40 Channel Segment / Common Driver For Dot Matrix LCD

The IZ7065 is a LCD driver LSI which is fabricated by low power CMOS technology. Basically this LSI consists of 20 × 2 bit bi-directional shift register, 20 × 2 bit data latch and 20 × 2 bit driver. This LSI can be used a common or segment driver.

IZ7065 contain following blocks:

- 2xLCD driver
- 2x20 bit date register
- 2x20 bit shift register
- sampling block
- control logic

FEATURES

- - Dot matrix LCD driver with 40-channel output.
- Selectable function to use common/segment drivers simultaneously.
- Input / Output signal

- output: 20 × 2 channel waveform for LCD driving
- input: - Serial display data and control pulse from the controller LSI.

- Power supply voltage: +5V ± 10%, +3V ± 10%
- Supply voltage for display: 3.0 ~ 13.0V(V_{EE})
- Operating temperature range: T_A = – 30 ... + 85 °C

MAIN ELECTRICAL FEATURES

Parameter/ Unit of measurement	**Symbol**	Mode	Value	
			min	max
High level input leakage current on pins M, FCS, uA	I_{IH}	V_{DD}=5.5V, V_{IH}=5.5V		5.0
Low level input leakage current on pins M, FCS, uA	I_{IL}	V_{DD}=5.5V, V_{IL}=0V	-5	
High level output voltage on pins DL1, DL2, DR1, DR2, V	V_{OH}	I_{OH}=-0.4mA	V_{DD} - 0.4	
Low level output voltage on pins DL1, DL2, DR1, DR2, V	V_{OL}	I_{OL}=0.4mA		0.4
Voltage descending between inputs V_1- V_6 & outputs SC1-SC40, V	V_{D1}	I_{ON}=0.1mA on one pin of SC1-SC40		1.1
	V_{D2}	I_{ON} =0.05mA on every pin pin of SC1-SC40		1.5
High level input leakage current on pins V_1- V_6, uA	I_{VH}	V_{IH}=5.5V, V_{DD}=5.5V, V_{EE} = -7.5V		10
Low level input leakage current on pins V_1- V_6, uA	I_{VL}	V_{IL}=-7.5V, V_{DD}=5.5V, V_{EE}=-7.5V	-10	
Current consumption, mA	I_{DD}	f_{CL2} =400kHz, V_{LCD}= V_{DD}-V_{EE} =4V		1
Current consumption in V_{EE} circuit, uA	I_{EE}	f_{CL1} = 1 kHz, V_{LCD}= V_{DD} - V_{EE} = 4V		10
Data Shift Frequency, kHz	f_{CL}	-		400