

ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Min.	Max.	Unit
Supply Voltage(Logic)	V _{DD} - V _{SS}	-0.3	6.0	V
Supply Voltage(LCD)	V _{DD} - V _o	-0.3	19.0	V
Input Voltage	V _I	-0.3	V _{DD} + 0.3	V
Operating Temp.	T _{opr}	-20	70	°C
Storage Temp.	T _{stg}	-30	80	°C

MECHANICAL DATA

Item	Nominal Dimensions	Unit
Module Size (W x H x T)	100.0 x 60.0 x 12.5	mm
Viewing Area (W x H)	84.0 x 31.0	mm
Dot Pitch (W x H)	0.41 x 0.41	mm
Dot Size (W x H)	0.37 x 0.37	mm
Weight	Approx. 80	g

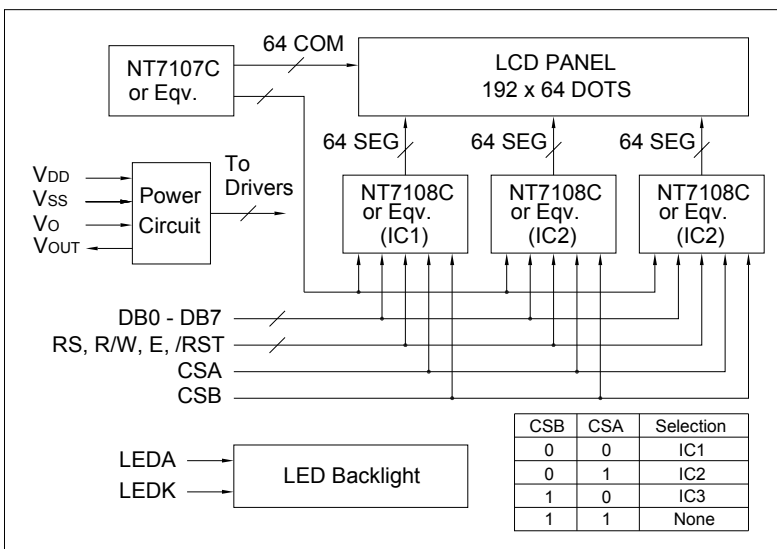
ELECTRICAL CHARACTERISTICS (V_{DD}=5V±0.5V)

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Input High Voltage	V _{IH}	--	2.0	--	V _{DD}	V
Input Low Voltage	V _{IL}	--	0	--	0.8	V
Output High Voltage	V _{OH}	I _{OH} = - 0.2mA	2.4	--	V _{DD}	V
Output Low Voltage	V _{OL}	I _{OL} = 1.6mA	0	--	0.4	V
Supply Current	I _{DD}	V _{DD} = 5.0V	--	7.0	10.0	mA
LCD Driving Voltage	V _{DD} - V _o	T _a =25°C	--	12.7	--	V

PIN CONNECTIONS

Pin	Symbol	Level	Function
1	DB7	H/L	Data bus
2	DB6	H/L	
3	DB5	H/L	
4	DB4	H/L	
5	DB3	H/L	
6	DB2	H/L	
7	DB1	H/L	
8	DB0	H/L	
9	E	H,H>L	Enable Signal
10	R/W	H/L	H : Read L : Write
11	RS	H/L	H : Data L : Instruction code
12	V _o	--	Operating voltage for LCD
13	V _{DD}	5V	Power supply for logic
14	V _{SS}	0V	GND
15	CSA	H/L	Chip selection signal A
16	CSB	H/L	Chip selection signal B
17	V _{OUT}	-10V	Output voltage for LCD driving
18	/RST	L	Reset signal. Active "L".
19	LEDA	5V	Power supply for LED backlight
20	LEDK	0V	

BLOCK DIAGRAM



LED BACKLIGHT SPECIFICATIONS (T_a=25°C)

Item	Symbol	Typ.	Max.	Unit
Forward Voltage	V _f	3.1	3.3	V
Forward Current	I _f	45	--	mA
LED Color		White		