

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	7.0	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)	36.2 x 24.0 x 8.5	mm
Viewing Area (W x H)	31.6 x 13.0	mm
Character Size (W x H)	2.95 x 5.55	mm
Dot Size (W x H)	0.55 x 0.65	mm
Weight	Approx. 7	g

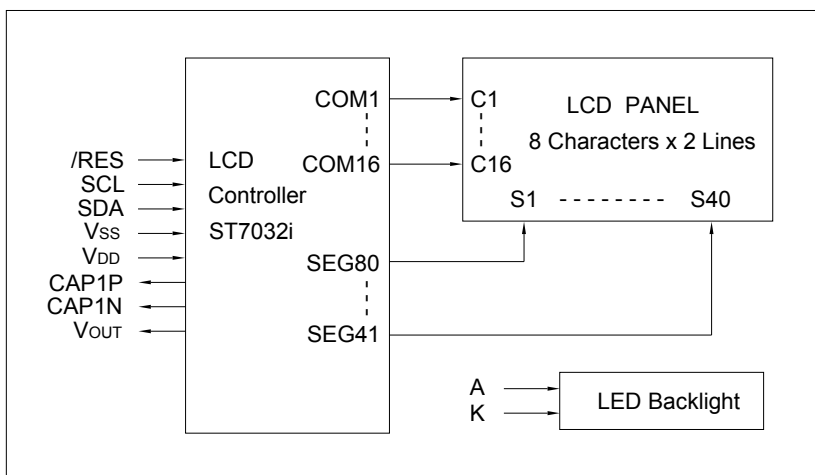
ELECTRICAL CHARACTERISTICS (V_{DD}=2.7 to 3.5V or 4.8 to 5.5V)

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Input High Voltage	V _{IH}	V _{DD} =2.7 to 3.5V	1.9	--	V _{DD}	V
Input Low Voltage	V _{IL}	V _{DD} =2.7 to 3.5V	0	--	0.8	V
Input High Voltage	V _{IH}	V _{DD} =4.8 to 5.5V	2.7	--	V _{DD}	V
Input Low Voltage	V _{IL}	V _{DD} =4.8 to 5.5V	0	--	0.8	V
Supply Current	I _{DD}	V _{DD} =2.7 to 5.5V	--	200	250	uA
LCD Driving Voltage	V ₀ - V _{SS}	T _a =25°C	--	4.6	--	V

PIN CONNECTIONS

Pin	Symbol	Level	Function
1	/RES	L	Reset signal. Active "L".
2	SCL	H/L	I2C Serial clock input
3	SDA	H/L	I2C Serial data input
4	VSS	0V	GND
5	VDD	2.7 to 3.5V or 4.8 to 5.5V	Power supply for logic and booster
6	CAP1P	--	Capacitor for voltage converter. VDD=3.3V: Connect a 1uF/16V capacitor between CAP1P and CAP1N.
7	CAP1N	--	VDD=5V: Keep CAP1P and CAP1N open.
8	VOUT	--	DC/DC voltage converter output. VDD=3.3V: Connect a 1uF/16V capacitor between VOUT and VDD. VDD=5V: Connect VOUT to VDD.

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	20	--	mA
LED Color		White		