



DESCRIPTION

PT6324 is a Vacuum Fluorescent Display (VFD) Controller driven on a 1/8 to 1/16 duty factor housed in 52-pin plastic QFP. 24 segment output lines, 16 grid output lines, one display memory, control circuit, key scan circuit are all incorporated into a single chip to build a highly reliable peripheral device for a single chip micro computer. Serial data is fed to PT6324 via a three-line serial interface.

FEATURES

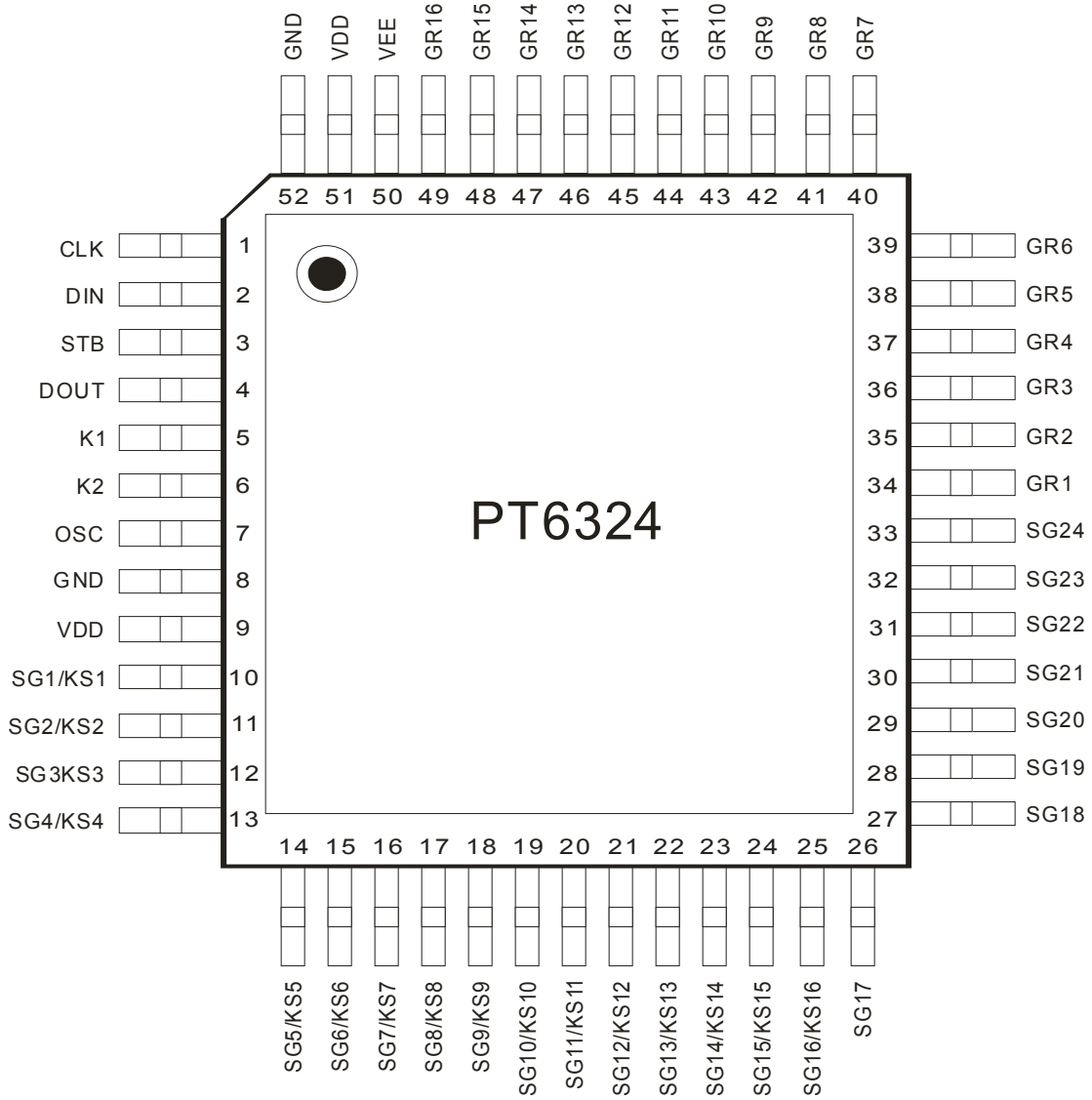
- CMOS technology
- Low power consumption
- Wide operating voltage $V_{DD}=2.7V\sim 5.5V$
- Key scanning (16 x 2 matrix)
- Display modes: (24 segments, 8 digits to 24 segments, 16 digits)
- 8-Step dimming circuitry
- Serial interface for Clock, Data Input, Data Output, Strobe pins
- No external resistors needed for driver outputs
- Available in 52-pin QFP

