

## DESCRIPTION

PT6579 is an LCD Driver IC which can drive up to 200 segments. It can be used for frequency display in microprocessor-controlled radio receiver and in other display applications. PT6579 supports both 1/3 duty, and 1/4 duty drive. Pin assignment and application circuit are optimized for easy PCB layout and cost saving advantages.

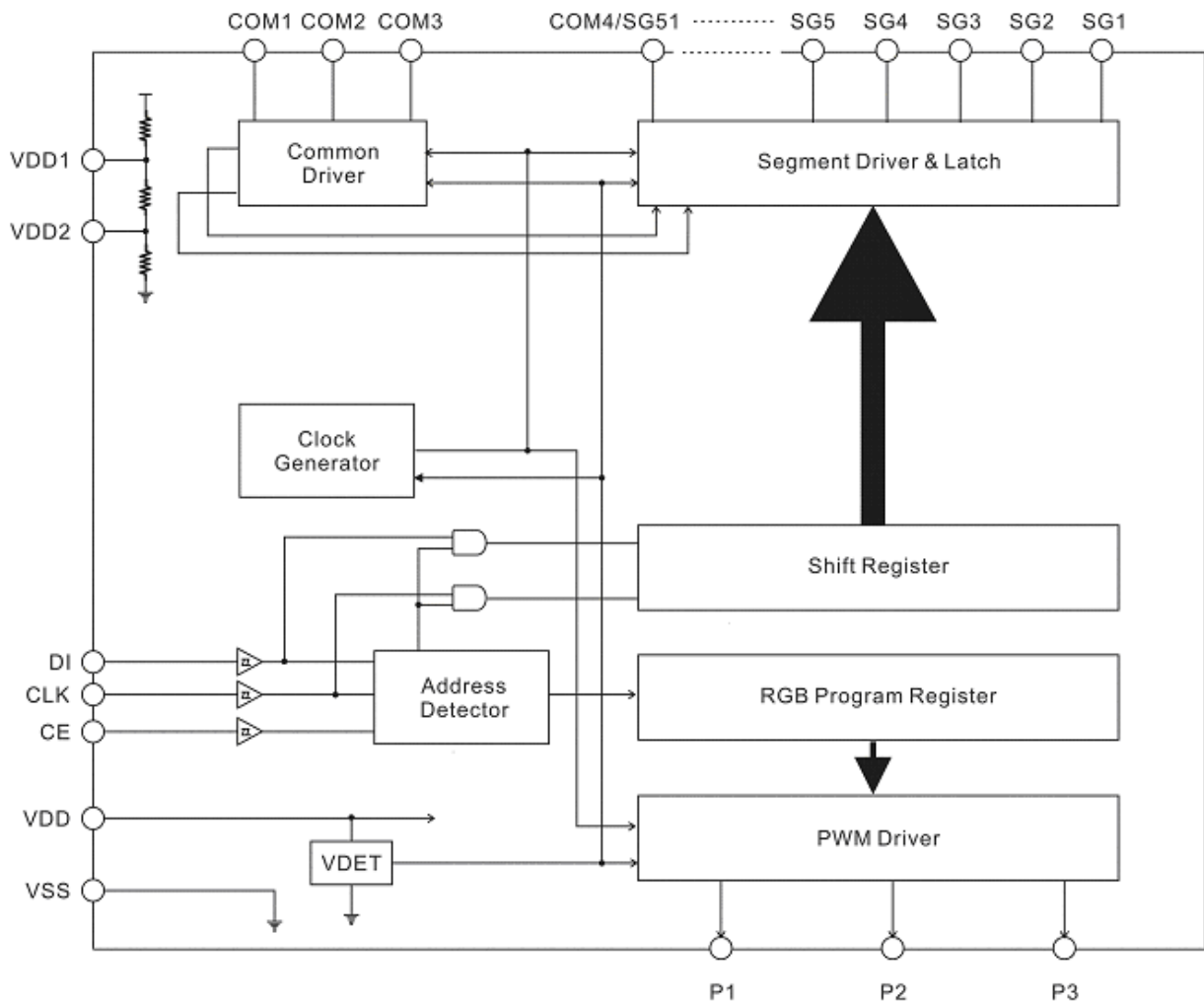
## APPLICATION

- Electronic equipment with LCD display

## FEATURES

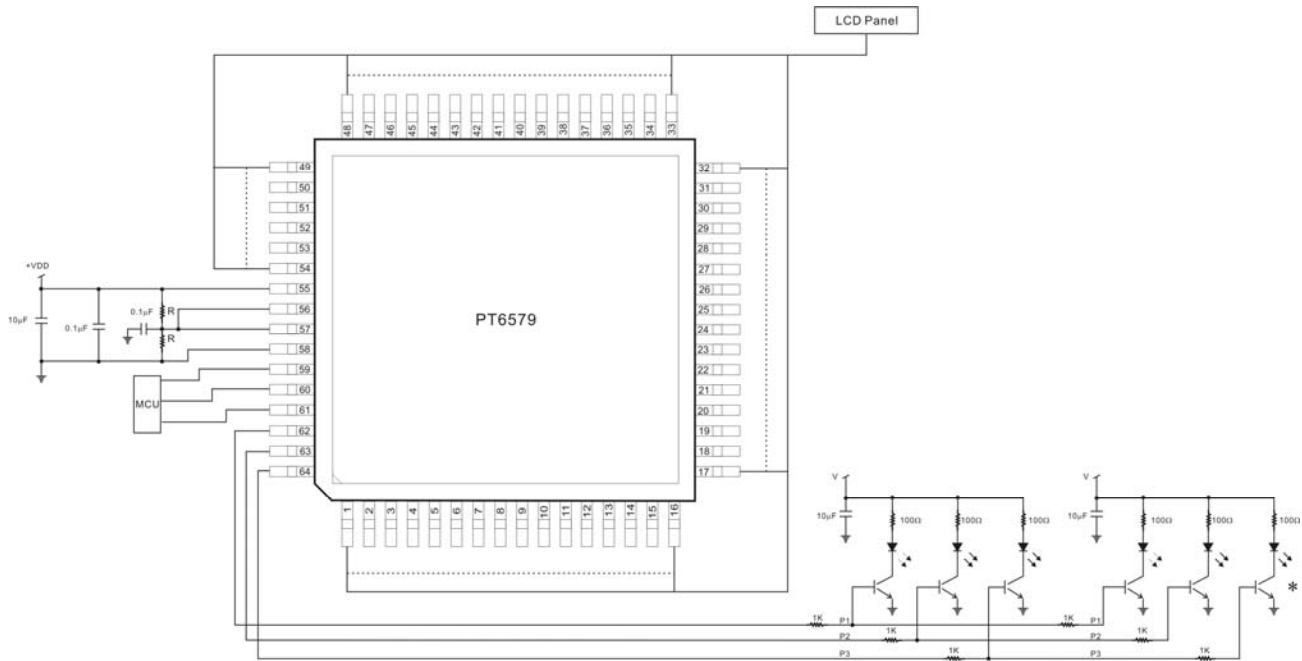
- CMOS technology
- Up to 153 segments for 1/3 duty and 200 segments for 1/4 duty drive can be displayed
- 1/3 Duty - 1/2 Bias and 1/3 Duty - 1/3 Bias drive techniques
- 1/4 Duty - 1/2 Bias and 1/4 Duty - 1/3 Bias drive techniques
- Power saving mode and all segments OFF function
- Direct display of display data without using a decoder
- RC oscillation circuit
- Power supply voltage: 4.5V to 6V
- CMOS/TTL compatible logic input pins
- LCD drive bias voltage can be provided internally or externally
- On-Chip voltage detection type reset circuit
- Programmable PWM signal output pins
- Available in 64 pins LQFP

