

ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Min.	Max.	Unit
Supply Voltage(Logic)	V _{DD} - V _{SS}	-0.3	6.0	V
Supply Voltage(LCD)	V _{OUT} - V _{SS}	-0.3	14.5	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)	66.0 x 56.0 x 10.0	mm
Viewing Area (W x H)	58.6 x 31.0	mm
Dot Pitch (W x H)	0.43 x 0.43	mm
Dot Size (W x H)	0.41 x 0.41	mm
Weight	Approx. 32	g

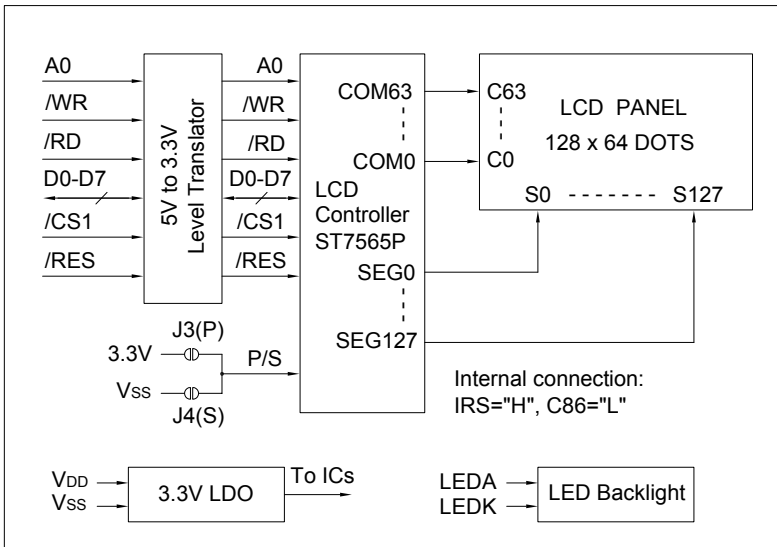
ELECTRICAL CHARACTERISTICS (V_{DD}=3.3V to 5.0V)

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} = -0.1mA	V _{DD} -0.2	--	V _{DD}	V
Output Low Voltage	V _{OL}	I _{OL} = 0.1mA	0	--	0.2	V
Supply Current	I _{DD}	V _{DD} = 5.0V	--	0.5	1.2	mA
LCD Driving Voltage	V ₀ - V _{SS}	T _a =25°C	--	9.0	--	V

PIN CONNECTIONS (CN1/CN2)

Pin	Symbol	Level	Function
1	V _{SS}	0V	GND
2	V _{DD}	3.3V-5V	Power supply for logic
3	NC	--	No connection
4	A0	H/L	A0="H": Display data A0="L": Instruction code
5	/WR	L	Write signal. Active "L"
6	/RD	L	Read signal. Active "L"
7	D0	H/L	When P/S="H" (Parallel mode): D0 to D7 are 8-bit bidirectional data bus.
8	D1	H/L	
9	D2	H/L	
10	D3	H/L	
11	D4	H/L	When P/S="L" (Serial mode): D7 is serial data input (SI). D6 is serial colck input (SCL).
12	D5	H/L	
13	D6	H/L	
14	D7	H/L	
15	/CS1	L	Chip selection signal. Active "L".
16	/RES	L	Reset signal. Active "L".
17	LEDA	5V	Power supply for LED backlight
18	LEDK	0V	

BLOCK DIAGRAM



LED BACKLIGHT SPECIFICATIONS (T_a=25°C)

Item	Symbol	Typ.	Max.	Unit
Forward Voltage	V _f	2.9	3.1	V
Forward Current	I _f	30	--	mA
LED Color	White			