

DESCRIPTION

PT16527 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 204 segment outputs and can control up to 12 general purpose output ports. Pin assignments and application circuit are optimized for easy PCB layout and cost saving advantages.

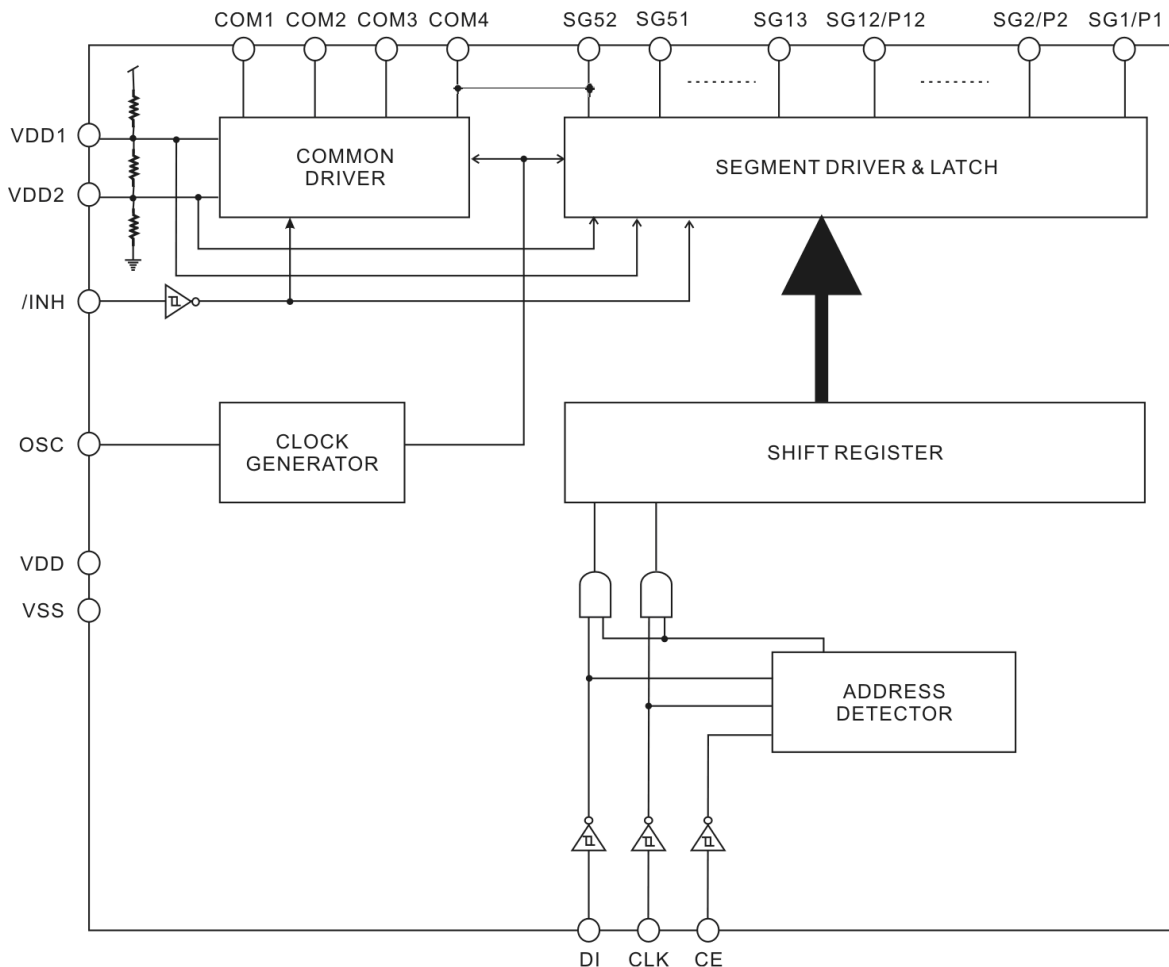
APPLICATION

- Electronic Dictionary / Translator
- P.O.S.
- Caller ID
- Pager
- Mini Compo
- Electronic Equipment with LCD Display

