

PRELIMINARY
 Notice: This is not a final specification.
 Some parametric limits are subject to change.

MITSUBISHI (DIGITAL ASSP)
M66270FP

OPERATION PANEL CONTROLLER

DESCRIPTION

The M66270FP is a graphic display-only controller for displaying a high duty dot matrix type LCD which is used widely for PPC, FAX and multi-function telephones.

It is capable of controlling a monochrome STN LCD system of up to 320 × 240 dots.

The IC has a built-in 9600-byte VRAM as a display memory. All of the VRAM addresses are externally opened. Address mapping in the MPU memory space allows direct addressing of all display data from the MPU, thus providing efficient display data processing such as drawing.

The built-in arbiter circuit (cycle steal system) which gives priority to display access allows timing-free access from MPU to VRAM, preventing display screen distortion.

The IC provides interface with a 8-bit/16-bit MPU with a READY (WAIT) pin.

FEATURES

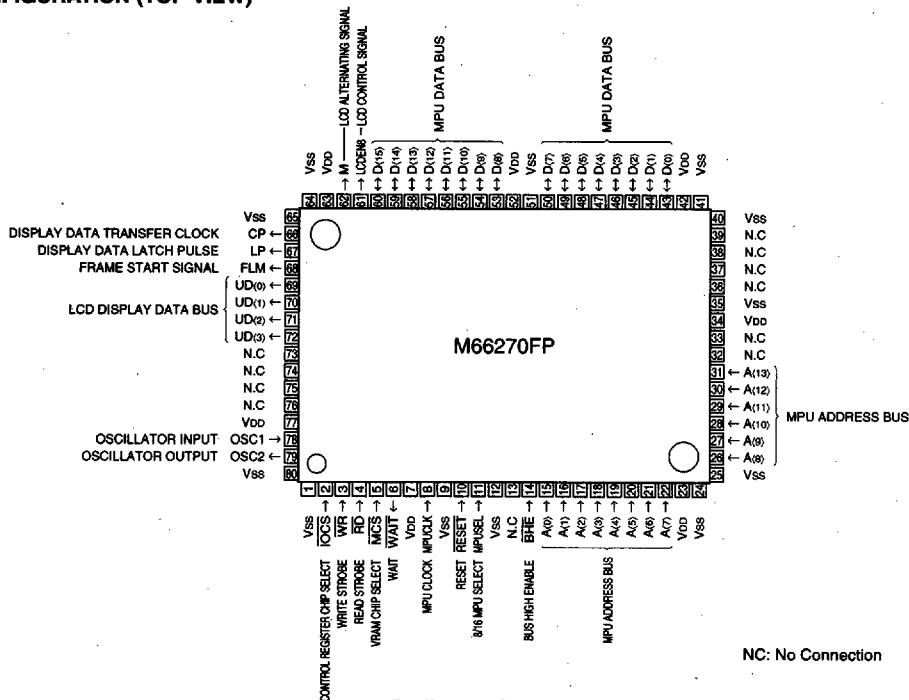
- Displayable LCD
 - Monochrome STN dot matrix type LCD of up to 320 × 240 dots
 - Maximum display duty: 1/240
- Display memory
 - Built-in 9600-byte (76800-bit) VRAM (equivalent to one screen of 320 × 240-dot LCD)
 - All addresses of built-in VRAM are externally opened.

- Interface with MPU
 - Capability of interfacing with 80 type MPU
 - Capability of switching 8-bit type MPU/16-bit type MPU.
 - With WAIT output pin
- Interface with LCD
 - 4-bit parallel output
 - Four kinds of control signals: M, LP, CP and FLM
- Display functions
 - Graphic display only (characters drawn graphically)
 - Binary display only (without tone display function)
 - Vertical scrolling is allows within memory range (smallsize LCD only)
- 5V single power supply
- 80-pin QFP

APPLICATION

- PPC/FAX operation panel, display/operation panel of other OA equipment
- Multi-function/public telephones
- PDA/electronic notebook/information terminal
- Other applications using LCD of 320 × 240 dots or less

