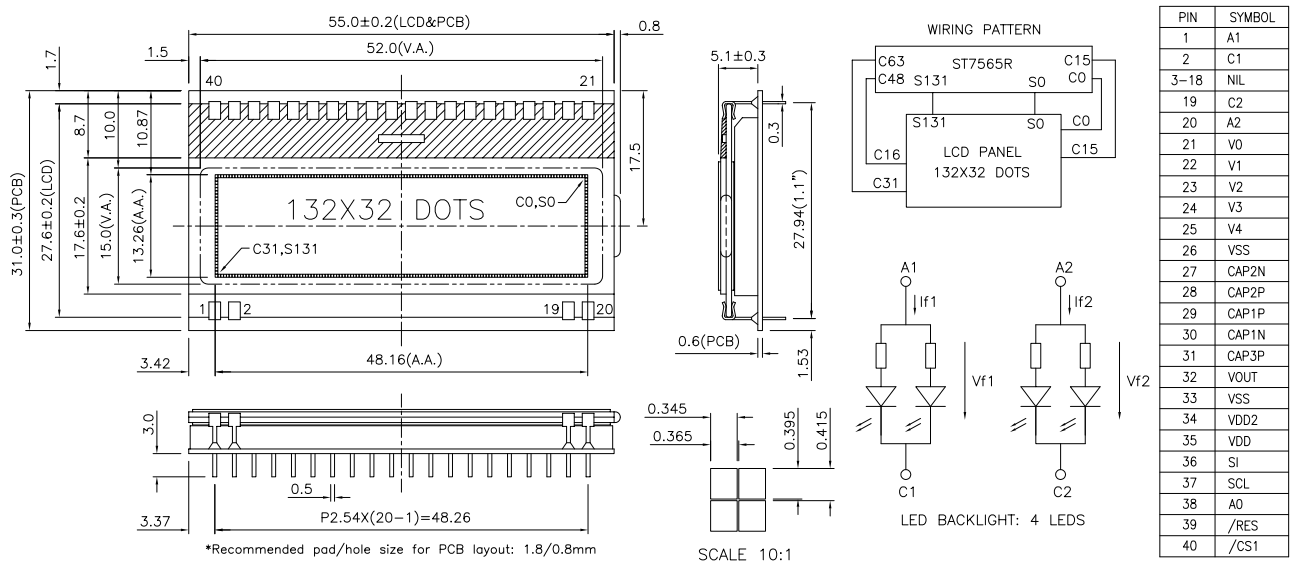
LG132321-DW

132 x 32 dots + white led backlight



PIN	SYMBOL
1	A1
2	C1
3–18	NIL
19	C2
20	A2
21	V0
22	V1
23	V2
24	V3
25	V4
26	VSS
27	CAP2N
28	CAP2P
29	CAP1P
30	CAP1N
31	CAP3P
32	VOUT
33	VSS
34	VDD2
35	VDD
36	SI
37	SCL
38	A0
39	/RES
40	/CS1

ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Min.	Max.	Unit
Supply Voltage(Logic)	V_{DD}/V_{DD2} - V_{SS}	-0.3	3.6	V
Supply Voltage(LCD)	V_{OUT} - V_{SS}	-0.3	13.5	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)	55.0 x 31.0 x 8.7	mm
Viewing Area (W x H)	52.0 x 15.0	mm
Dot Pitch (W x H)	0.365 x 0.415	mm
Dot Size (W x H)	0.345 x 0.395	mm
Weight	Approx. 12	g

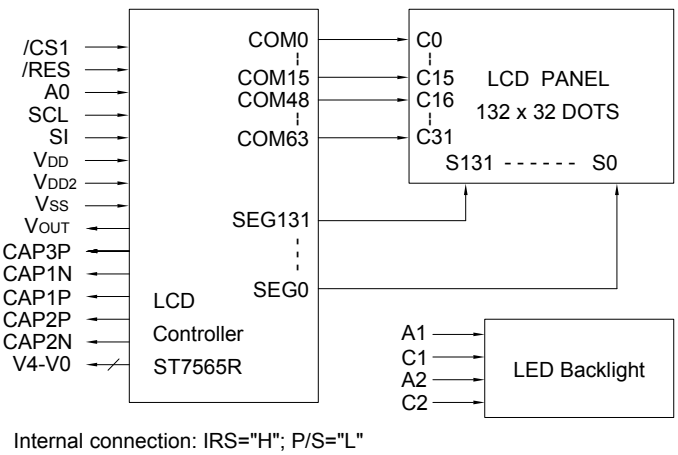
ELECTRICAL CHARACTERISTICS (V_{DD}/V_{DD2}=2.7V to 3.3V)

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}/V_{DD2}=3.0V	--	150	250	uA
LCD Driving Voltage	V_0 - V_{SS}	Ta=25°C	--	7.6	--	V

PIN CONNECTIONS

Pin	Symbol	Level	Function
1	A1	3.3V	LED backlight anode 1
2	C1	0V	LED backlight cathode 1
3-18	NIL	--	Nil
19	C2	0V	LED backlight cathode 2
20	A2	3.3V	LED backlight anode 2
21-25	V0-V4	--	Power supply for LCD drive
26	V_{SS}	0V	GND
27	CAP2N	--	Capacitor 2 negative connection
28	CAP2P	--	Capacitor 2 positive connection
29	CAP1P	--	Capacitor 1 positive connection
30	CAP1N	--	Capacitor 1 negative connection
31	CAP3P	--	Capacitor 3 positive connection
32	V_{OUT}	--	DC/DC voltage converter output
33	V_{SS}	0V	GND
34	V_{DD2}	2.7-3.3V	Power supply for booster
35	V_{DD}	2.7-3.3V	Power supply for logic
36	SI	H/L	Serial data input
37	SCL	H/L	Serial clock input
38	A0	H/L	H: Display data L: Instruction code
39	/RES	L	Reset signal. Active "L".
40	/CS1	L	Chip selection signal. Active "L".

BLOCK DIAGRAM



Internal connection: IRS="H"; P/S="L"

LED BACKLIGHT SPECIFICATIONS (Ta=25° C)

Item	Symbol	Parallel	Series	Unit
Forward Voltage	V_f	V_{f1}=V_{f2}=3.3	V_{f1}+V_{f2}=6.6	V
Forward Current	I_f	I_{f1}+I_{f2}=30	I_{f1}=I_{f2}=15	mA
LED Color	White			