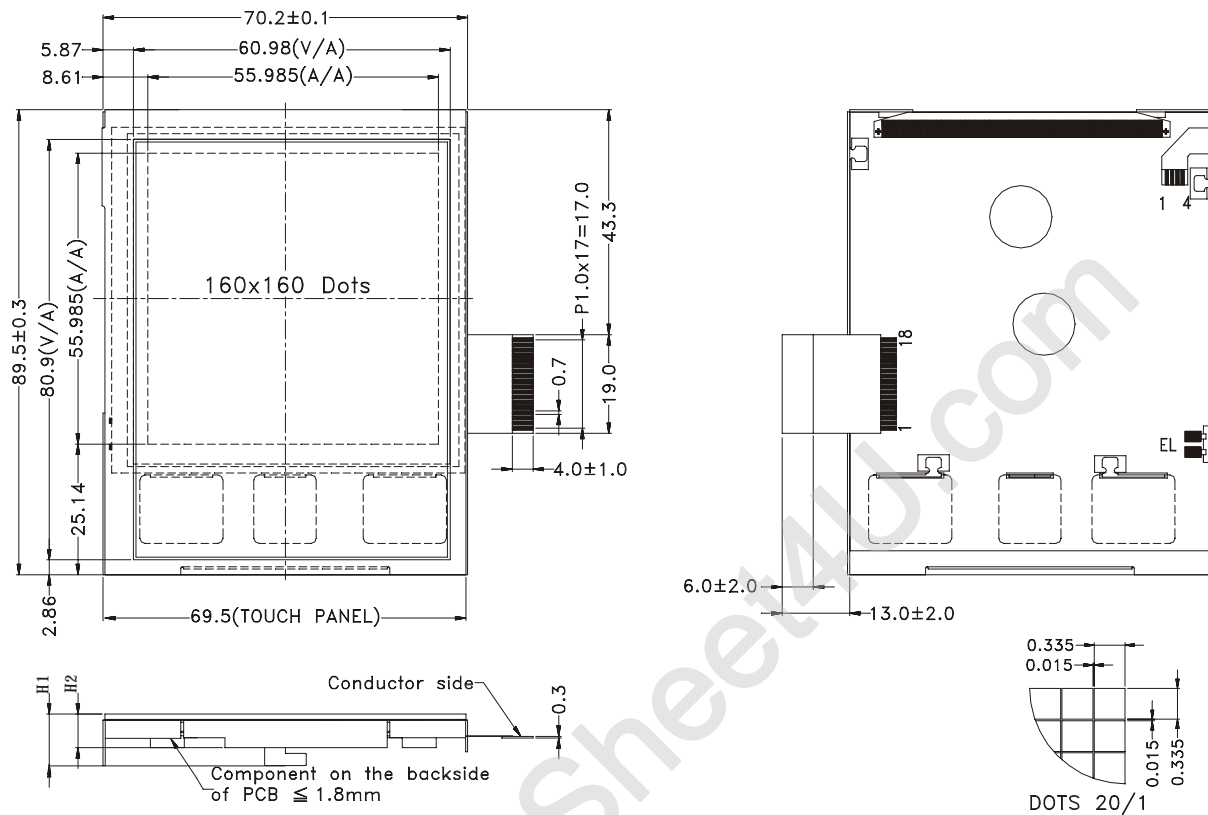


OUTLINE DIMENSION & BLOCK DIAGRAM



The tolerance unless classified ±0.1mm

MECHANICAL SPECIFICATION

Overall Size	70.2 x 89.5 mm	Module	H2 / H1
View Area	60.98 x 80.9 mm	W/O B/L	6.50 / 10.2
Dot Size	0.335 x 0.335 mm	EL B/L	6.50 / 10.2
Dot Pitch	0.35 x 0.35 mm	LED B/L	- / -

PIN ASSIGNMENT

Pin No.	Symbol	Function
1	Vss	Ground
2	FLM	Scan start-up signal
3	CL1	Data shift pulse
4	CL2	Data latch pulse
5	M	Fram reverse signal(Alternate signal)
6	VDD	Power supply voltage for logic
7	BLE	EL enable/disable
8	VEE	Power supply voltage for LCD(+)
9	D3	Data display
10	D2	Data display
11	D1	Data display
12	D0	Data display
13	TP_L	Analog Touch Panel-Left signal
14	TP_U	Analog Touch Panel-Up signal
15	TP_R	Analog Touch Panel-Right signal
16	TP_D	Analog Touch Panel-Down signal
17	Vss	Ground
18	Vss	Ground

ABSOLUTE MAXIMUM RATING

Item	Symbol	Condition	Min.	Max.	Units
Supply for logic voltage	V <sub>DD-VSS</sub>	25°C	-0.3	7.0	V
LCD driving supply voltage	V <sub>DD-VEE</sub>	25°C	-0.3	30.0	V
Input Voltage	V <sub>IN</sub>	25°C	-0.3	V <sub>DD</sub> +0.3	V

ELECTRICAL CHARACTERISTICS

Item	Symbol	Condition	Min.	Typical	Max.	Units		
Power supply voltage	V <sub>DD-VSS</sub>	25°C	2.7	3.0	3.3	V		
LCD operation voltage	V <sub>OP</sub>	T <sub>OP</sub>	N	W	N	W	V	
		-20°C	-	-	-	20.6	-	V
		0°C	-	19.4	-	19.6	-	V
		25°C	-	18.4	-	19.0	-	V
		50°C	-	17.6	-	18.1	-	V
		70°C	-	-	-	17.5	-	V
LCM current consumption (No B/L)	I <sub>DD</sub>	V <sub>DD</sub> =3V	-	0.3	-	mA		
	I <sub>EE</sub>	V <sub>DD</sub> =3V	-	1.5	-	mA		
Backlight current consumption	EL	V <sub>OP</sub> =3V	-	40.0	--	mA		

REMARK

LCD option: STN, FSTN

Backlight Option: EL backlight feature, other specs not available on catalog is under request.