

ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Min.	Max.	Unit
Supply Voltage(Logic)	V _{DD} - V _{SS}	-0.3	4.0	V
Supply Voltage(LCD)	V _{OUT} - V _{SS}	-0.3	19.8	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)	90.0 x 29.8 x 9.5	mm
Viewing Area (W x H)	84.0 x 18.4	mm
Dot Pitch (W x H)	0.30 x 0.23	mm
Dot Size (W x H)	0.28 x 0.21	mm
Weight	Approx. 24	g

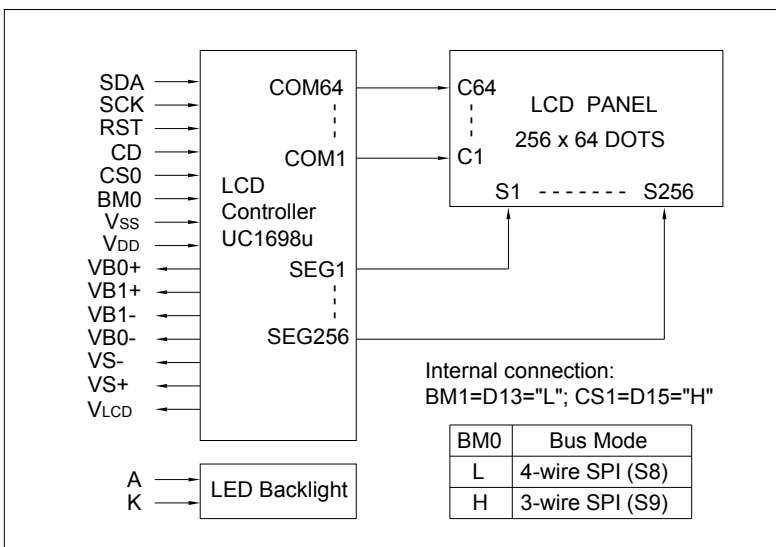
ELECTRICAL CHARACTERISTICS (V_{DD}=2.7V to 3.3V)

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
Supply Current	I _{DD}	V _{DD} = 3.3V	--	1.5	2.0	mA
LCD Driving Voltage	V _{LCD} -V _{SS}	T _a =25°C	--	13.2	--	V

PIN CONNECTIONS

Pin	Symbol	Level	Function
1	V _{LCD}	--	LCD driving voltage
2	V _{S+}	--	LCD bias voltage
3	V _{S-}	--	LCD bias voltage
4	V _{B0-}	--	LCD bias voltage
5	V _{B1-}	--	LCD bias voltage
6	V _{B1+}	--	LCD bias voltage
7	V _{B0+}	--	LCD bias voltage
8	V _{DD}	2.7V to 3.3V	Power supply for logic and booster
9	V _{SS}	0V	GND
10	BM0	H/L	Bus mode selection
11	CS0	L	Chip selection signal. Active "L".
12	CD	H/L	H:Display data L:Instruction code
13	V _{SS}	0V	GND
14	RST	L	Reset signal. Active "L".
15	SCK	H/L	Serial colck input
16	V _{DD}	2.7V to 3.3V	Power supply for logic
17	SDA	H/L	Serial data input
18	V _{SS}	0V	GND
19	V _{DD}	2.7V to 3.3V	Power supply for logic
20	NC	--	No connection

BLOCK DIAGRAM



LED BACKLIGHT SPECIFICATIONS (T_a=25°C)

Item	Symbol	Typ.	Max.	Unit
Forward Voltage	V _f	2.8	2.9	V
Forward Current	I _f	30	--	mA
LED Color		White		