

DESCRIPTION

PT6314 is a VFD Controller/Driver IC utilizing CMOS technology providing 80 segment outputs and 24 grid outputs. It supports dot matrix displays of up to 16 columns x 2 lines, 20 columns x 2 lines or 24 columns x 2 lines. PT6314 also features a character generator ROM which stores 240 x 5 x 8 dos characters. Pin assignments and application circuits are optimized for easy PCB layout and cost saving advantages.

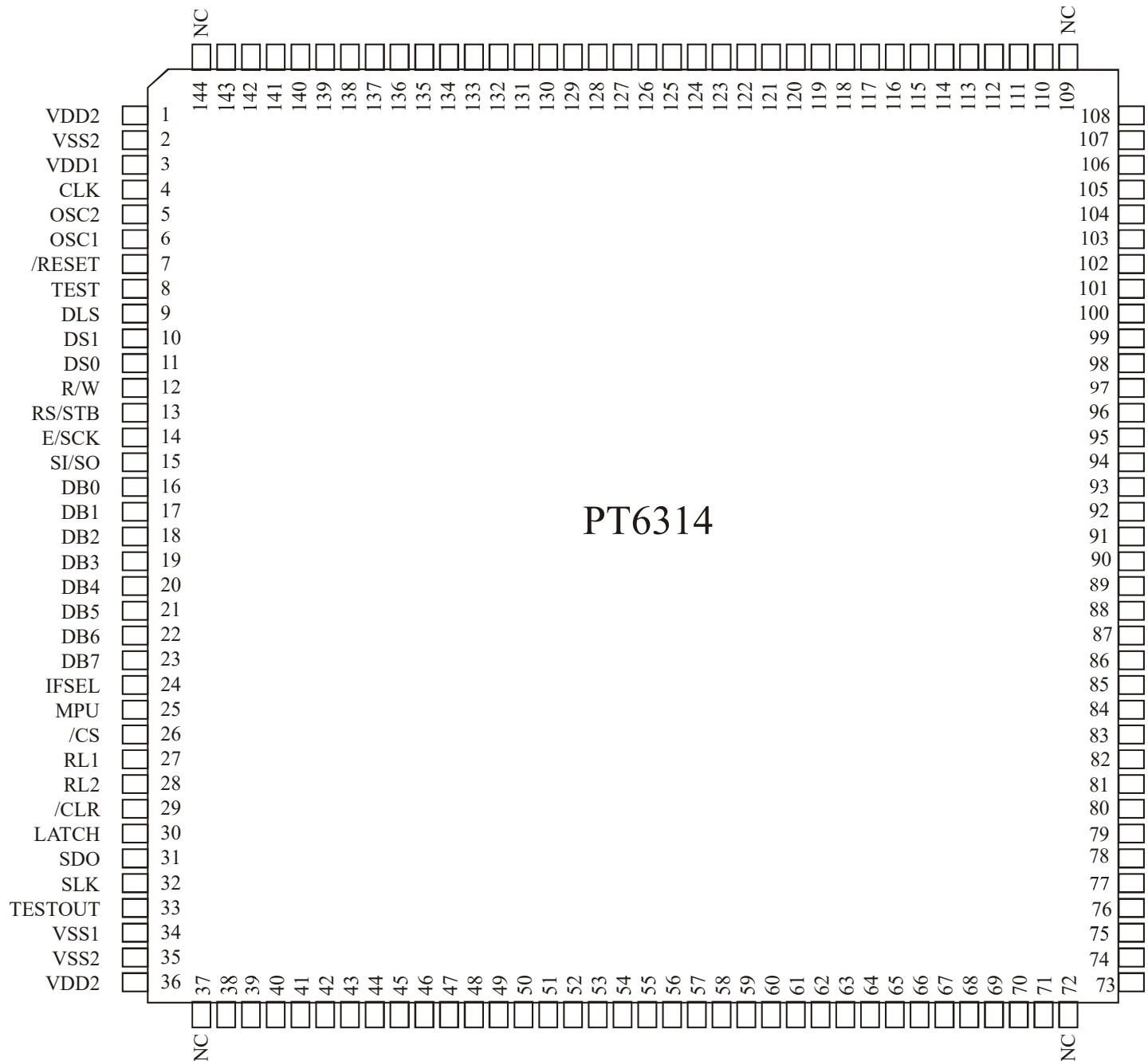
FEATURES

- CMOS technology
- Provides up to 80 x 8 display RAM
- Capable of driving segment for cursor displays (48 units)
- Built-in oscillation circuit
- Parallel data input/output (switchable 4 or 8 bits) or serial data input/output
- Alphanumeric and symbolic display via the built-in ROM (5 x 8 dots): 240 characters
- Eight user-defined 5 x 8 dot character CGRAM
- Display contents capability:
 - 16 columns x 2(1) rows + 32(16) cursors
 - 20 columns x 2(1) rows + 40(20) cursors
 - 24 columns x 2(1) rows + 48(24) cursors
- Custom ROM available (please contact PTC)

