

IZ7065

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 data 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: $+5V \pm 10\%$, $+3V \pm 10\%$
- Supply voltage for display: $3.0 \sim 13.0V(V_{EE})$
- Operating temperature range: $T_A = -30 \dots +85 \text{ }^\circ\text{C}$

MAIN ELECTRICAL FEATURES

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