APPLICATIONS

- Microcomputer peripheral devices
- Digital Audio/Video system: CD/MD/VCD/DVD players
- Car audio
- VCR
- Electric scale meter
- P.O.S.
- Electronic equipment with instructional display

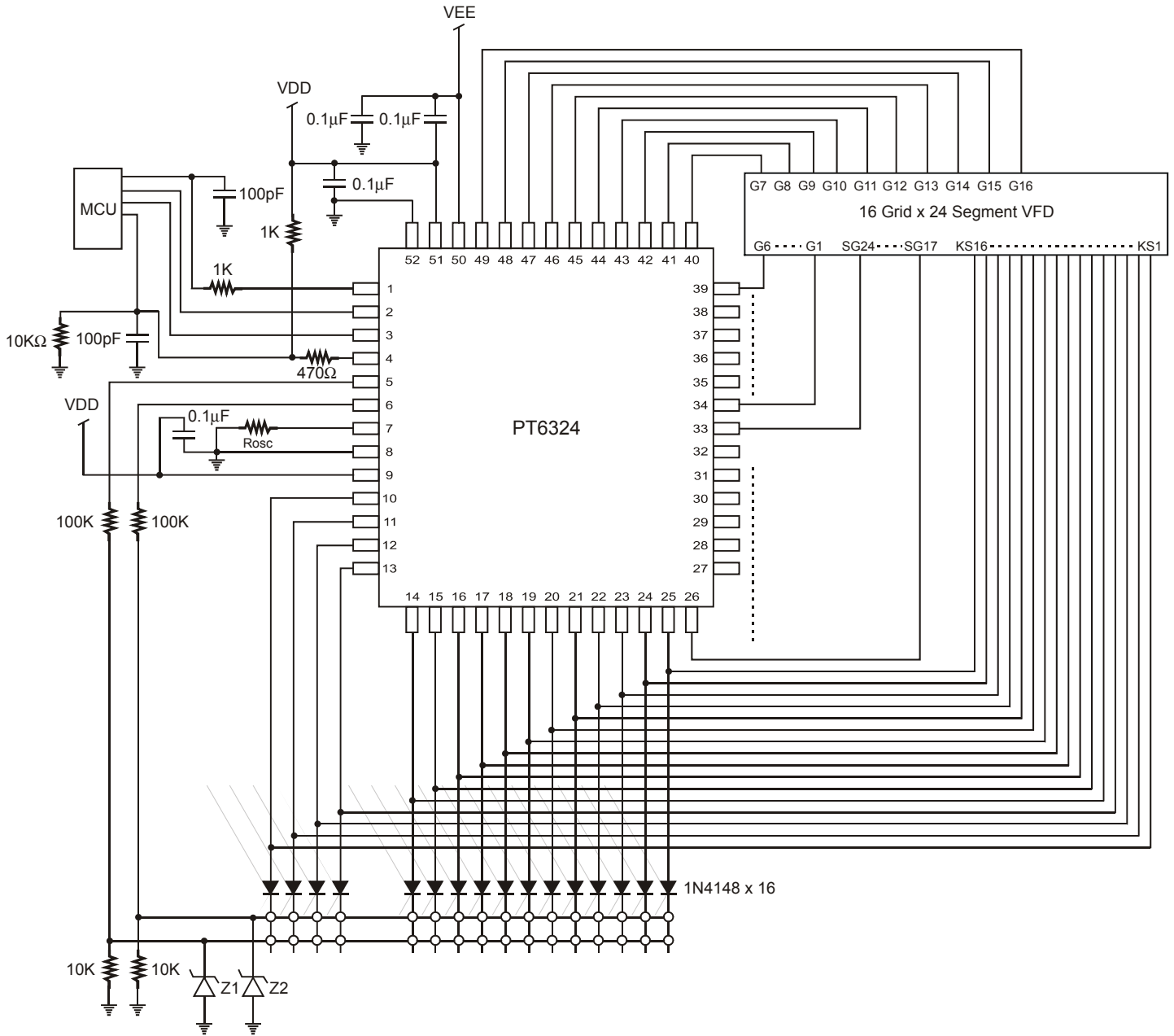


PIN CONFIGURATION





16-GRID X 24-SEGMENT VFD APPLICATION CIRCUIT



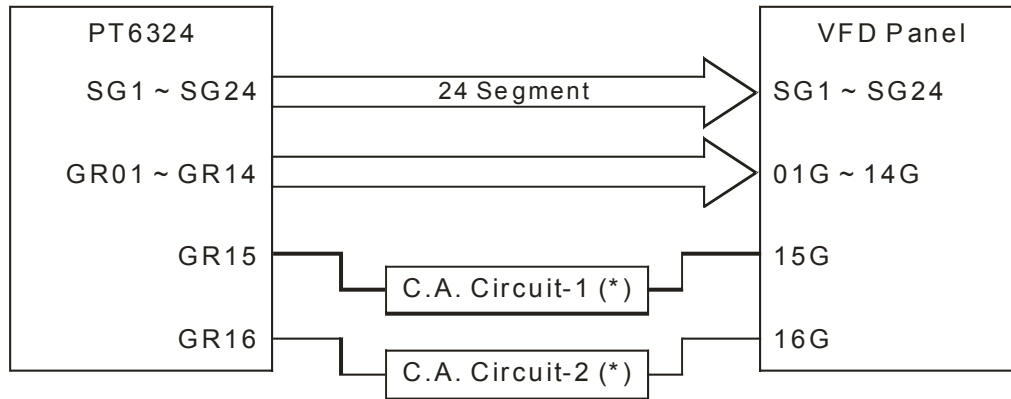


VFD Driver/Controller IC

PT6324

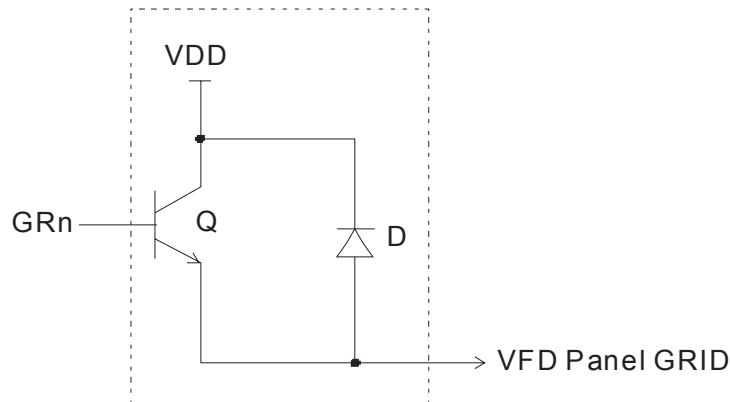
Notes:

1. The value of R_{osc} is depend on PT6324 IC chip supply voltage of V_{DD} ($R_{osc}=82K\Omega$, when $V_{DD}=5V$; $R_{osc}=100K\Omega$, when $V_{DD}=3.3V$).
2. Z1, Z2=Zener diode 5.1V
3. Please adding the current amplifying circuit as following figure when $I_{OHGR}>15mA$ on VFD panel for high brightness issue.



*=C.A. Circuit=Current amplifying circuit

C.A. Circuit-1 & C.A. Circuit-2 Ex.:



Parts recommended:

- Q=SAMSUNG-KSR1105 (General fast switching transistor)
- D=HITACHI-HSM221C (General fast recovery diode)



ORDER INFORMATION

Order Part Number	Package Type	Top Code
PT6324-Q	52 Pin QFP	PT6324-Q
PT6324-Q (L)	52 Pin QFP	PT6324-Q

Notes:

1. (L), (C) or (S) = Lead Free.
2. The Lead Free mark is put in front of the date code.