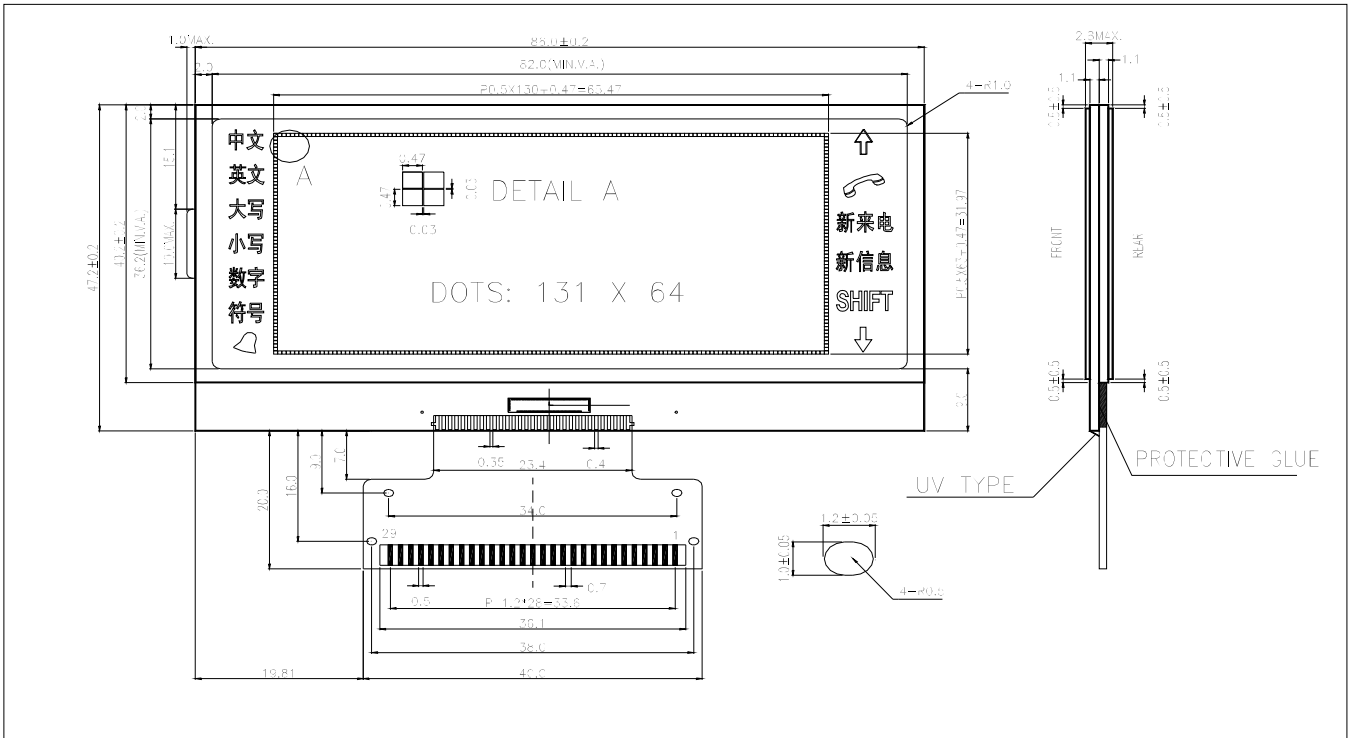
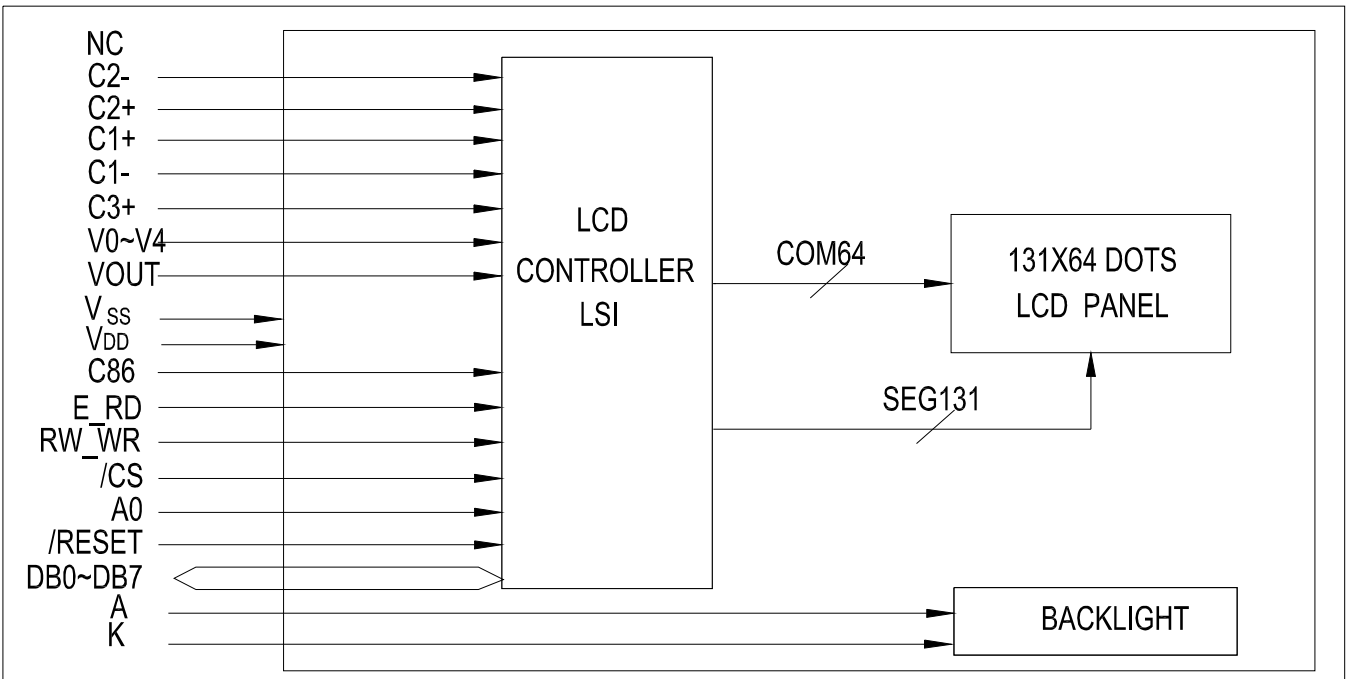


