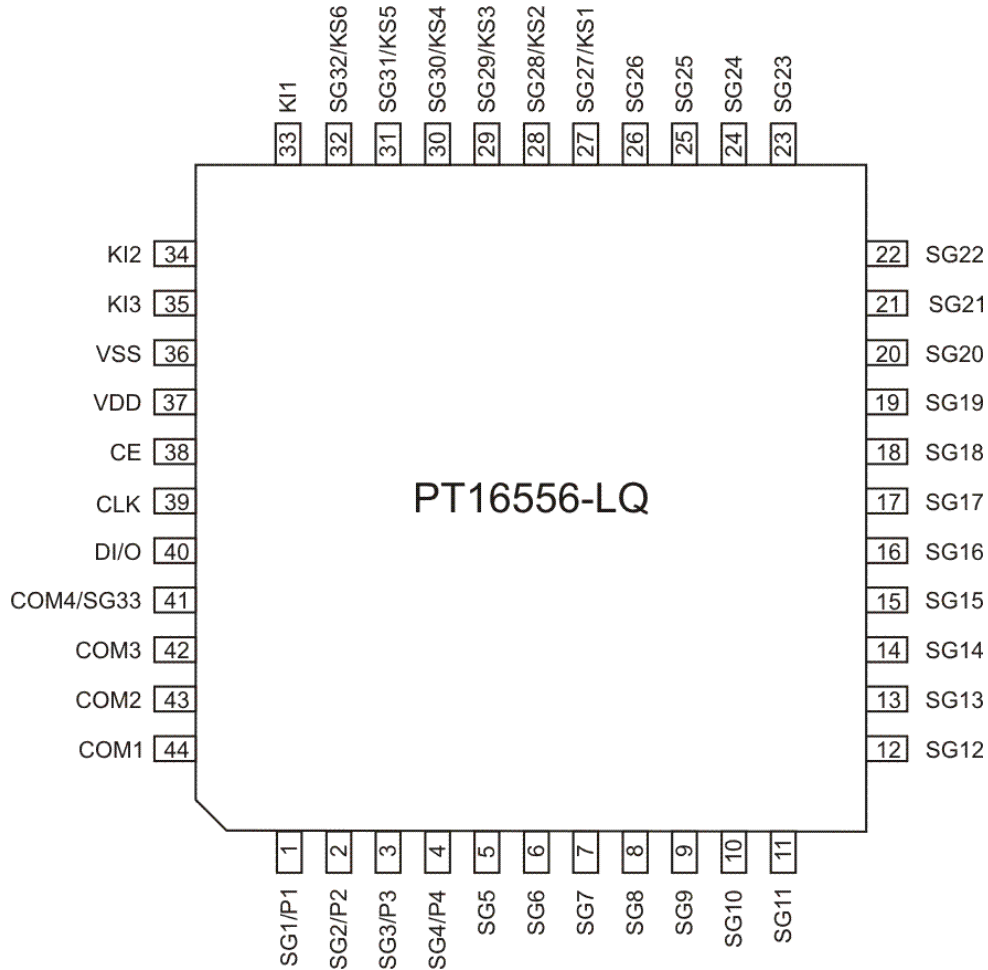


- Notes:
1.  $C \geq 0.1\mu\text{F}$
  2.  $10\text{K}\Omega \geq R \geq 1\text{K}\Omega$

## 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**

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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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