



MIC10939/10942/10943

V. F. Dot Matrix Display Controller

Summary Information*—Not Recommended for New Designs

General Description

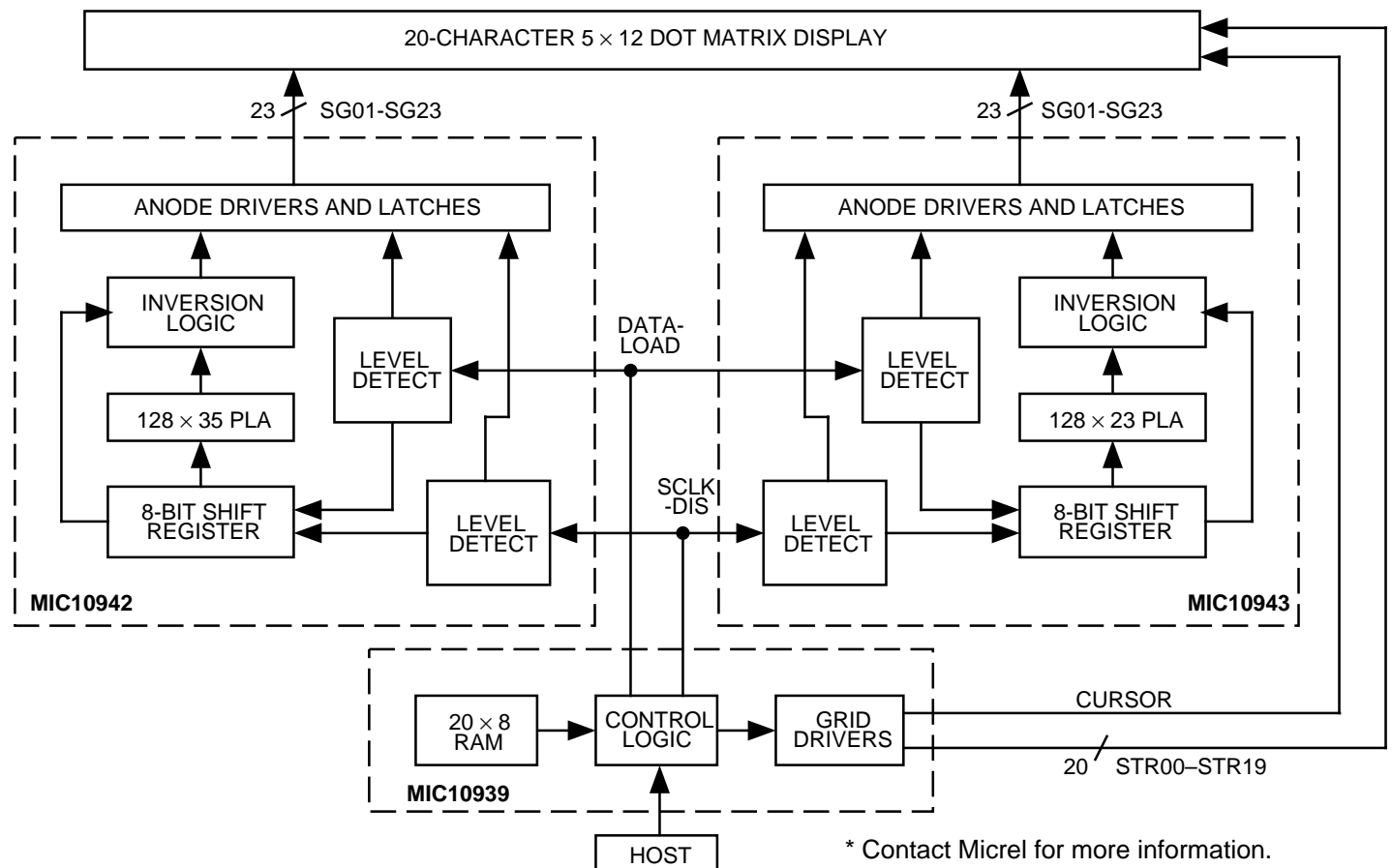
The MIC10939, MIC10942, and MIC10943 Dot Matrix Display Controller is a three-chip MOS/LSI general purpose display controller system designed to interface to dot matrix displays (vacuum fluorescent or LED).

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.

Micrel has received the rights from Rockwell International to manufacture and market this product and reproduce the specifications, including references to Rockwell.

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