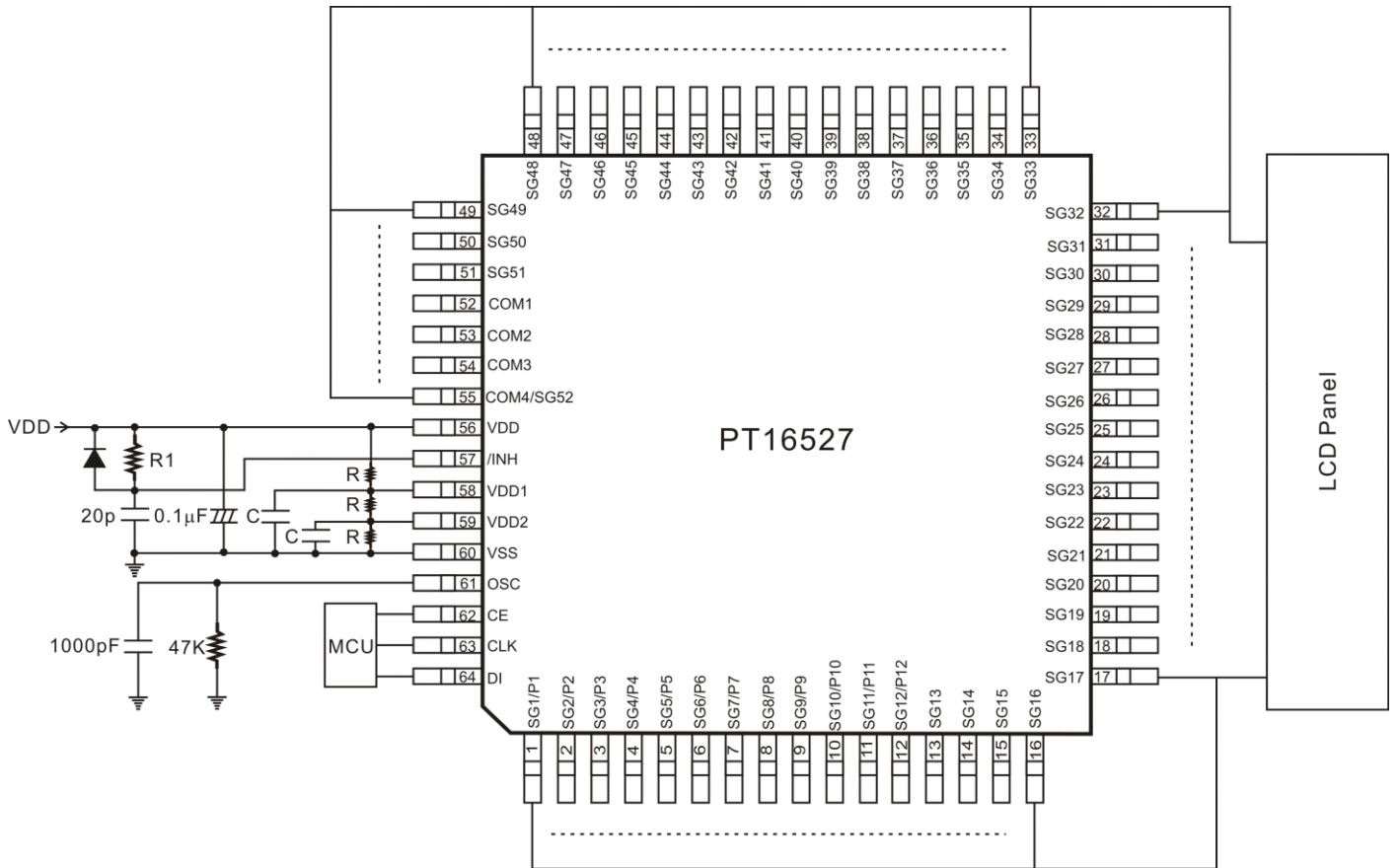
FEATURES

- Up to 204 Segments Outputs
- 1/3 duty and 1/4 duty drive schemes can be controlled from serial data.
- 1/2 bias and 1/3 bias drive schemes can be controlled from serial data.
- Power Saving Mode and all Segments OFF Function
- Direct Display of Display Data without using a Decoder
- RC Oscillation Circuit
- Power Supply Voltage: 3.3 to 6V
- CMOS/TTL compatible logic input pins
- LCD Drive Bias Voltage can be provided internally or externally
- AEC-Q100 Grade1 Compliant for Automotive Applications
- Available in 64 pins LQFP