## BLOCK DIAGRAM



# APPLICATION CIRCUIT 1

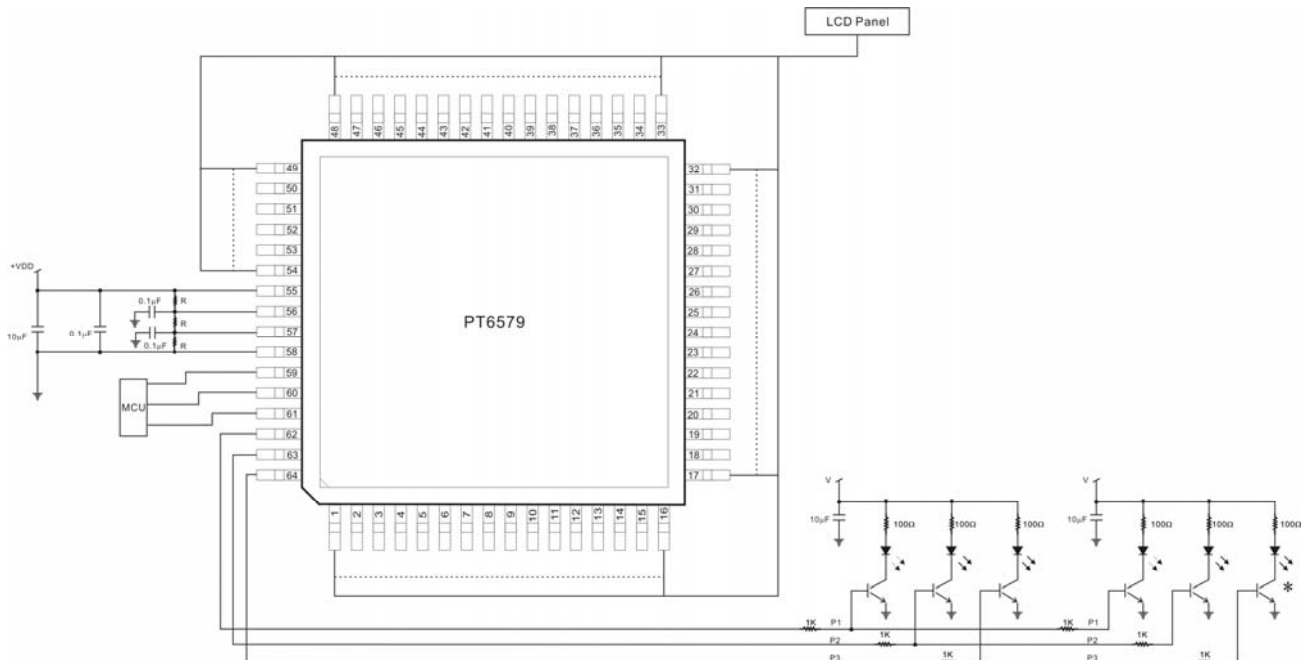
## 1/2 BIAS (FOR NORMAL PANEL)



Notes:

1.  $10K\Omega \geq R \geq 1K\Omega$
2. \*=Please select the suitable transistor

## 1/3 BIAS (FOR NORMAL PANELS)

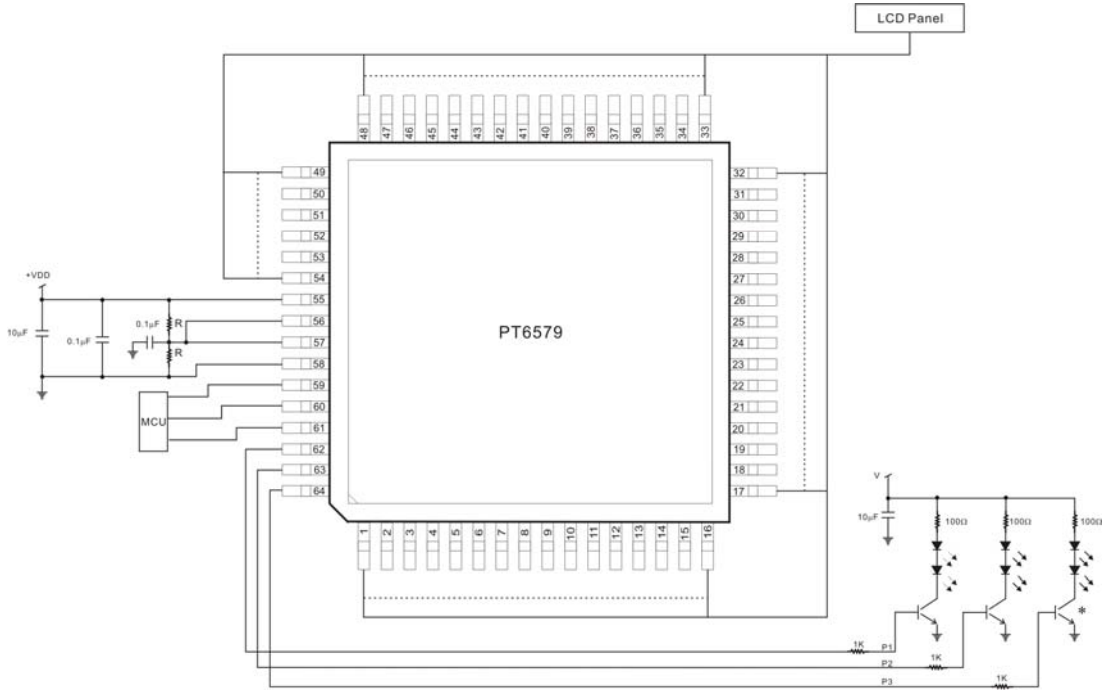


Notes:

