



# 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

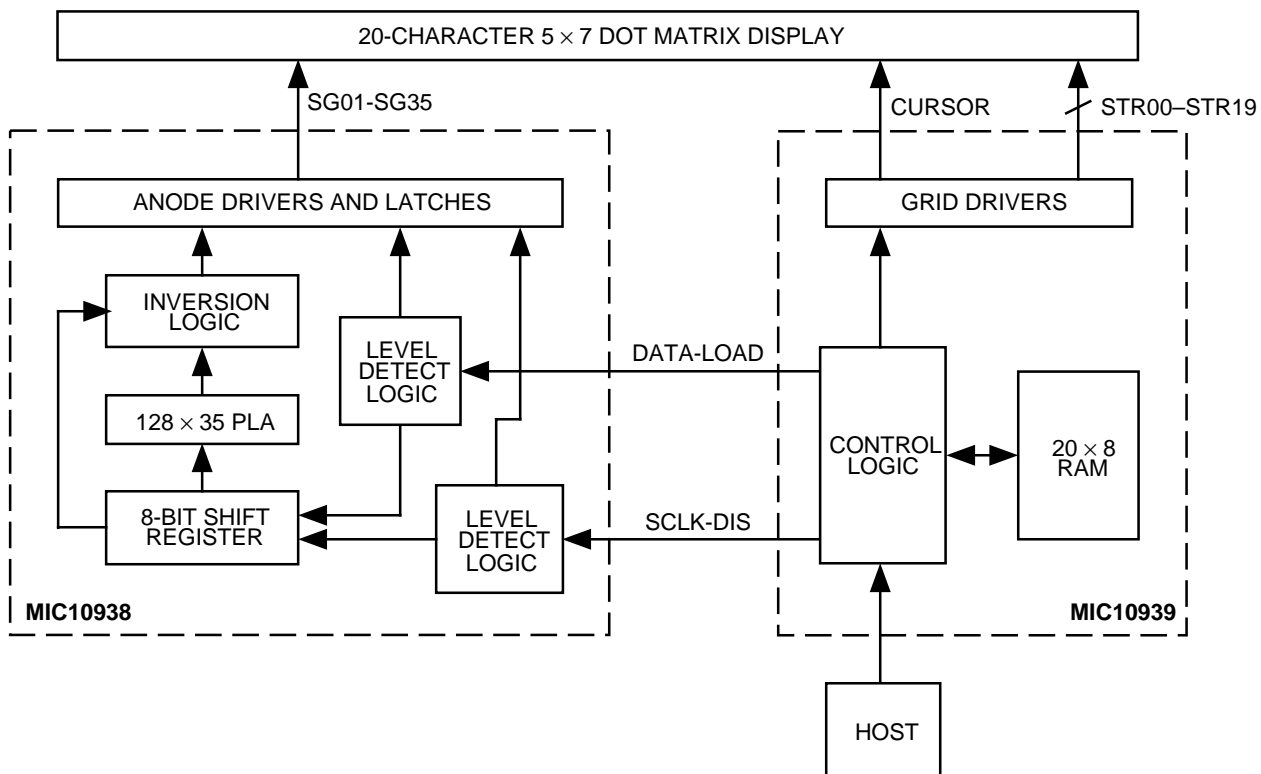
- 20-character display driver cascadable to 80 characters
- Standard 5 × 7 character font
- Separate cursor driver output
- Direct drive capability for vacuum-fluorescent displays
- 128 × 35 PLA provides segment decoding for full 96-character ASCII set, plus 32 special characters
- Serial or parallel 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.