1.0 DIMENSIONAL DRAWING



2.0 BLOCK DIAGRAM



3.0 ELECTRICAL CHARACTERISTICS Ta=25 °C V_{DD}=5.0V±0.25V

Item	Symbol	Test Condition	Standard Value			
			Min.	Typ.	Max.	Unit
Power Supply Voltage	V _{DD} -V _{SS}	25°C	2.7	3.0	3.6	V
LCD Operation Voltage	V _{OP}		-	9	13	V
LCM Current Consumption	I _{DD}		-	0.2	0.3	mA
Backlight Forward Voltage	V _F		-	100	150	V
Backlight Current Consumption	I _F		-	-	-	mA

4.0 ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Test Condition	Standard Value		
			Min.	Max.	Unit
Supply Voltage (Logic)	$V_{DD}-V_{SS}$	25°C	-0.3	7	V
Supply Voltage (LCD)	$V_{DD}-V_{O}$		-0.3	17	V
Input Voltage	V_{IN}		-0.3	$V_{DD}+0.3$	V
Operating Temp.	T_{OPR}		-20	70	°C
Storage Temp.	T_{STG}		-30	80	°C

5.0 PIN ASSIGNMENT

PIN No.	Symbol	Description
1	NC	No Connection
2	C86	MUP Select input pin
3	V_0	LCD driver supply voltages
4	V_4	LCD driver supply voltages
5	V_3	LCD driver supply voltages
6	V_2	LCD driver supply voltages
7	V_1	LCD driver supply voltages
8	CAP2-	Capacitor 2 negative connection pin for voltage converter
9	CAP2+	Capacitor 2 positive connection pin for voltage converter
10	CAP1+	Capacitor 1 positive connection pin for voltage converter
11	CAP1-	Capacitor 1 negative connection pin for voltage converter
12	CAP3+	Capacitor 3 positive connection pin for voltage converter
13	V_{OUT}	Voltage converter input / output pin
14	V_{SS}	Ground
15	V_{DD}	Power supply
16~23	D0~D7	DATA BUS
24	E_RD	Read / Write execution control pin
25	R/W_WR	Read / Write execution control pin
26	A0	Register select input pin
27	/RES	Reset input pin
28	/CS	Chip select input pins
29	NC	No Connection

Remark

1. LCD option: STN, FSTN .
2. Customized module.
3. Backlight option: LED,EL backlight feature, other specs not available on catalog is under request.