



Infrared Remote Control Transmitter

PT2560

Description

PT2560 is an infrared remote control transmitter utilizing CMOS technology housed in a 20-pin DIP or SO package. A 4 x 8 key matrix and extension bit inputs allow the transmission of up to 256 instructions. The transmission code consists of 16 bits code (8 bits custom code and 8 bits data code) and a leader code. PT2560 is functionally compatible with M50560. However, there is a slight difference in their application circuits. If you are to replace M50560 with PT2560, you do not need to connect an external capacitor to Pin No.3 (SEL Pin).

Pin assignments and application circuit of PT2560 are optimized for easy PCB layout and cost saving advantage for remote control applications.

Features

- CMOS Technology
- Low Power Consumption: 2.0 ~ 4.0 V
- Least External Components
- LED Power Dissipation is less during the transmission of instructions

Applications

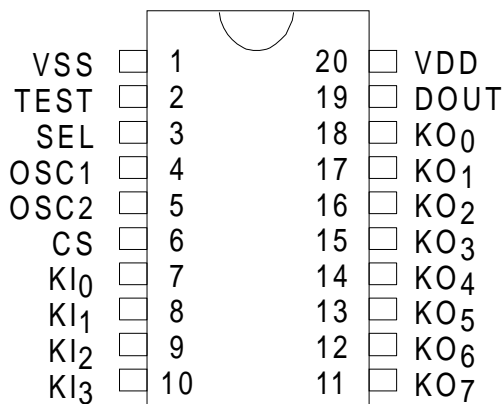
- Audio Equipment
- Television
- Video Cassette Recorder
- Air Conditioner



Infrared Remote Control Transmitter

PT2560

Pin Configuration



PT2560

Order Information

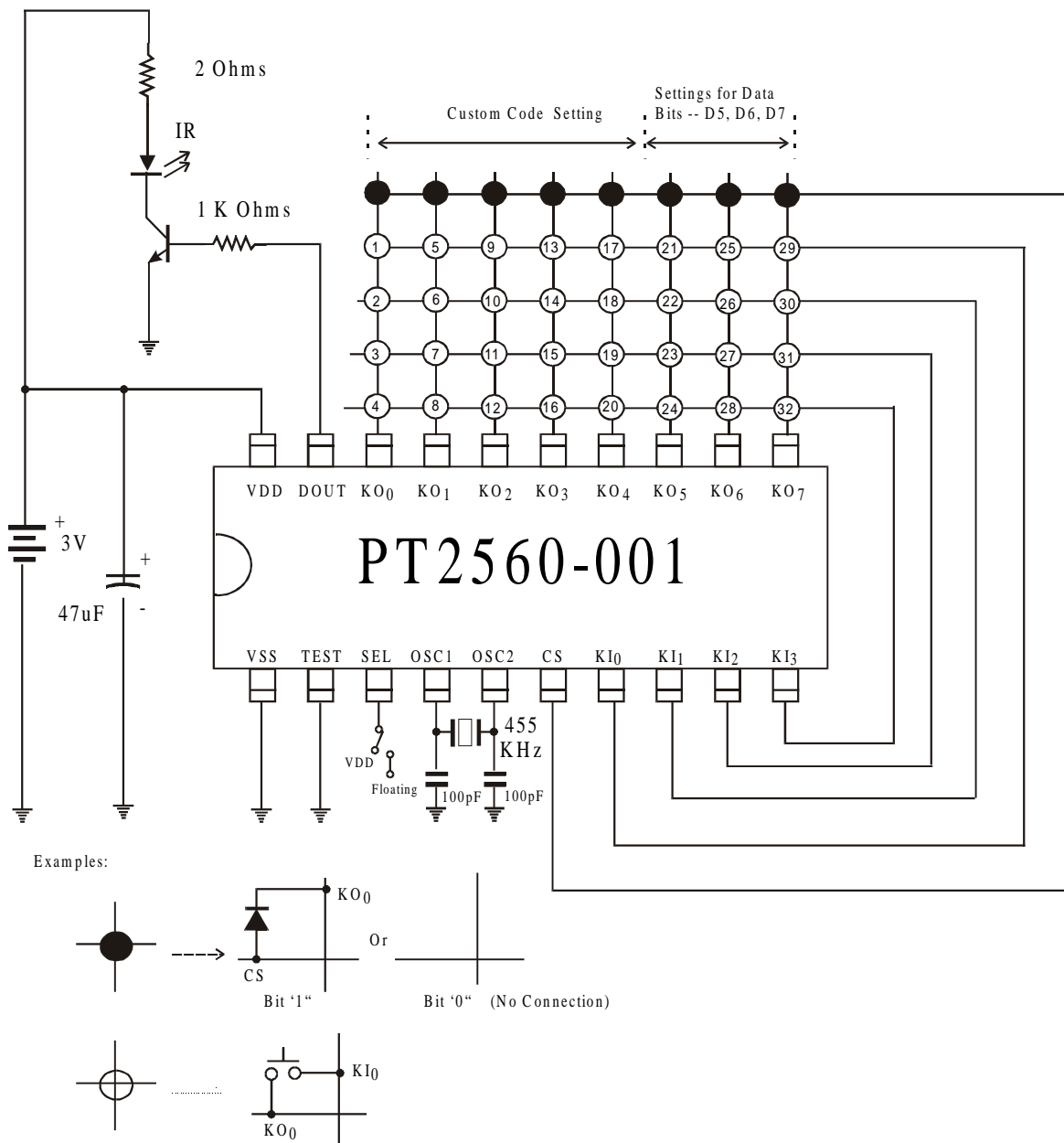
| Valid Part Number | Package |
|-------------------|--------------------------------|
| PT2560-001 | 20 Pins, DIP Package (300 mil) |
| PT2560S-001 | 20 Pins, SO Package (300 mil) |
| PT2560-002 | 20 Pins, DIP Package (300 mil) |
| PT2560S-002 | 20 Pins, SO Package (300mil) |
| PT2560-003 | 20 Pins, DIP Package (300 mil) |
| PT2560S-003 | 20 Pins, SO Package (300 mil) |



