



VFD Driver/Controller IC with Character RAM

PT6302

DESCRIPTION

PT6302 is a dot matrix VFD Driver/Controller IC utilizing CMOS Technology specially designed to display characters, numerals, and symbols. PT6302 provides 35 dot matrix plus 2 additional segment drivers and 16 grid drivers. 248 types of character data (CGROM), 8 types of character data (CGRAM), 16 display digits x 2 bits symbol data, 16 display digits x 8 bits register for character data display and 2 general output bits for static operation are provided. Pin assignments and application circuit are optimized for easy PCB layout and cost saving advantages.

FEATURES

- CMOS technology
- Logic power supply: $VDD=3.3V\pm 10\%$ or $5.0V\pm 10\%$
- VFD drive power supply: $VEE=-20V$ to $-35V$
- Built-in oscillation circuit (External RC)
- One-byte instruction execution (not including Data Write to RAM)
- Microcontroller interface
- Display contents:
 - Character generator ROM (CGROM): 5x7 Dots (248 Character data types)
 - Character generator RAM (CGRAM): 5x7 Dots (8 Character data types)
 - Additional data RAM (ADRAM): 16 Display digits x 2 Bits (Symbol data)
 - Data control RAM (DCRAM): 16 Display digits x 8 Bits (Character data display register)
 - General output port: 2 bits (Static operation)
- Display control function:
 - Display digits: 9 to 16 digits
 - Display duty (Contrast adjustment): 8 stages
 - All display lights: ON/OFF mode

