MIC10939/10942/10943

V. F. Dot Matrix Display Controller

### Summary Information*—Not Recommended for New Designs

General Description

The MIC10939, MIC10942, and MIC10943 Dot Matrix Display Controller is a three-chip MOS/LSI general purpose display controller system designed to interface to dot matrix displays (vacuum fluorescent or LED).

The three-chip set will drive displays with up to 46 anodes (dots) and up to 20 grids (characters) plus a cursor. The chips can be cascaded to drive larger displays of up to 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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Block Diagram
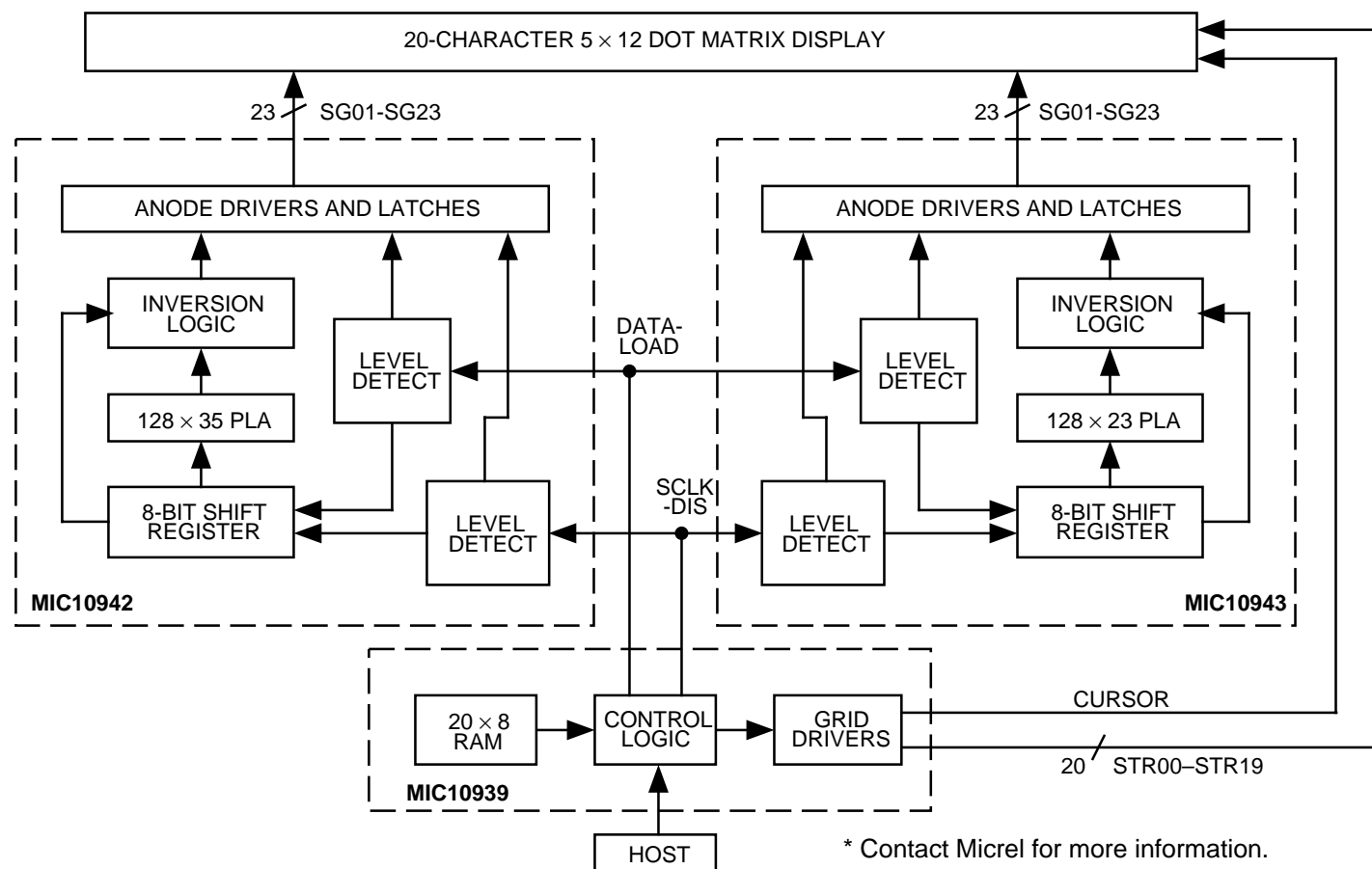
Features

- 20-character display driver cascadable to 80 characters
- Standard 5×12 character font
- Separate cursor driver output
- Two 128×23 PLAs provides segment decoding for full 96-character ASCII set, plus 32 special characters
- Serial or parallel data input for 8-bit display mode controls
- Brightness, refresh rate, and display mode controls
- 40-pin DIP or 44-pin PLCC (MIC10939)
- 28-pin DIP (MIC10942 and MIC10943)

Ordering Information

Part Number	Temperature Range	Package
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
MIC10942P-50	0°C to +70°C	40-pin P-DIP
MIC10942PE-50	–40°C to +85°C	40-pin P-DIP
MIC10943P-50	0°C to +70°C	40-pin P-DIP
MIC10943PE-50	–40°C to +85°C	40-pin P-DIP