Infrared Remote Control Transmitter

PT2560

Application Circuit 1



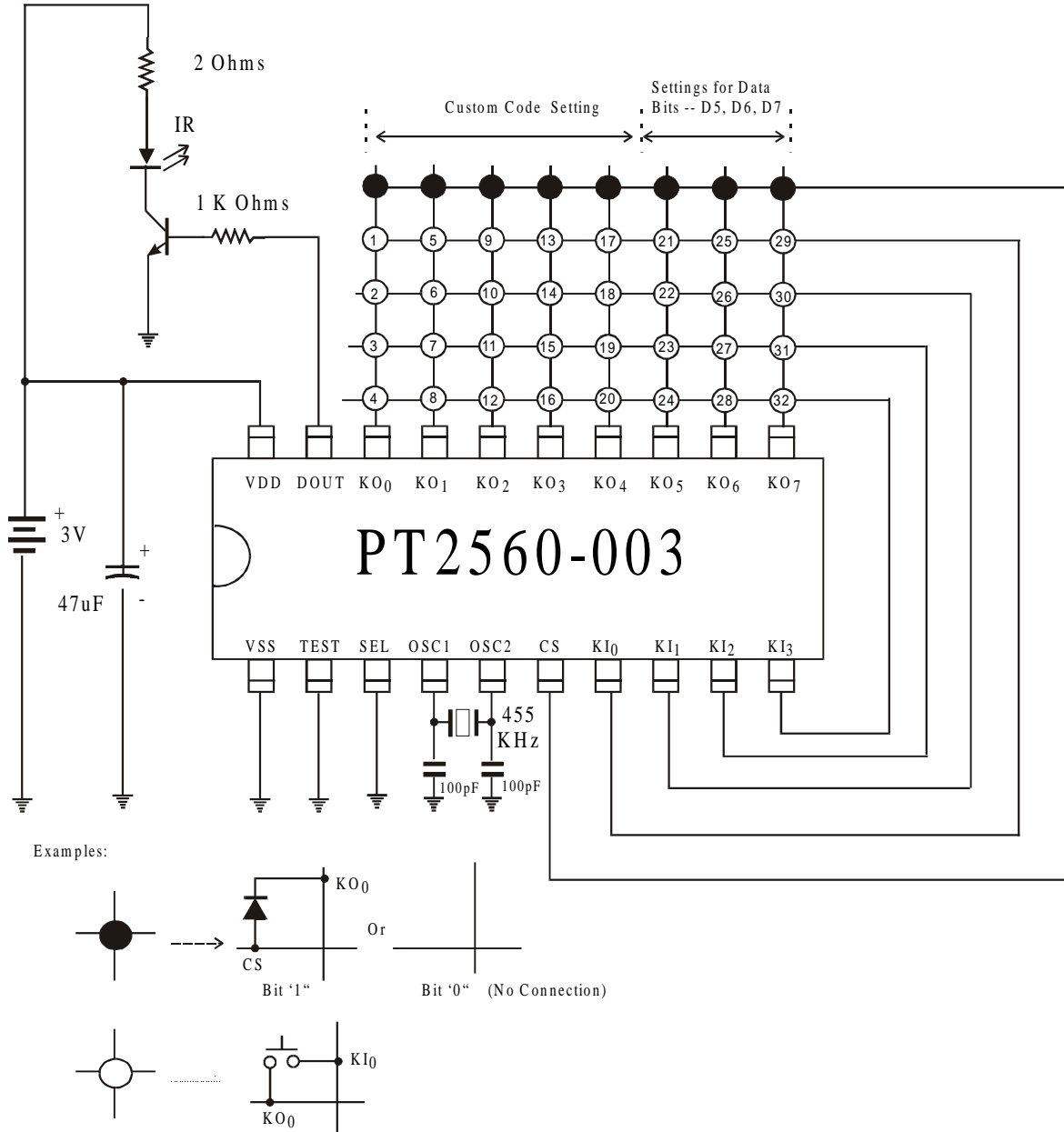
Note: Please take note that if you are replacing M50560 with PT2560, you do not need to connect an external capacitor to PT2560's Pin No. 3 (SEL PIN). PT2560 SEL Pin must either be "floating" or connected to VDD.



Infrared Remote Control Transmitter

PT2560

Application Circuit 2



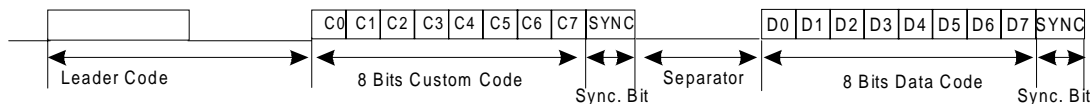
Note: Please take note that if you are replacing M50560 with PT2560, you do not need to connect an external capacitor to PT2560's Pin No. 3 (SEL PIN). PT2560 SEL Pin must be connected to the Ground.



Infrared Remote Control Transmitter

PT2560

Application Circuit 1 & 2 Key Table



PT2560-001/ PT2560-003 Custom Code Table for Application Circuit 1/2

| Input CS | KO Lines | | | | | Custom Codes | | | | | | | |
|-------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------------|----|----|----|----|-----|----|----|
| | KO ₀ | KO ₁ | KO ₂ | KO ₃ | KO ₄ | C0 | C1 | C2 | C3 | C4 | C5 | C6 | C7 |
| | | | | | | 0 | 0 | 0 | 0 | 0 | 0/1 | 0 | 0 |
| * | * | | | | | 1 | 0 | 0 | 0 | 0 | 0/1 | 0 | 0 |
| * | | * | | | | 0 | 1 | 0 | 0 | 0 | 0/1 | 0 | 0 |
| * | * | * | | | | 1 | 1 | 0 | 0 | 0 | 0/1 | 0 | 0 |
| * | | | * | | | 0 | 0 | 1 | 0 | 0 | 0/1 | 0 | 0 |
| * | * | | * | | | 1 | 0 | 1 | 0 | 0 | 0/1 | 0 | 0 |
| * | | * | * | | | 0 | 1 | 1 | 0 | 0 | 0/1 | 0 | 0 |
| * | * | * | * | | | 1 | 1 | 1 | 0 | 0 | 0/1 | 0 | 0 |
| * | | | | * | | 0 | 0 | 0 | 1 | 0 | 0/1 | 0 | 0 |
| * | * | | | * | | 1 | 0 | 0 | 1 | 0 | 0/1 | 0 | 0 |
| * | | * | | * | | 0 | 1 | 0 | 1 | 0 | 0/1 | 0 | 0 |
| * | * | * | | * | | 1 | 1 | 0 | 1 | 0 | 0/1 | 0 | 0 |
| * | | | * | * | | 0 | 0 | 1 | 1 | 0 | 0/1 | 0 | 0 |
| * | * | | * | * | | 1 | 0 | 1 | 1 | 0 | 0/1 | 0 | 0 |
| * | | * | * | * | | 0 | 1 | 1 | 1 | 0 | 0/1 | 0 | 0 |
| * | * | * | * | * | | 1 | 1 | 1 | 1 | 0 | 0/1 | 0 | 0 |
| * | | | | | * | 0 | 0 | 0 | 0 | 1 | 0/1 | 0 | 0 |
| * | * | | | * | * | 1 | 0 | 0 | 1 | 1 | 0/1 | 0 | 0 |
| * | | * | | * | * | 0 | 1 | 0 | 1 | 1 | 0/1 | 0 | 0 |
| * | * | * | | * | * | 1 | 1 | 0 | 1 | 1 | 0/1 | 0 | 0 |
| * | | | * | * | * | 0 | 0 | 1 | 1 | 1 | 0/1 | 0 | 0 |
| * | * | | * | * | * | 1 | 0 | 1 | 1 | 1 | 0/1 | 0 | 0 |
| * | | * | * | * | * | 0 | 1 | 1 | 1 | 1 | 0/1 | 0 | 0 |
| * | * | * | * | * | * | 1 | 1 | 1 | 1 | 1 | 0/1 | 0 | 0 |

Note: * = CS connected to the respective KO Line
 For PT2560-001, Custom Code Bit 5 (C5) = "0".
 For PT2560-003 Custom Code Bit 5 (C5) = "1".