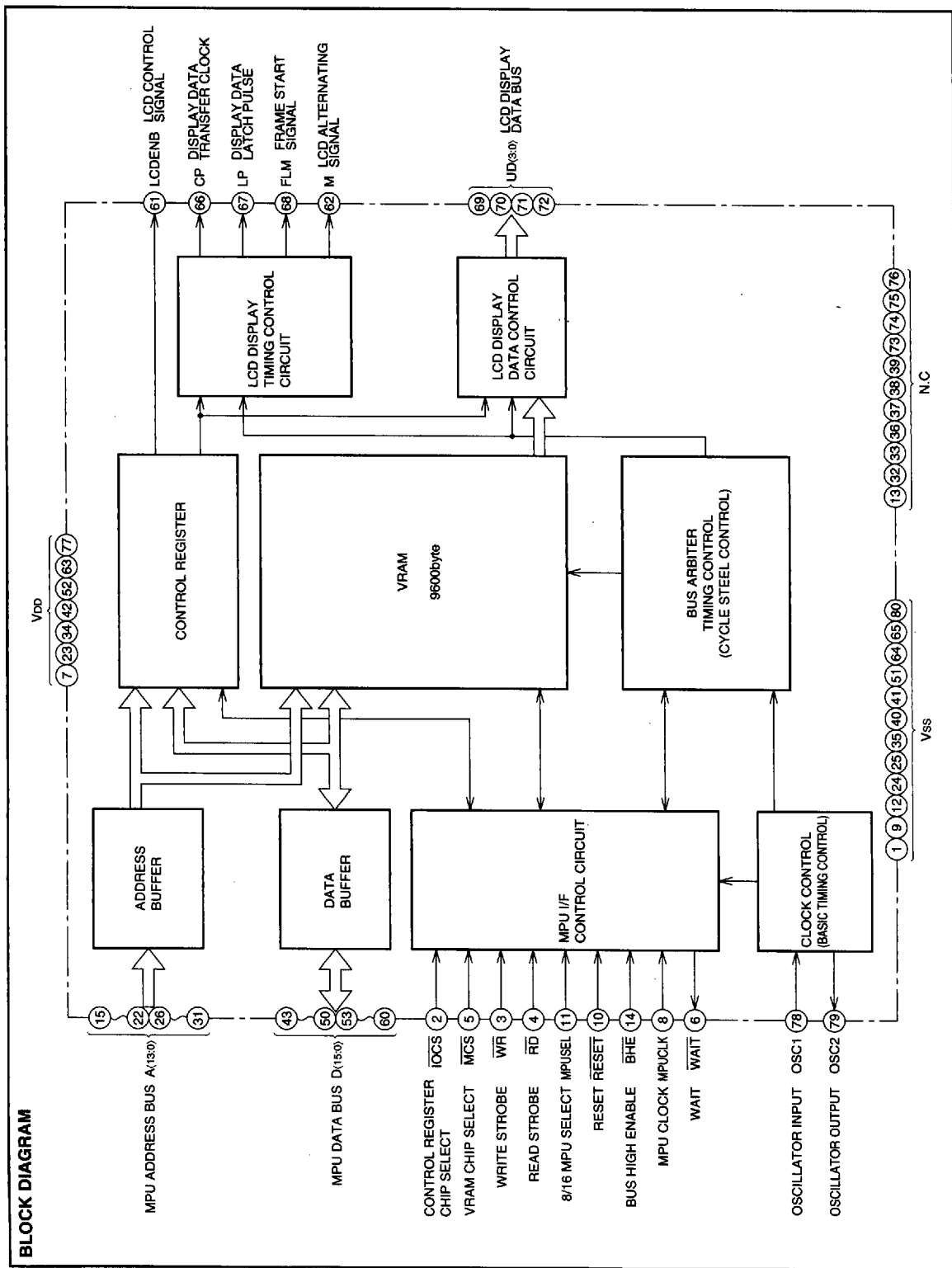
PIN CONFIGURATION (TOP VIEW)



Outline 80P6N-A

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