APPLICATIONS

- Microcontroller peripheral device
- Audio/Video equipment

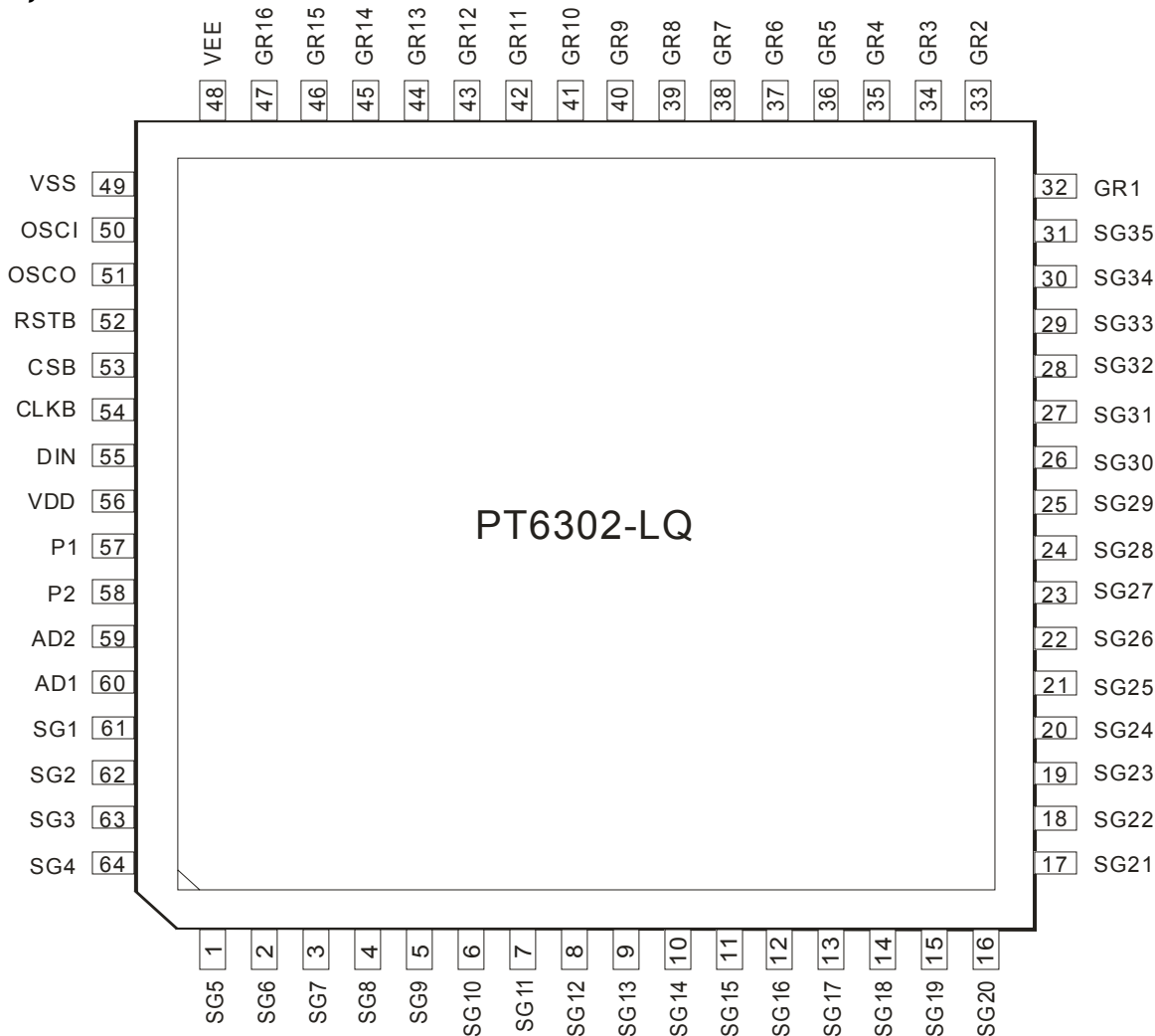


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PIN CONFIGURATION

64 PINS, LQFP

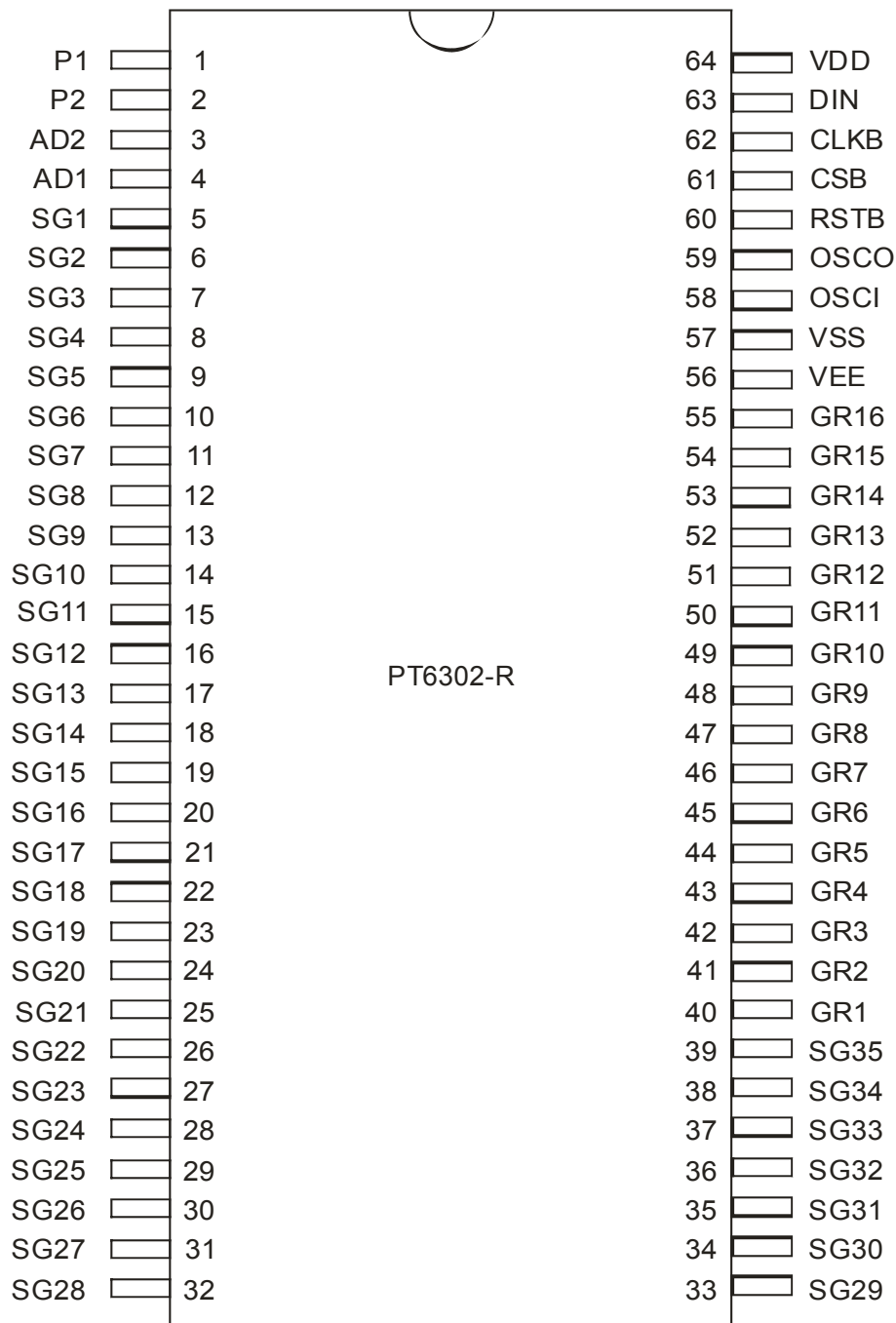




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64 PINS, SSOP

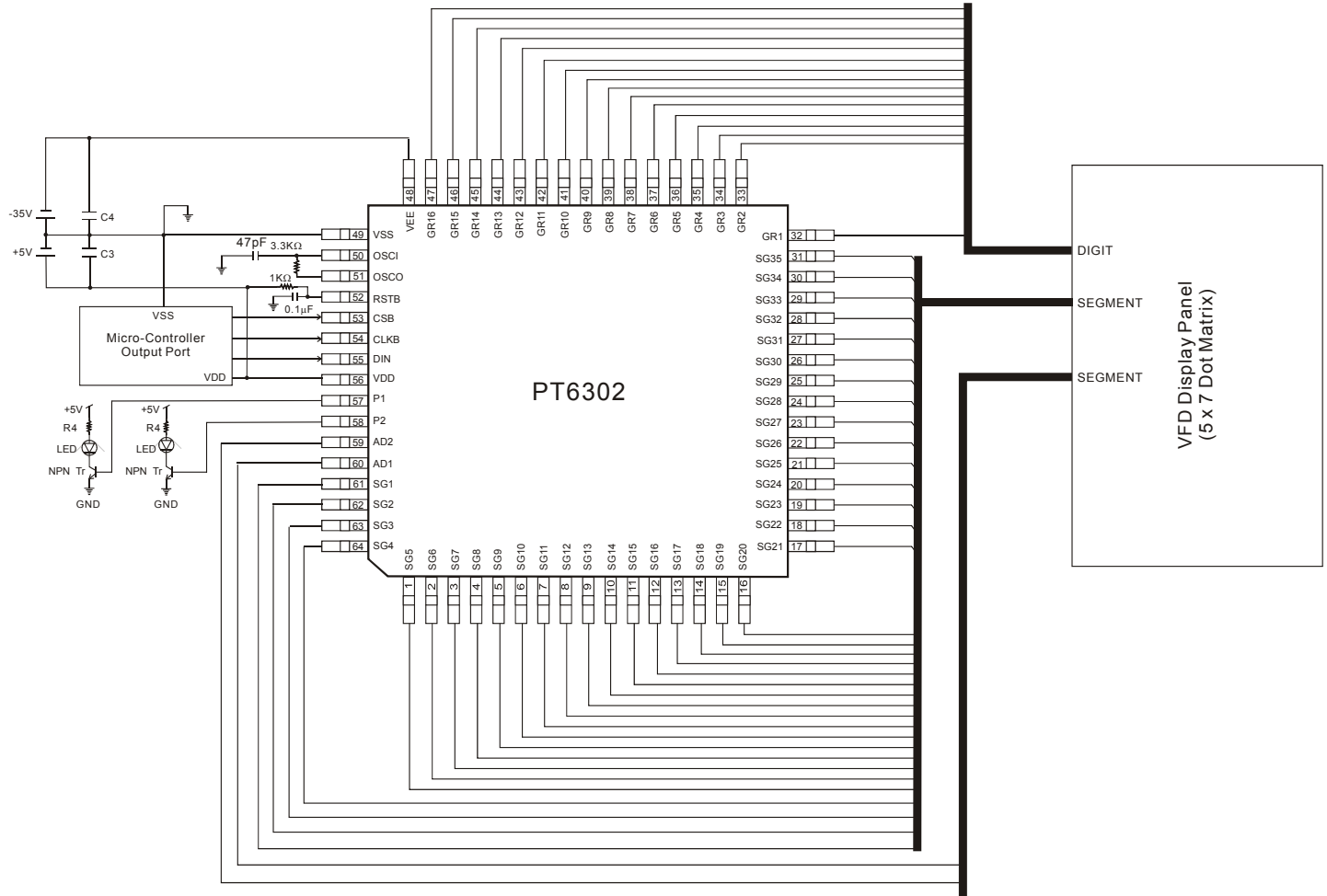




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APPLICATION CIRCUIT





ORDERING INFORMATION

| Order Part Number | Package Type | Top Code |
|----------------------|---------------|-----------------|
| PT6302LQ-001 (G) (L) | 64 pins, LQFP | PT6302LQ-001 |
| PT6302LQ-003 (G) (L) | 64 pins, LQFP | PT6302LQ-003 |
| PT6302LQ-007 (G) (L) | 64 pins, LQFP | PT6302LQ-007 |
| PT6302-R-001 (G) (L) | 64 pins, SSOP | PT6302(G)-R-001 |

Notes:

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