Infrared Remote Control Transmitter

PT2560

PT2560-001/PT2560-003 Data Code Table for Application Circuit 1/2

| No. | KI Lines | | | | KO Lines | | | | | | | | Data Code | | | | |
|-----|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------|----|----|----|----|
| | KI ₀ | KI ₁ | KI ₂ | KI ₃ | KO ₀ | KO ₁ | KO ₂ | KO ₃ | KO ₄ | KO ₅ | KO ₆ | KO ₇ | D0 | D1 | D2 | D3 | D4 |
| 1 | * | | | | * | | | | | | | | 0 | 0 | 0 | 0 | 0 |
| 2 | | * | | | * | | | | | | | | 1 | 0 | 0 | 0 | 0 |
| 3 | | | * | | * | | | | | | | | 0 | 1 | 0 | 0 | 0 |
| 4 | | | | * | * | | | | | | | | 1 | 1 | 0 | 0 | 0 |
| 5 | * | | | | | * | | | | | | | 0 | 0 | 1 | 0 | 0 |
| 6 | | * | | | | * | | | | | | | 1 | 0 | 1 | 0 | 0 |
| 7 | | | * | | | * | | | | | | | 0 | 1 | 1 | 0 | 0 |
| 8 | | | | * | | * | | | | | | | 1 | 1 | 1 | 0 | 0 |
| 9 | * | | | | | | * | | | | | | 0 | 0 | 0 | 1 | 0 |
| 10 | | * | | | | | * | | | | | | 1 | 0 | 0 | 1 | 0 |
| 11 | | | * | | | | * | | | | | | 0 | 1 | 0 | 1 | 0 |
| 12 | | | | * | | | * | | | | | | 1 | 1 | 0 | 1 | 0 |
| 13 | * | | | | | | | * | | | | | 0 | 0 | 1 | 1 | 0 |
| 14 | | * | | | | | | * | | | | | 1 | 0 | 1 | 1 | 0 |
| 15 | | | * | | | | | * | | | | | 0 | 1 | 1 | 1 | 0 |
| 16 | | | | * | | | | * | | | | | 1 | 1 | 1 | 1 | 0 |
| 17 | * | | | | | | | | * | | | | 0 | 0 | 0 | 0 | 1 |
| 18 | | * | | | | | | | * | | | | 1 | 0 | 0 | 0 | 1 |
| 19 | | | * | | | | | | * | | | | 0 | 1 | 0 | 0 | 1 |
| 20 | | | | * | | | | | * | | | | 1 | 1 | 0 | 0 | 1 |
| 21 | * | | | | | | | | | * | | | 0 | 0 | 1 | 0 | 1 |
| 22 | | * | | | | | | | | * | | | 1 | 0 | 1 | 0 | 1 |
| 23 | | | * | | | | | | | * | | | 0 | 1 | 1 | 0 | 1 |
| 24 | | | | * | | | | | | * | | | 1 | 1 | 1 | 0 | 1 |
| 25 | * | | | | | | | | | | * | | 0 | 0 | 0 | 1 | 1 |
| 26 | | * | | | | | | | | | * | | 1 | 0 | 0 | 1 | 1 |
| 27 | | | * | | | | | | | | * | | 0 | 1 | 0 | 1 | 1 |
| 28 | | | | * | | | | | | | * | | 1 | 1 | 0 | 1 | 1 |
| 29 | * | | | | | | | | | | | * | 0 | 0 | 1 | 1 | 1 |
| 30 | | * | | | | | | | | | | * | 1 | 0 | 1 | 1 | 1 |
| 31 | | | * | | | | | | | | | * | 0 | 1 | 1 | 1 | 1 |
| 32 | | | | * | | | | | | | | * | 1 | 1 | 1 | 1 | 1 |

| Input CS | KO Lines | | | Data Code | | |
|-------------|-----------------|-----------------|-----------------|-----------|----|----|
| | KO ₅ | KO ₆ | KO ₇ | D5 | D6 | D7 |
| | | | | 0 | 0 | 0 |
| * | * | | | 1 | 0 | 0 |
| * | | * | | 0 | 1 | 0 |
| * | * | * | | 1 | 1 | 0 |
| * | | | * | 0 | 0 | 1 |
| * | * | | * | 1 | 0 | 1 |
| * | | * | * | 0 | 1 | 1 |
| * | * | * | * | 1 | 1 | 1 |

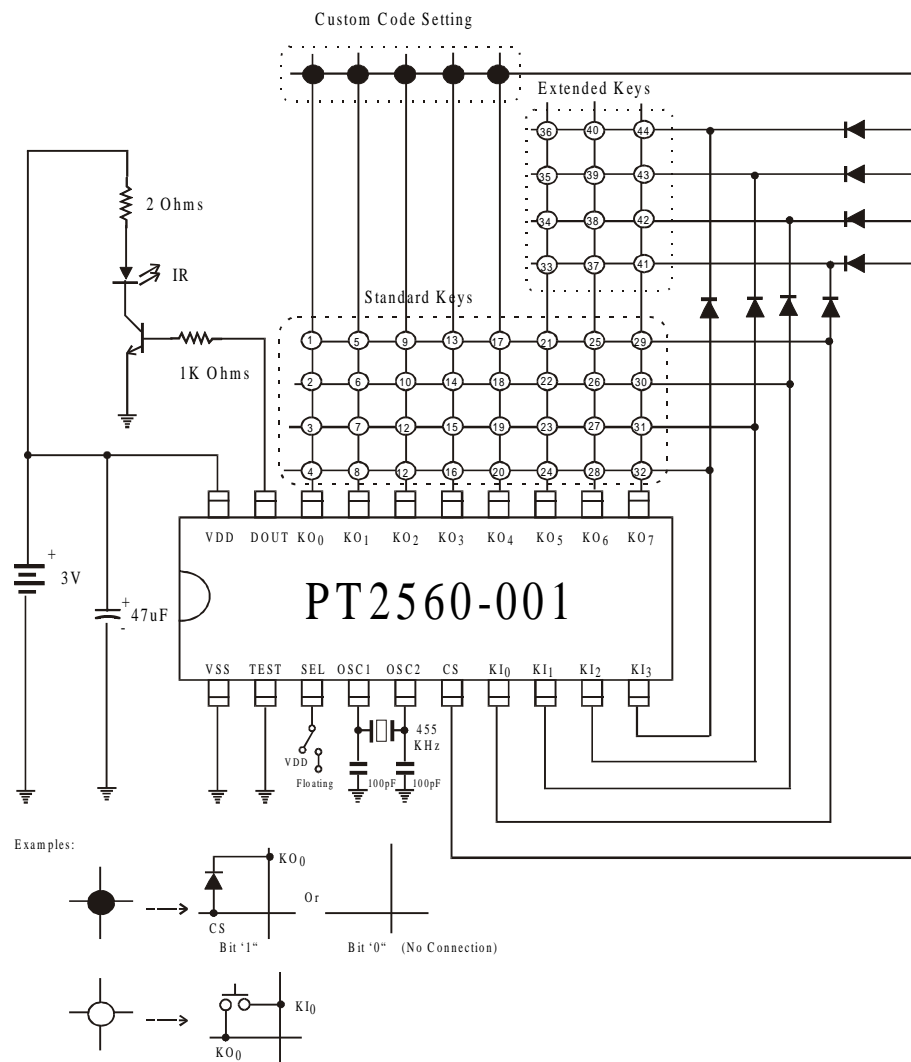


Infrared Remote Control Transmitter

PT2560

Application Circuit 3

(Extended Codes)



Note: Please take note that if you are replacing M50560 with PT2560, you do not need to connect an external capacitor to PT2560's Pin No. 3 (SEL PIN). PT2560 SEL Pin must either be "floating" or connected to VDD.



