



MIC10938/10939

V. F. Dot Matrix Display Controller

Summary Information*—Not Recommended for New Designs

General Description

The MIC10938 and MIC10939 Dot Matrix Display Controller is a two-chip MOS/LSI general purpose display controller system designed to interface to dot matrix displays (vacuum fluorescent or LED).

The two-chip set will drive displays with up to 35 anodes (dots) and up to 20 grids (characters) plus a cursor. The chips can be cascaded to drive larger displays of as many as 80 characters.

An internal PLA-type decoder provides character decoding and dot pattern generation for the full 96-character ASCII set and an additional 32 special characters.

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Features

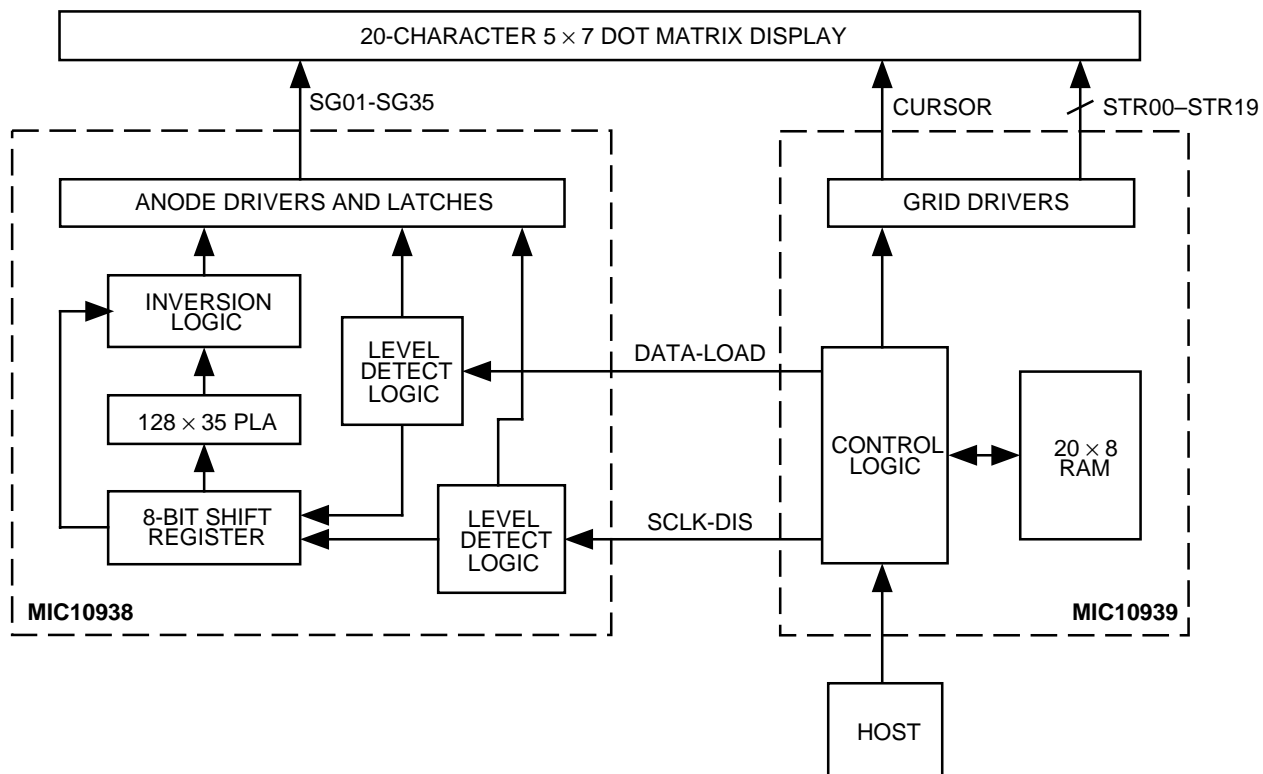
- 20-character display driver cascadable to 80 characters
- Standard 5 × 7 character font
- Separate cursor driver output
- Direct drive capability for vacuum-fluorescent displays
- 128 × 35 PLA provides segment decoding for full 96-character ASCII set, plus 32 special characters
- Serial or parallel data input for 8-bit display and control characters
- 40-pin DIP or 44-pin PLCC

Ordering Information

| Part Number | Temperature Range | Package |
|---------------|-------------------|--------------|
| MIC10938J-50 | 0°C to +70°C | 44-pin PLCC |
| MIC10938P-50 | 0°C to +70°C | 40-pin P-DIP |
| MIC10938PE-50 | -40°C to +85°C | 40-pin P-DIP |
| MIC10939J-50 | 0°C to +70°C | 44-pin PLCC |
| MIC10939P-50 | 0°C to +70°C | 40-pin P-DIP |
| MIC10939PE-50 | -40°C to +85°C | 40-pin P-DIP |

‡ Dual-marked devices replace both 40V and 50V versions

Block Diagram



* Contact Micrel for more information.