

DOT MATRIX LCD 64-OUT SEGMENT DRIVER

GENERAL DESCRIPTION

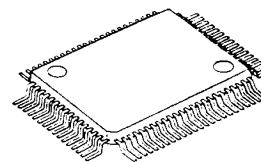
The NJU6417 is a serial input, 64-out segment driver for dot matrix LCDs, especially useful as expansion driver for LCD controller drivers like NJU6408.

It consists of 64 bits(two of 32 bits) shift register, 64 bits latch, and 64 high voltage LCD drivers.

The shift direction of each 32 bits shift register can be set independently to each other, consequently the efficient expansion driver allocation according to the number of characters and easy wiring to the LCD panel can be performed.

As the 64 drivers have 4 level voltage inputs to drive the LCD, adjustable driving voltage according to the LCD panel can be supplied from the external power source.

PACKAGE OUTLINE

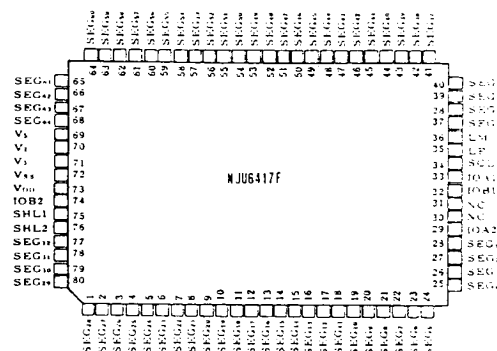


NJU6417F

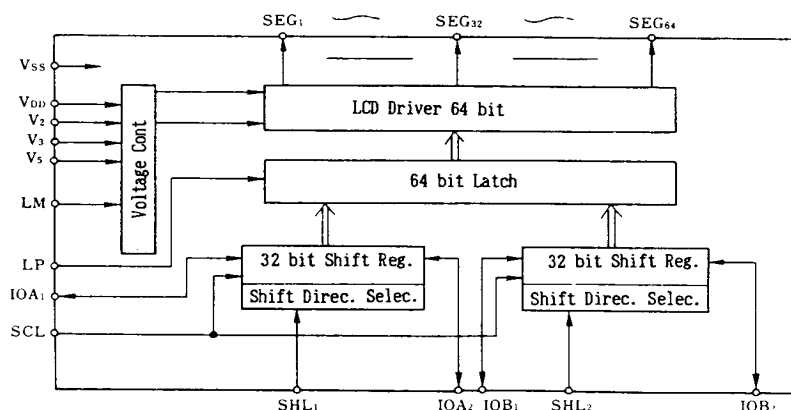
FEATURES

- 64 Segment Drivers
- 64 bits Shift Register
(Two of 32 bits Shift Registers)
- Shift Direction for each
32 bits Shift Registers Selectable
- Two Shift Direction Select Terminals
- Duty Ratio 1/64 to 1/128
- Fast Data Transmission (Shift Clock 6 MHz max.)
- External Power Supply for the LCD Driving Voltage
- Operating Voltage --- 5 V $\pm$ 10 %
- Package Outline --- QFP 80
- C-MOS Technology

PIN CONFIGURATION



BLOCK DIAGRAM



New Japan Radio Co., Ltd.

ABSOLUTE MAXIMUM RATINGS

(Ta=25°C)

P A R A M E T E R	S Y M B O L	R A T I N G S	U N I T
Supply Voltage (1)	V _{DD}	- 0.3 ~ + 7.0	V
Supply Voltage (2)	V _{DD} ~ V _S	V _{DD} -13.5 ~ V _{DD} +0.3	V
Input Voltage	V _{IN}	- 0.3 ~ V _{DD} +0.3	V
Storage Temperature	T _{stg}	- 55 ~ + 150	°C

ELECTRICAL CHARACTERISTICS

(V_{DD}=5V±10% , Ta=-20 ~ +75°C)

P A R A M E T E R	S Y M B O L	C O N D I T I O N S	M I N	T Y P	M A X	U N I T
Input Voltage	V _{IH}		0.8V _{DD}		V _{DD}	V
	V _{IL}				0.2V _{DD}	
Input Current	I _{IH}	V _{IH} =V _{DD}			1	uA
	I _{IL}	V _{IL} =0V			- 1	
Output Voltage	V _{OH}	I _O =- 40uA	4.2			V
	V _{OL}	I _O = 400uA			0.4	
Driver On-resistance	R _{ON}	I _D =0.05mA			30	kΩ
Operating Current for Logic Part	I _{SSO}	LM,LP=130us cycle, SCL=1.5MHz Every one bit Inverted Data.		40	80	uA
Operating Current for LCD Driver Part	I _{SSH0}	LM,LP=130us cycle, SCL=1.5MHz Every one bit Inverted Data.		70	100	