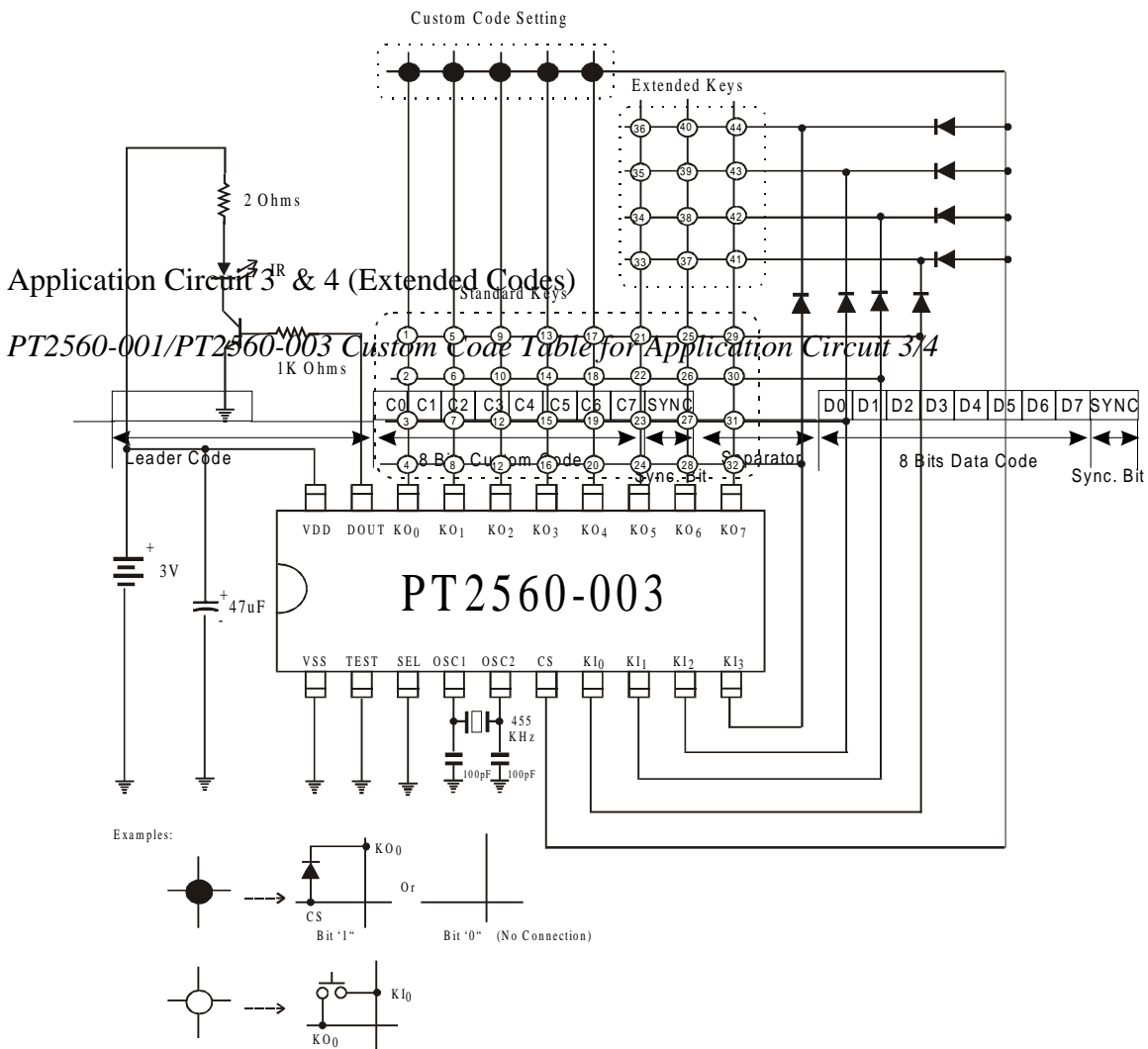
Infrared Remote Control Transmitter

PT2560

Application Circuit 4

(Extended Codes)

Note: Please take note that if you are replacing M50560 with PT2560, you do not need to connect an external capacitor to PT2560's Pin No. 3 (SEL PIN). PT2560 SEL Pin must connected to the Ground.





Infrared Remote Control Transmitter

PT2560

| Input CS | KO Lines | | | | | Custom Codes | | | | | | | |
|-------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------------|----|----|----|----|-----|----|----|
| | KO ₀ | KO ₁ | KO ₂ | KO ₃ | KO ₄ | C0 | C1 | C2 | C3 | C4 | C5 | C6 | C7 |
| | | | | | | 0 | 0 | 0 | 0 | 0 | 0/1 | 0 | 0 |
| * | * | | | | | 1 | 0 | 0 | 0 | 0 | 0/1 | 0 | 0 |
| * | | * | | | | 0 | 1 | 0 | 0 | 0 | 0/1 | 0 | 0 |
| * | * | * | | | | 1 | 1 | 0 | 0 | 0 | 0/1 | 0 | 0 |
| * | | | * | | | 0 | 0 | 1 | 0 | 0 | 0/1 | 0 | 0 |
| * | * | | * | | | 1 | 0 | 1 | 0 | 0 | 0/1 | 0 | 0 |
| * | | * | * | | | 0 | 1 | 1 | 0 | 0 | 0/1 | 0 | 0 |
| * | * | * | * | | | 1 | 1 | 1 | 0 | 0 | 0/1 | 0 | 0 |
| * | | | | * | | 0 | 0 | 0 | 1 | 0 | 0/1 | 0 | 0 |
| * | * | | | * | | 1 | 0 | 0 | 1 | 0 | 0/1 | 0 | 0 |
| * | | * | | * | | 0 | 1 | 0 | 1 | 0 | 0/1 | 0 | 0 |
| * | * | * | | * | | 1 | 1 | 0 | 1 | 0 | 0/1 | 0 | 0 |
| * | | | * | * | | 0 | 0 | 1 | 1 | 0 | 0/1 | 0 | 0 |
| * | * | | * | * | | 1 | 0 | 1 | 1 | 0 | 0/1 | 0 | 0 |
| * | | * | * | * | | 0 | 1 | 1 | 1 | 0 | 0/1 | 0 | 0 |
| * | * | * | * | * | | 1 | 1 | 1 | 1 | 0 | 0/1 | 0 | 0 |
| * | | | | | * | 0 | 0 | 0 | 0 | 1 | 0/1 | 0 | 0 |
| * | * | | | | * | 1 | 0 | 0 | 0 | 1 | 0/1 | 0 | 0 |
| * | | * | | | * | 0 | 1 | 0 | 0 | 1 | 0/1 | 0 | 0 |
| * | * | * | | | * | 1 | 1 | 0 | 0 | 1 | 0/1 | 0 | 0 |
| * | | | * | | * | 0 | 0 | 1 | 0 | 1 | 0/1 | 0 | 0 |
| * | * | | * | | * | 1 | 0 | 1 | 0 | 1 | 0/1 | 0 | 0 |
| * | | * | * | | * | 0 | 1 | 1 | 0 | 1 | 0/1 | 0 | 0 |
| * | * | * | * | | * | 1 | 1 | 1 | 0 | 1 | 0/1 | 0 | 0 |
| * | | | * | * | * | 0 | 0 | 1 | 1 | 1 | 0/1 | 0 | 0 |
| * | * | | * | * | * | 1 | 0 | 1 | 1 | 1 | 0/1 | 0 | 0 |
| * | | * | * | * | * | 0 | 1 | 1 | 1 | 1 | 0/1 | 0 | 0 |
| * | * | * | * | * | * | 1 | 1 | 1 | 1 | 1 | 0/1 | 0 | 0 |

Note: * = CS is connected to the respective KO Line.
 For PT2650-001, Custom Code Bit 5 (C5) = "0".
 For PT2560-003, Custom Code Bit 5 (C5) = "1".