APPLICATION

- Electronic equipment with VFD display
- Microprocessor peripherals

PIN CONFIGURATION

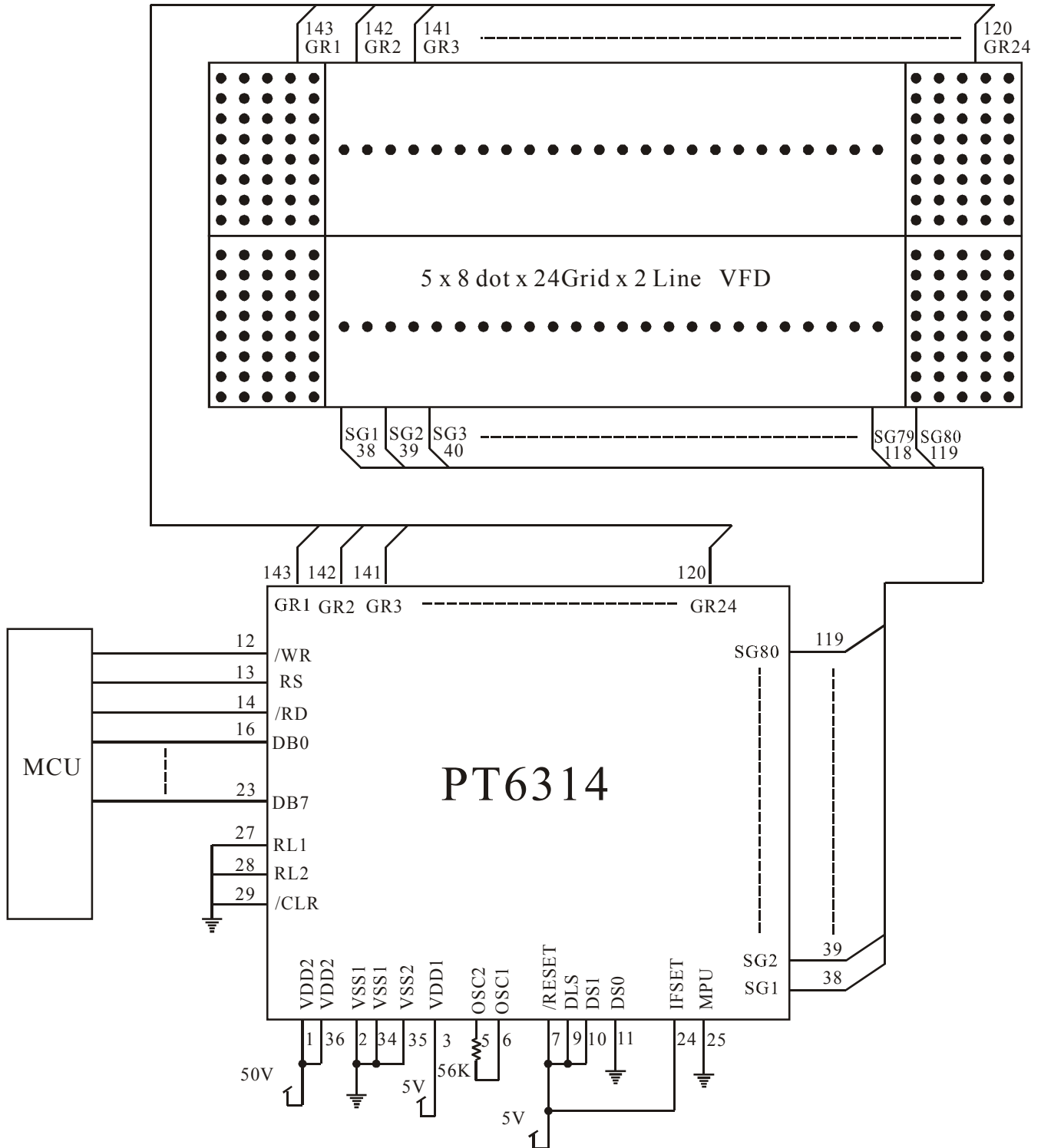


Notes:

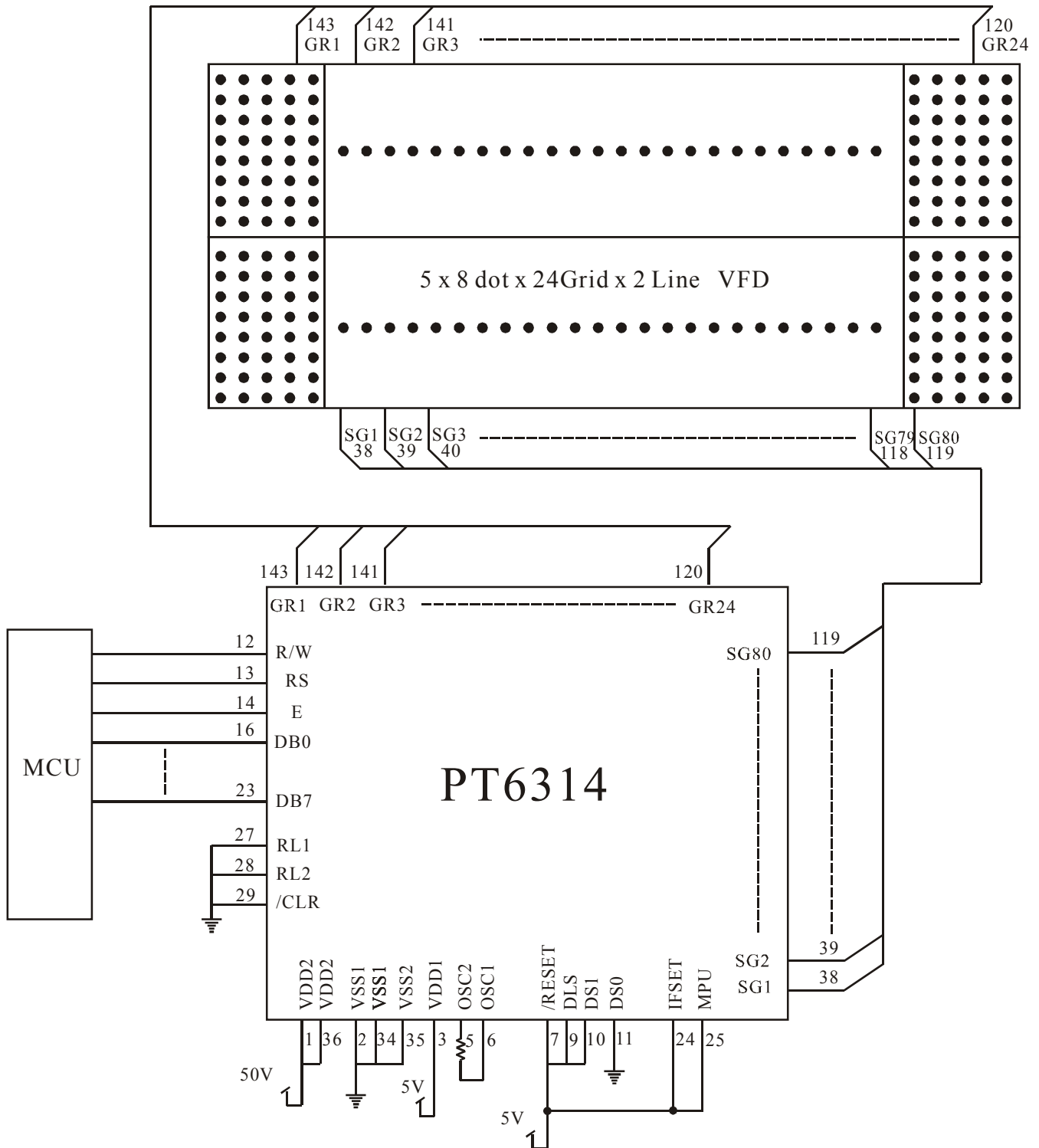
- Pin Nos. 38 to 71, 73 to 108, 110 to 119 are used as Segment Signal Output Pins, Pin Nos. 120 to 143 are used as Grid Signal Output Pins and are configured according to the Tables shown in the Duty Ratio Setting Section (see pages 7 to 13).

The diagram illustrates the PT6314 VFD driver IC interfaced to an MCU and a 5x8 dot x 24Grid x 2 Line VFD. The MCU controls the SI/SO, SCK, and STB pins. The VFD is connected to the PT6314's grid (GR1-GR24) and segment (SG1-SG80) pins. Power and timing components like VDD2, VSS1, VSS2, VDD1, OSC2, OSC1, /RESET, DLS, DS1, DS0, and IFSET are also shown.

APPLICATION CIRCUIT 2: I80 INTERFACE



APPLICATION CIRCUIT 3: M68 INTERFACE



ORDERING INFORMATION

Order Part Number	Package Type	Top Code
PT6314-001	144 Pins LQFP	PT6314-001
PT6314-002	144 Pins LQFP	PT6314-002
PT6314-16	144 Pins LQFP	PT6314-16
PT6314-001 (L)	144 Pins LQFP	PT6314-001
PT6314-002 (L)	144 Pins LQFP	PT6314-002
PT6314-16 (L)	144 Pins LQFP	PT6314-16

Note:

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