

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 _{OUT}	-0.3	12.0	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)	89.7 x 49.8 x 11.8	mm
Viewing Area (W x H)	66.8 x 35.5	mm
Dot Pitch (W x H)	0.50 x 0.50	mm
Dot Size (W x H)	0.48 x 0.48	mm
Weight	Approx. 40	g

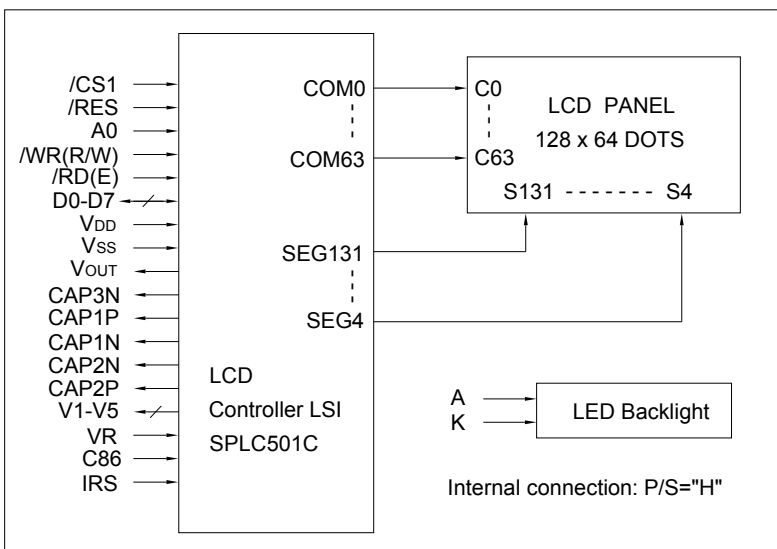
ELECTRICAL CHARACTERISTICS (V_{DD}=3V to 5.5V)

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Input High Voltage	V _{IH}	--	0.8V _{DD}	--	V _{DD}	V
Input Low Voltage	V _{IL}	--	0	--	0.2V _{DD}	V
Output High Voltage	V _{OH}	I _{OH} = -0.1mA	0.8V _{DD}	--	V _{DD}	V
Output Low Voltage	V _{OL}	I _{OL} = 0.1mA	0	--	0.2V _{DD}	V
Supply Current	I _{DD}	V _{DD} = 5.0V	--	0.3	1.0	mA
		V _{DD} = 3.0V	--	0.6	1.5	mA
LCD Driving Voltage	V _{DD} - V _S	T _a =25°C	--	8.7	--	V

PIN CONNECTIONS

Pin	Symbol	Level	Function
1	NC	--	No connection
2	/CS1	L	Chip selection signa. Active "L".
3	/RES	L	Reset signal. Active "L".
4	A0	H/L	H : Data L : Instruction code
5	/WR(R/W)	H/L	/WR for 80 MPU, R/W for 68 MPU
6	/RD(E)	H/L	/RD for 80 MPU, E for 68 MPU
7-14	D0-D7	H/L	Data bus
15	V _{DD}	3 to 5.5V	Power supply for logic and booster
16	V _{SS}	0V	GND
17	V _{OUT}	--	DC/DC voltage converter output
18	CAP3N	--	Capacitor 3 negative connection
19	CAP1P	--	Capacitor 1 positive connection
20	CAP1N	--	Capacitor 1 negative connection
21	CAP2N	--	Capacitor 2 negative connection
22	CAP2P	--	Capacitor 2 positive connection
23-27	V1-V5	--	Power supply for LCD drive
28	VR	--	Output voltage adjustment terminal
29	C86	H/L	H: 68 series MPU L: 80 series MPU
30	IRS	H/L	H: Use internal resistors for booster L: Use external resistors for booster

BLOCK DIAGRAM



LED BACKLIGHT SPECIFICATIONS (T_a=25°C)

Item	Symbol	Typ.	Max.	Unit
Forward Voltage	V _f	4.1	4.3	V
Forward Current	I _f	140	--	mA
Color		Yellow Green		