Infrared Remote Control Transmitter

PT2560

PT2560-001/PT2560-003 Data Code Table for Application Circuit 3/4

| No. | KI Lines | | | | KO Lines | | | | | | | | Data Code | | | | |
|-----|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------|----|----|----|----|
| | KI ₀ | KI ₁ | KI ₂ | KI ₃ | KO ₀ | KO ₁ | KO ₂ | KO ₃ | KO ₄ | KO ₅ | KO ₆ | KO ₇ | D0 | D1 | D2 | D3 | D4 |
| 1 | * | | | | * | | | | | | | | 0 | 0 | 0 | 0 | 0 |
| 2 | | * | | | * | | | | | | | | 1 | 0 | 0 | 0 | 0 |
| 3 | | | * | | * | | | | | | | | 0 | 1 | 0 | 0 | 0 |
| 4 | | | | * | * | | | | | | | | 1 | 1 | 0 | 0 | 0 |
| 5 | * | | | | | * | | | | | | | 0 | 0 | 1 | 0 | 0 |
| 6 | | * | | | | * | | | | | | | 1 | 0 | 1 | 0 | 0 |
| 7 | | | * | | | * | | | | | | | 0 | 1 | 1 | 0 | 0 |
| 8 | | | | * | | * | | | | | | | 1 | 1 | 1 | 0 | 0 |
| 9 | * | | | | | | * | | | | | | 0 | 0 | 0 | 1 | 0 |
| 10 | | * | | | | | * | | | | | | 1 | 0 | 0 | 1 | 0 |
| 11 | | | * | | | | * | | | | | | 0 | 1 | 0 | 1 | 0 |
| 12 | | | | * | | | * | | | | | | 1 | 1 | 0 | 1 | 0 |
| 13 | * | | | | | | | * | | | | | 0 | 0 | 1 | 1 | 0 |
| 14 | | * | | | | | | * | | | | | 1 | 0 | 1 | 1 | 0 |
| 15 | | | * | | | | | * | | | | | 0 | 1 | 1 | 1 | 0 |
| 16 | | | | * | | | | * | | | | | 1 | 1 | 1 | 1 | 0 |
| 17 | * | | | | | | | | * | | | | 0 | 0 | 0 | 0 | 1 |
| 18 | | * | | | | | | | * | | | | 1 | 0 | 0 | 0 | 1 |
| 19 | | | * | | | | | | * | | | | 0 | 1 | 0 | 0 | 1 |
| 20 | | | | * | | | | | * | | | | 1 | 1 | 0 | 0 | 1 |
| 21 | * | | | | | | | | | * | | | 0 | 0 | 1 | 0 | 1 |
| 22 | | * | | | | | | | | * | | | 1 | 0 | 1 | 0 | 1 |
| 23 | | | * | | | | | | | * | | | 0 | 1 | 1 | 0 | 1 |
| 24 | | | | * | | | | | | * | | | 1 | 1 | 1 | 0 | 1 |
| 25 | * | | | | | | | | | | * | | 0 | 0 | 0 | 1 | 1 |
| 26 | | * | | | | | | | | | * | | 1 | 0 | 0 | 1 | 1 |
| 27 | | | * | | | | | | | | * | | 0 | 1 | 0 | 1 | 1 |
| 28 | | | | * | | | | | | | * | | 1 | 1 | 0 | 1 | 1 |
| 29 | * | | | | | | | | | | | * | 0 | 0 | 1 | 1 | 1 |
| 30 | | * | | | | | | | | | | * | 1 | 0 | 1 | 1 | 1 |
| 31 | | | * | | | | | | | | | * | 0 | 1 | 1 | 1 | 1 |
| 32 | | | | * | | | | | | | | * | 1 | 1 | 1 | 1 | 1 |

| Input CS | KO Lines | | | Data Code | | |
|-------------|-----------------|-----------------|-----------------|-----------|----|----|
| | KO ₅ | KO ₆ | KO ₇ | D5 | D6 | D7 |
| | | | | 0 | 0 | 0 |
| * | * | | | 1 | 0 | 0 |
| * | | * | | 0 | 1 | 0 |
| * | * | * | | 1 | 1 | 0 |
| * | | | * | 0 | 0 | 1 |
| * | * | | * | 1 | 0 | 1 |
| * | | * | * | 0 | 1 | 1 |
| * | * | * | * | 1 | 1 | 1 |



Infrared Remote Control Transmitter

PT2560

PT2560-001/PT2560-003 Data Code Table for Application Circuit 3/4 (Extended Keys)

| No. | Input | KI Lines | | | | KO Lines | | | Data Code | | | | | | | |
|-----|-------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------|----|----|----|----|----|----|----|
| | CS | KI ₀ | KI ₁ | KI ₂ | KI ₃ | KO ₅ | KO ₆ | KO ₇ | D0 | D1 | D2 | D3 | D4 | D5 | D6 | D7 |
| 33 | * | * | | | | * | | | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |
| 34 | * | | * | | | * | | | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |
| 35 | * | | | * | | * | | | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 |
| 36 | * | | | | * | * | | | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 |
| 37 | * | * | | | | | * | | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 |
| 38 | * | | * | | | | * | | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 |
| 39 | * | | | * | | | * | | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 |
| 40 | * | | | | * | | * | | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 |
| 41 | * | * | | | | | | * | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 |
| 42 | * | | * | | | | | * | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 |
| 43 | * | | | * | | | | * | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 |
| 44 | * | | | | * | | | * | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 |

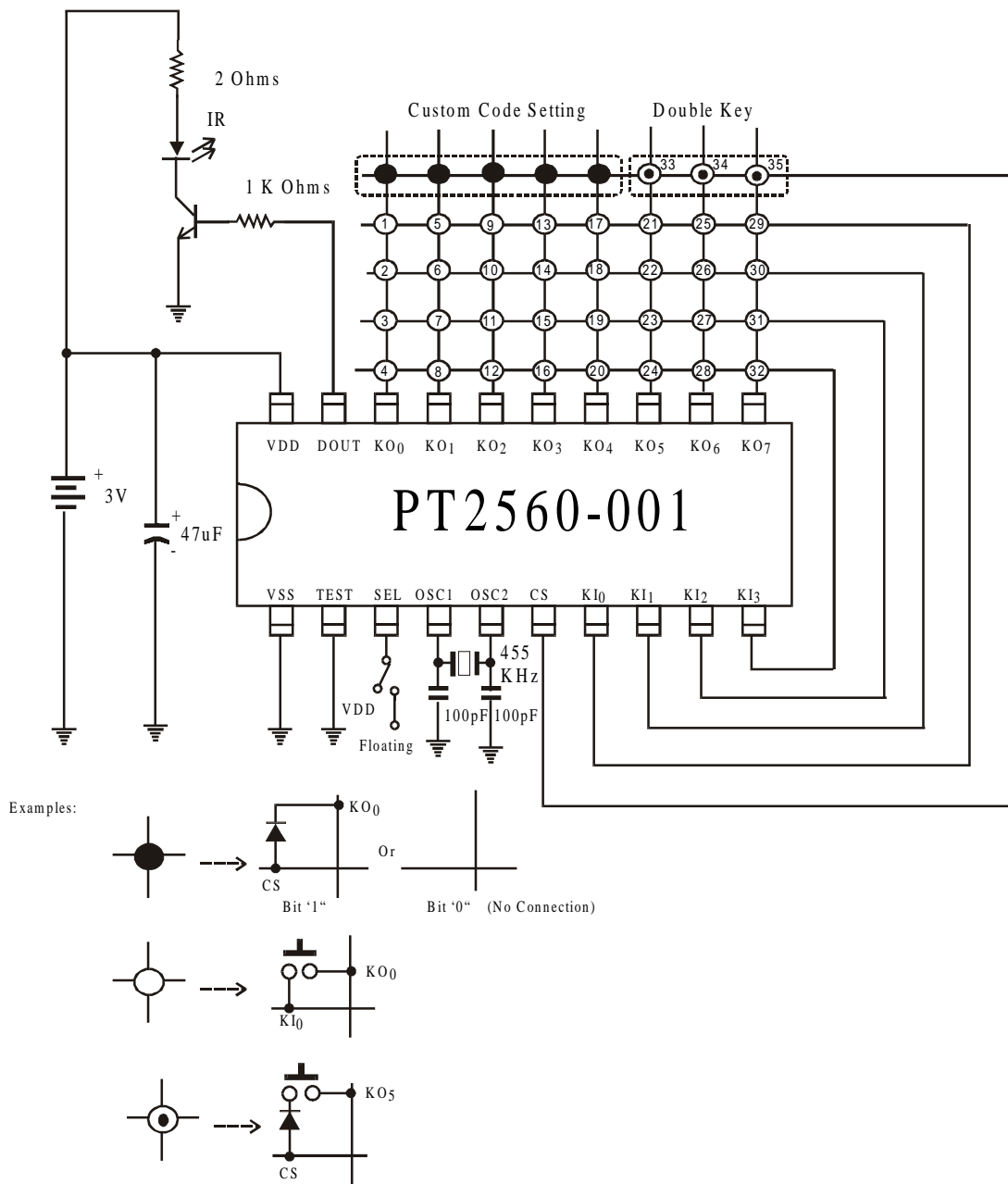


Infrared Remote Control Transmitter

PT2560

Application Circuit 5

(Double Key Operation)



Note: Please take note that if you are replacing M50560 with PT2560, you do not need to connect an external capacitor to PT2560's Pin No. 3 (SEL PIN). PT2560 SEL Pin must either be "floating" or connected to VDD.