1.  $10K\Omega \geq R \geq 1K\Omega$
2. \*=Please select the suitable transistor

# APPLICATION CIRCUIT 2

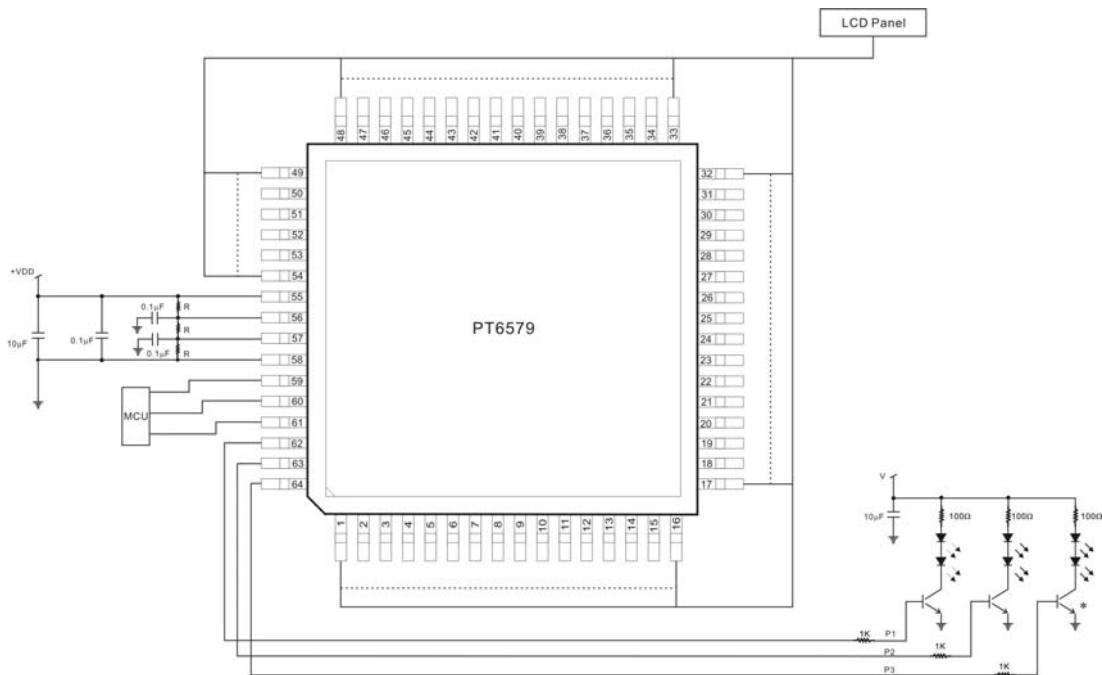
## 1/2 BIAS (FOR NORMAL PANEL)



Notes:

1.  $10K\Omega \geq R \geq 1K\Omega$
2. \*=Please select the suitable transistor

## 1/3 BIAS (FOR NORMAL PANELS)



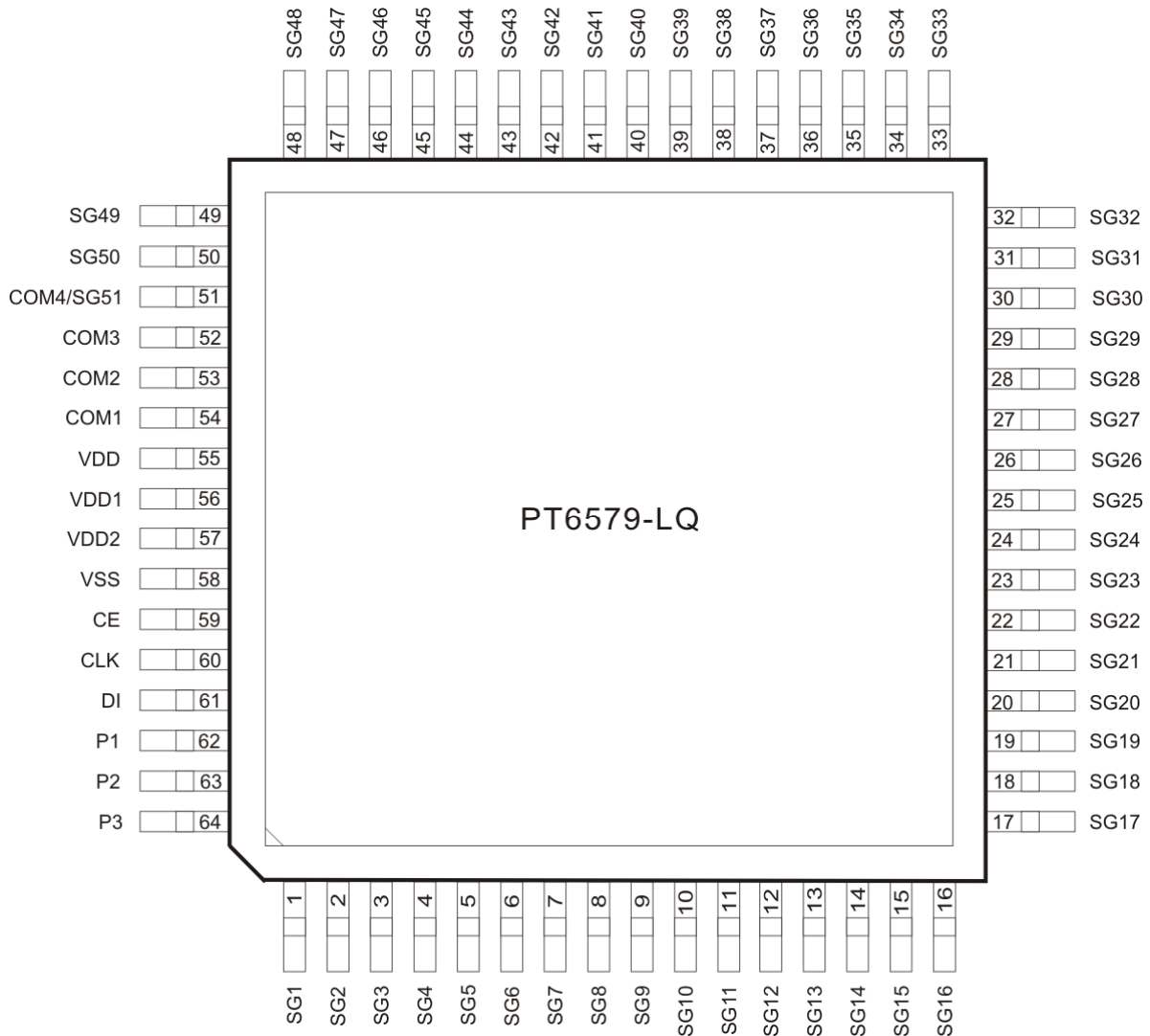
Notes:

1.  $10K\Omega \geq R \geq 1K\Omega$
2. \*=Please select the suitable transistor


## ORDER INFORMATION

Valid Part Number	Package Type	Top Code
PT6579-LQ	64 Pins, LQFP	PT6579-LQ

## PIN CONFIGURATION



## PIN DESCRIPTION

Pin Name	I/O	Active	Description	Pin No.
SG1 to SG50	O	-	Segment output pins	1 to 50
COM4/SG51 COM3 to COM1	O	-	Common driver output pins The COM4/ SG51 pin can be used as a segment output in 1/3 duty	51 to 54
VDD	-	-	Power supply Supply voltage in the range 4.5 to 6.0V	55
VDD1	I	-	Used for the 2/3 Bias Voltage when the Bias Voltage is provided externally. Connect to VDD2 when 1/2 bias is used	56
VDD2	I	-	Used for the 1/3 Bias Voltage when the Bias Voltage is provided externally. Connect to VDD1 when 1/2 Bias is used	57
VSS	-	-	Ground	58
CE	I	H	Chip enable pin	59
CLK	I		Synchronization clock pin	60
DI	I	-	Transfer data input pin	61
P1 to P3	O	H	PWM output pins	62 to 64

## **IMPORTANT NOTICE**

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