BLOCK DIAGRAM



APPLICATION CIRCUIT

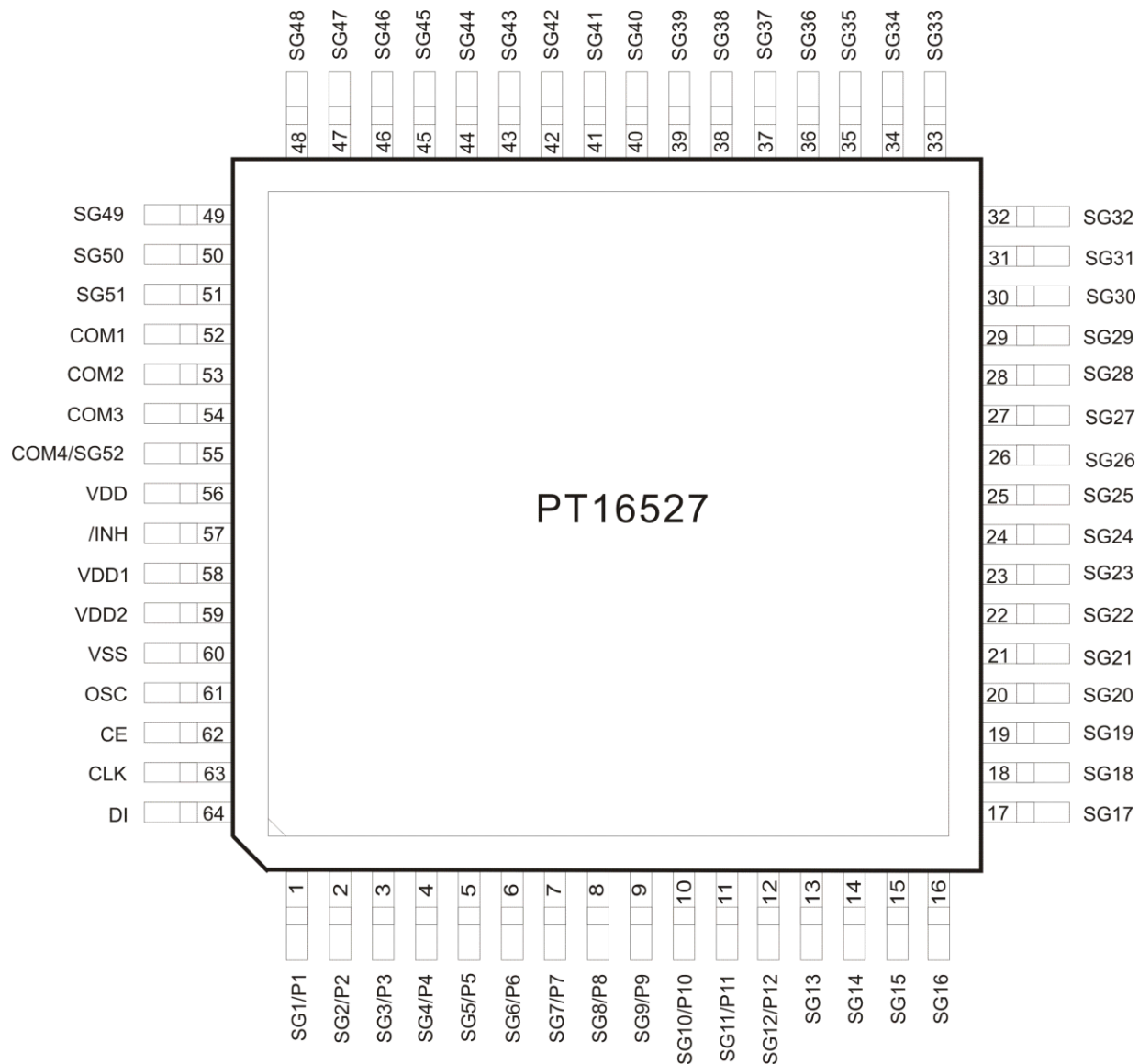


- Notes:
1. $39K\Omega \geq R1 \geq 10K\Omega$
 2. $C \geq 0.047\mu F$
 3. $10K\Omega \geq R \geq 1K\Omega$

ORDER INFORMATION

Valid Part Number	Package Type	Top Code
PT16527-LQ	64-Pin, LQFP	PT16527-LQ

PIN CONFIGURATION



PIN DESCRIPTION

Pin Name	I/O	Description	Pin No.
SG1/P1 ~ SG12/P12	O	Segment Driver Output/General Purpose Output Ports	1 ~ 12
SG13 ~ SG51	O	Segment Driver Output Pins	13 ~ 51
COM1 ~ COM3	O	Common Driver Output Pins	52 ~ 54
COM4/SG52	O	The COM4/SG52 pin can be used as a segment output in 1/3 duty.	55
VDD	-	Power Supply	56
VDD1	-	Power Supply This pin is used to apply a 2/3 LCD Drive Bias Voltage. If the 1/2 Bias Drive Technique is used, this pin must be short to VDD2.	58
VDD2	-	Power Supply This pin is used to apply a 1/3 LCD Drive Bias Voltage. If the 1/2 Bias Drive Technique is used, this pin must be short to VDD1.	59
VSS	-	Ground	60
OSC	I/O	Oscillation Input / Output Pin	61
/INH	I	Display OFF Control Pin If this pin is set to "LOW" (VSS), the display is forced to turn OFF. Output driver pins -- SG1/P1 to SG12/P12, SG13 to SG51, COM1 to COM4/SG52 are set to "LOW". If this pin is set to "HIGH" (VDD), the display is turned ON. (see Note)	57
CE	I	Chip Enable Pin	62
CLK	I	Clock Input Pin	63
DI	I	Data Input Pin	64

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.

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