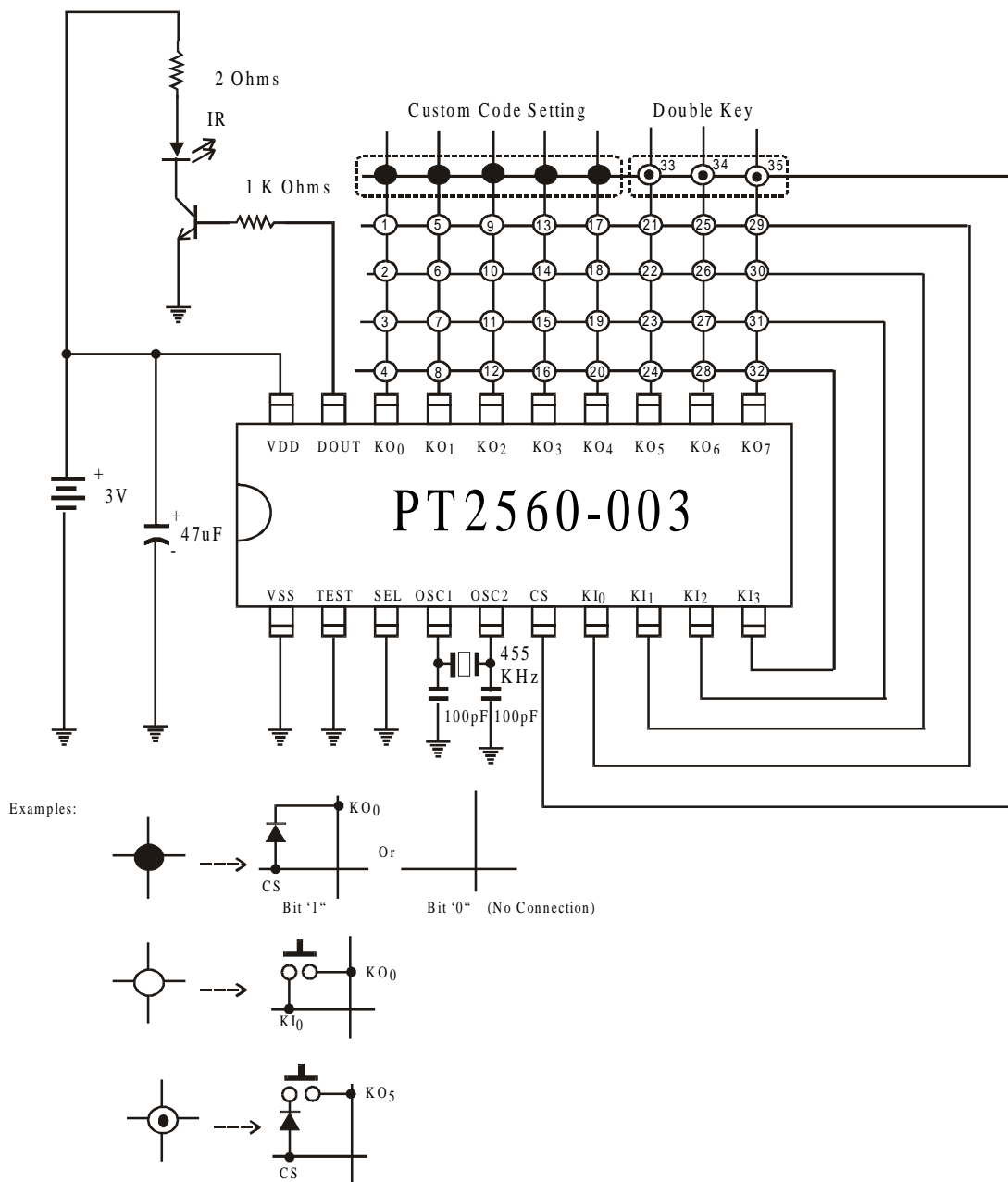


Infrared Remote Control Transmitter

PT2560

Application Circuit 6

(Double Key Operation)



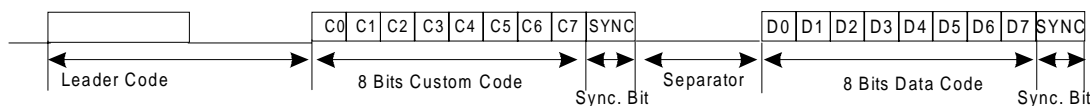
Note: Please take note that if you are replacing M50560 with PT2560, you do not need to connect an external capacitor to PT2560's Pin No. 3 (SEL PIN). PT2560 SEL Pin must be connected to the Ground.



Infrared Remote Control Transmitter

PT2560

Application Circuit 5 & 6 (Double Key Operation)



PT2560-001/PT2560-003 Custom Code Table for Application Circuit 5/6

| Input CS | KO Lines | | | | | Custom Codes | | | | | | | |
|-------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------------|----|----|----|----|-----|----|----|
| | KO ₀ | KO ₁ | KO ₂ | KO ₃ | KO ₄ | C0 | C1 | C2 | C3 | C4 | C5 | C6 | C7 |
| | | | | | | 0 | 0 | 0 | 0 | 0 | 0/1 | 0 | 0 |
| * | * | | | | | 1 | 0 | 0 | 0 | 0 | 0/1 | 0 | 0 |
| * | | * | | | | 0 | 1 | 0 | 0 | 0 | 0/1 | 0 | 0 |
| * | * | * | | | | 1 | 1 | 0 | 0 | 0 | 0/1 | 0 | 0 |
| * | | | * | | | 0 | 0 | 1 | 0 | 0 | 0/1 | 0 | 0 |
| * | * | | * | | | 1 | 0 | 1 | 0 | 0 | 0/1 | 0 | 0 |
| * | | * | * | | | 0 | 1 | 1 | 0 | 0 | 0/1 | 0 | 0 |
| * | * | * | * | | | 1 | 1 | 1 | 0 | 0 | 0/1 | 0 | 0 |
| * | | | | * | | 0 | 0 | 0 | 1 | 0 | 0/1 | 0 | 0 |
| * | * | | | * | | 1 | 0 | 0 | 1 | 0 | 0/1 | 0 | 0 |
| * | | * | | * | | 0 | 1 | 0 | 1 | 0 | 0/1 | 0 | 0 |
| * | * | * | | * | | 1 | 1 | 0 | 1 | 0 | 0/1 | 0 | 0 |
| * | | | * | * | | 0 | 0 | 1 | 1 | 0 | 0/1 | 0 | 0 |
| * | * | | * | * | | 1 | 0 | 1 | 1 | 0 | 0/1 | 0 | 0 |
| * | | * | * | * | | 0 | 1 | 1 | 1 | 0 | 0/1 | 0 | 0 |
| * | * | * | * | * | | 1 | 1 | 1 | 1 | 0 | 0/1 | 0 | 0 |
| * | | | | * | * | 0 | 0 | 0 | 1 | 1 | 0/1 | 0 | 0 |
| * | * | | | * | * | 1 | 0 | 0 | 1 | 1 | 0/1 | 0 | 0 |
| * | | * | | * | * | 0 | 1 | 0 | 1 | 1 | 0/1 | 0 | 0 |
| * | * | * | | * | * | 1 | 1 | 0 | 1 | 1 | 0/1 | 0 | 0 |
| * | | | * | * | * | 0 | 0 | 1 | 1 | 1 | 0/1 | 0 | 0 |
| * | * | | * | * | * | 1 | 0 | 1 | 1 | 1 | 0/1 | 0 | 0 |
| * | | * | * | * | * | 0 | 1 | 1 | 1 | 1 | 0/1 | 0 | 0 |
| * | * | * | * | * | * | 1 | 1 | 1 | 1 | 1 | 0/1 | 0 | 0 |

