

ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Min.	Max.	Unit
Supply Voltage(Logic)	Vdd - Vss	-0.3	3.6	V
Supply Voltage(LCD)	Vlcd	-0.3	16.0	V
Input Voltage	Vi	-0.4	Vdd2	V
Operating Temp.	Topr	-10	60	°C
Storage Temp.	Tstg	-20	70	°C

MECHANICAL DATA

Item	Max.	Unit
Module Size (W X H X T)	54.5 X 58.2 X 2.0	mm
Viewing Area(W X H)	51.5 X 49.6	mm
Dot Pitch(W X H)	0.356 X 0.354	mm
Dot Size(W X H)	0.341 X 0.339	mm
View Angle	6 O'Clock	

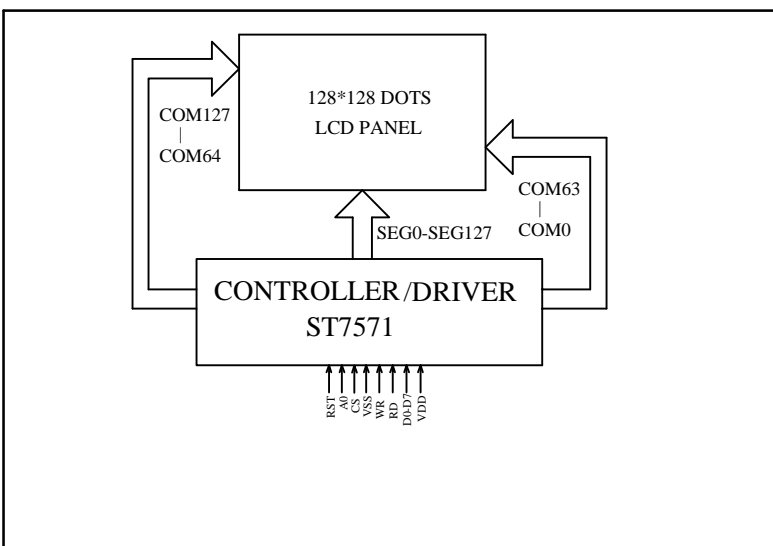
ELECTRICAL CHARACTERISTICS (Vdd=3.0V±0.3V)

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Input High Voltage	Vih	--	2.4	--	Vdd	V
Input Low Voltage	Vil	--	--	--	0.2Vdd	V
Output High Voltage	Voh	--	0.8Vdd	--	--	V
Output Low Voltage	Vol	--	--	--	0.2Vdd	V
Current consumption	Idd	Vdd=3.0V	--	158	237	μ A
LCD Driving Voltage	V0	Ta=25 °C	--	12	--	V

PIN CONNECTIONS

Pin	Symbol	Function
1	VG	LCD driver supply voltages
2	VD1	VDD
3	XV0	Negative LCD driver supply voltages.
4	V0	Positive LCD driver supply voltages.
5	VM0	LCD driver supply voltages
6	VSS	Ground
7	VDD	Power Supply for Logic(+3.3V)
8-15	D7-D0	Display Data Signal
16	/RD	Read Enable Signal
17	/WR	Write Select Signal
18	RS	"L": Control data "H": Display data
19	RST	Reset signal input
20	CS	Chip select pin

BLOCK DIAGRAM



LCD Type

LCD Color	Backlight
FSTN/POSITIVE/Reflective	