Note: * = CS is connected to the respective KO Line.
 For PT2560-001, Custom Code Bit 5 (C5) = "0".
 For PT2560-003, Custom Code Bit 5 (C5) = "1".



Infrared Remote Control Transmitter

PT2560

PT2560-001/PT2560-003 Data Code Table for Application Circuit 5/6

| No. | KI Lines | | | | KO Lines | | | | | | | | Data Code | | | | |
|-----|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------|----|----|----|----|
| | KI ₀ | KI ₁ | KI ₂ | KI ₃ | KO ₀ | KO ₁ | KO ₂ | KO ₃ | KO ₄ | KO ₅ | KO ₆ | KO ₇ | D0 | D1 | D2 | D3 | D4 |
| 1 | * | | | | * | | | | | | | | 0 | 0 | 0 | 0 | 0 |
| 2 | | * | | | * | | | | | | | | 1 | 0 | 0 | 0 | 0 |
| 3 | | | * | | * | | | | | | | | 0 | 1 | 0 | 0 | 0 |
| 4 | | | | * | * | | | | | | | | 1 | 1 | 0 | 0 | 0 |
| 5 | * | | | | | * | | | | | | | 0 | 0 | 1 | 0 | 0 |
| 6 | | * | | | | * | | | | | | | 1 | 0 | 1 | 0 | 0 |
| 7 | | | * | | | * | | | | | | | 0 | 1 | 1 | 0 | 0 |
| 8 | | | | * | | * | | | | | | | 1 | 1 | 1 | 0 | 0 |
| 9 | * | | | | | | * | | | | | | 0 | 0 | 0 | 1 | 0 |
| 10 | | * | | | | | * | | | | | | 1 | 0 | 0 | 1 | 0 |
| 11 | | | * | | | | * | | | | | | 0 | 1 | 0 | 1 | 0 |
| 12 | | | | * | | | * | | | | | | 1 | 1 | 0 | 1 | 0 |
| 13 | * | | | | | | | * | | | | | 0 | 0 | 1 | 1 | 0 |
| 14 | | * | | | | | | * | | | | | 1 | 0 | 1 | 1 | 0 |
| 15 | | | * | | | | | * | | | | | 0 | 1 | 1 | 1 | 0 |
| 16 | | | | * | | | | * | | | | | 1 | 1 | 1 | 1 | 0 |
| 17 | * | | | | | | | | * | | | | 0 | 0 | 0 | 0 | 1 |
| 18 | | * | | | | | | | * | | | | 1 | 0 | 0 | 0 | 1 |
| 19 | | | * | | | | | | * | | | | 0 | 1 | 0 | 0 | 1 |
| 20 | | | | * | | | | | * | | | | 1 | 1 | 0 | 0 | 1 |
| 21 | * | | | | | | | | | * | | | 0 | 0 | 1 | 0 | 1 |
| 22 | | * | | | | | | | | * | | | 1 | 0 | 1 | 0 | 1 |
| 23 | | | * | | | | | | | * | | | 0 | 1 | 1 | 0 | 1 |
| 24 | | | | * | | | | | | * | | | 1 | 1 | 1 | 0 | 1 |
| 25 | * | | | | | | | | | | * | | 0 | 0 | 0 | 1 | 1 |
| 26 | | * | | | | | | | | | * | | 1 | 0 | 0 | 1 | 1 |
| 27 | | | * | | | | | | | | * | | 0 | 1 | 0 | 1 | 1 |
| 28 | | | | * | | | | | | | * | | 1 | 1 | 0 | 1 | 1 |
| 29 | * | | | | | | | | | | | * | 0 | 0 | 1 | 1 | 1 |
| 30 | | * | | | | | | | | | | * | 1 | 0 | 1 | 1 | 1 |
| 31 | | | * | | | | | | | | | * | 0 | 1 | 1 | 1 | 1 |
| 32 | | | | * | | | | | | | | * | 1 | 1 | 1 | 1 | 1 |

PT2560-001/PT2560-003 Data Code Table for Double Key Operation

| Double Keys Key Nos. | Input CS | KO Lines | | | Data Code | | |
|-------------------------|-------------|-----------------|-----------------|-----------------|-----------|----|----|
| | | KO ₅ | KO ₆ | KO ₇ | D5 | D6 | D7 |
| | | | | | 0 | 0 | 0 |
| 33 | * | * | | | 1 | 0 | 0 |
| 34 | * | | * | | 0 | 1 | 0 |
| 33+34 | * | * | * | | 1 | 1 | 0 |
| 35 | * | | | * | 0 | 0 | 1 |
| 33+35 | * | * | | * | 1 | 0 | 1 |
| 34+35 | * | | * | * | 0 | 1 | 1 |
| 33+34+35 | * | * | * | * | 1 | 1 | 1 |



Infrared Remote Control Transmitter

PT2560

Example 1: When the Double Key Operation is NOT used and the Key No. 2 is pressed, then the Data Code will be:

| D0 | D1 | D2 | D3 | D4 | D5 | D6 | D7 |
|----|----|----|----|----|----------|----------|----------|
| 1 | 0 | 0 | 0 | 0 | <u>0</u> | <u>0</u> | <u>0</u> |

Take note that since the Double Key Operation is NOT used, the value of data bits D5, D6, and D7 is "0".

Example 2: When only 1 Double Key (Key Nos. 33 + Key No. 2) is used, then the Data Code is

| D0 | D1 | D2 | D3 | D4 | D5 | D6 | D7 |
|----|----|----|----|----|----------|----------|----------|
| 1 | 0 | 0 | 0 | 0 | <u>1</u> | <u>0</u> | <u>0</u> |

Example 3: When 2 Double Keys (Key Nos. [33 + 35] + Key No. 2) are used, the Data Code is

| D0 | D1 | D2 | D3 | D4 | D5 | D6 | D7 |
|----|----|----|----|----|----------|----------|----------|
| 1 | 0 | 0 | 0 | 0 | <u>1</u> | <u>0</u> | <u>1</u> |

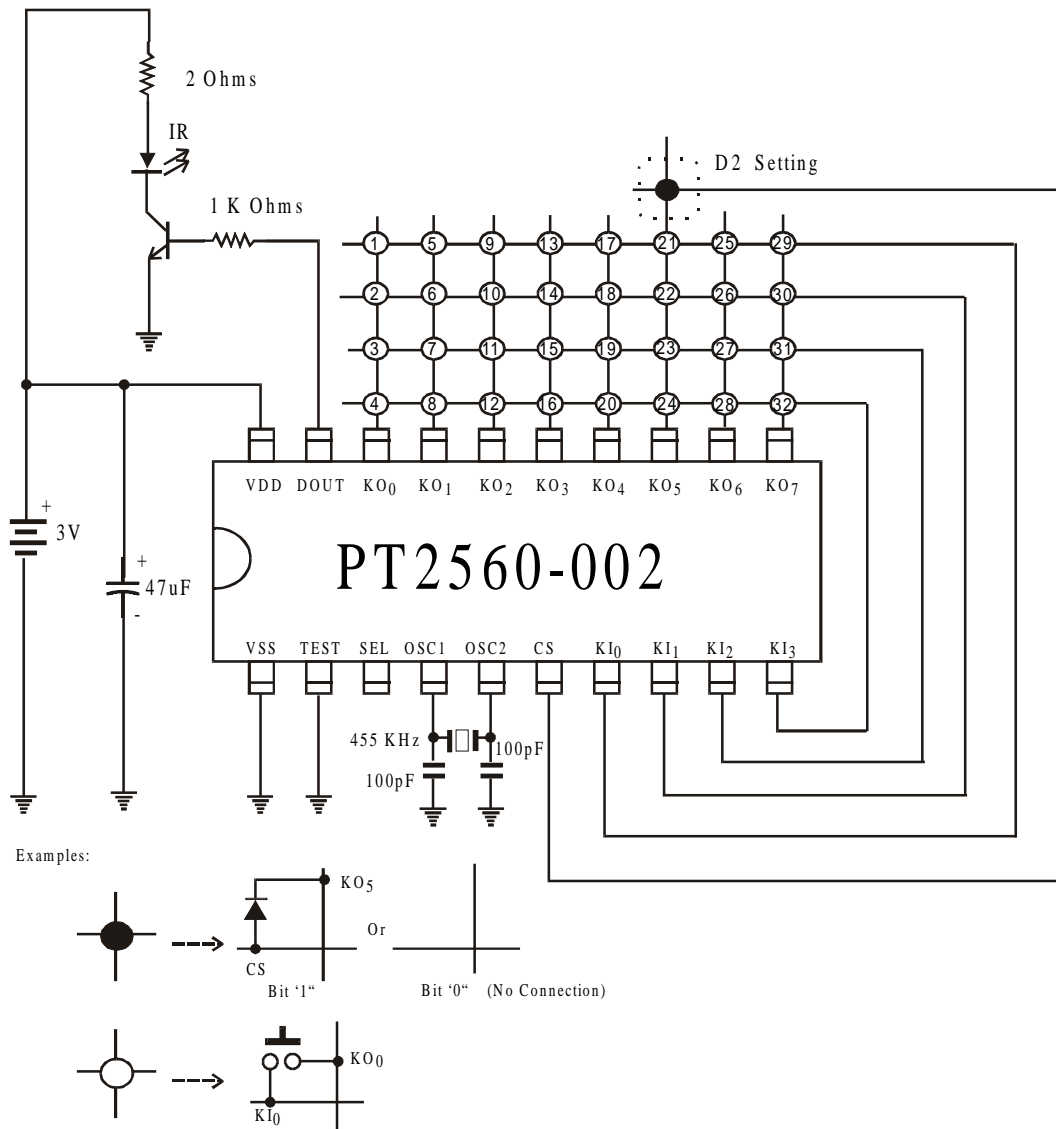


Infrared Remote Control Transmitter

PT2560

Application Circuit 7

(No Leader Code and Custom Code)



Note: D2 is the Extended Code setting. When KO5 is connected to a DIODE, the Data Bit D5 is "1". Conversely, if the KO5 is not connected to a DIODE, then the Data Bit, D5 is "0". PT2560 SEL Pin is "floating".



Infrared Remote Control Transmitter

PT2560

PT2560-002 Data Code Table for Application Circuit 7 (MODE B)

| No. | KI Lines | | | | KO Lines | | | | | | | | Data Code | | | | | |
|-----|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------|----|----|----|----|-----|
| | KI ₀ | KI ₁ | KI ₂ | KI ₃ | KO ₀ | KO ₁ | KO ₂ | KO ₃ | KO ₄ | KO ₅ | KO ₆ | KO ₇ | D0 | D1 | D2 | D3 | D4 | D5 |
| 1 | * | | | | * | | | | | | | | 0 | 0 | 0 | 0 | 0 | 0/1 |
| 2 | | * | | | * | | | | | | | | 1 | 0 | 0 | 0 | 0 | 0/1 |
| 3 | | | * | | * | | | | | | | | 0 | 1 | 0 | 0 | 0 | 0/1 |
| 4 | | | | * | * | | | | | | | | 1 | 1 | 0 | 0 | 0 | 0/1 |
| 5 | * | | | | | * | | | | | | | 0 | 0 | 1 | 0 | 0 | 0/1 |
| 6 | | * | | | | * | | | | | | | 1 | 0 | 1 | 0 | 0 | 0/1 |
| 7 | | | * | | | * | | | | | | | 0 | 1 | 1 | 0 | 0 | 0/1 |
| 8 | | | | * | | * | | | | | | | 1 | 1 | 1 | 0 | 0 | 0/1 |
| 9 | * | | | | | | * | | | | | | 0 | 0 | 0 | 1 | 0 | 0/1 |
| 10 | | * | | | | | * | | | | | | 1 | 0 | 0 | 1 | 0 | 0/1 |
| 11 | | | * | | | | * | | | | | | 0 | 1 | 0 | 1 | 0 | 0/1 |
| 12 | | | | * | | | * | | | | | | 1 | 1 | 0 | 1 | 0 | 0/1 |
| 13 | * | | | | | | | * | | | | | 0 | 0 | 1 | 1 | 0 | 0/1 |
| 14 | | * | | | | | | * | | | | | 1 | 0 | 1 | 1 | 0 | 0/1 |
| 15 | | | * | | | | | * | | | | | 0 | 1 | 1 | 1 | 0 | 0/1 |
| 16 | | | | * | | | | * | | | | | 1 | 1 | 1 | 1 | 0 | 0/1 |
| 17 | * | | | | | | | | * | | | | 0 | 0 | 0 | 0 | 1 | 0/1 |
| 18 | | * | | | | | | | * | | | | 1 | 0 | 0 | 0 | 1 | 0/1 |
| 19 | | | * | | | | | | * | | | | 0 | 1 | 0 | 0 | 1 | 0/1 |
| 20 | | | | * | | | | | * | | | | 1 | 1 | 0 | 0 | 1 | 0/1 |
| 21 | * | | | | | | | | | * | | | 0 | 0 | 1 | 0 | 1 | 0/1 |
| 22 | | * | | | | | | | | * | | | 1 | 0 | 1 | 0 | 1 | 0/1 |
| 23 | | | * | | | | | | | * | | | 0 | 1 | 1 | 0 | 1 | 0/1 |
| 24 | | | | * | | | | | | * | | | 1 | 1 | 1 | 0 | 1 | 0/1 |
| 25 | * | | | | | | | | | | * | | 0 | 0 | 0 | 1 | 1 | 0/1 |
| 26 | | * | | | | | | | | | * | | 1 | 0 | 0 | 1 | 1 | 0/1 |
| 27 | | | * | | | | | | | | * | | 0 | 1 | 0 | 1 | 1 | 0/1 |
| 28 | | | | * | | | | | | | * | | 1 | 1 | 0 | 1 | 1 | 0/1 |
| 29 | * | | | | | | | | | | | * | 0 | 0 | 1 | 1 | 1 | 0/1 |
| 30 | | * | | | | | | | | | | * | 1 | 0 | 1 | 1 | 1 | 0/1 |
| 31 | | | * | | | | | | | | | * | 0 | 1 | 1 | 1 | 1 | 0/1 |
| 32 | | | | * | | | | | | | | * | 1 | 1 | 1 | 1 | 1 | 0/1 |