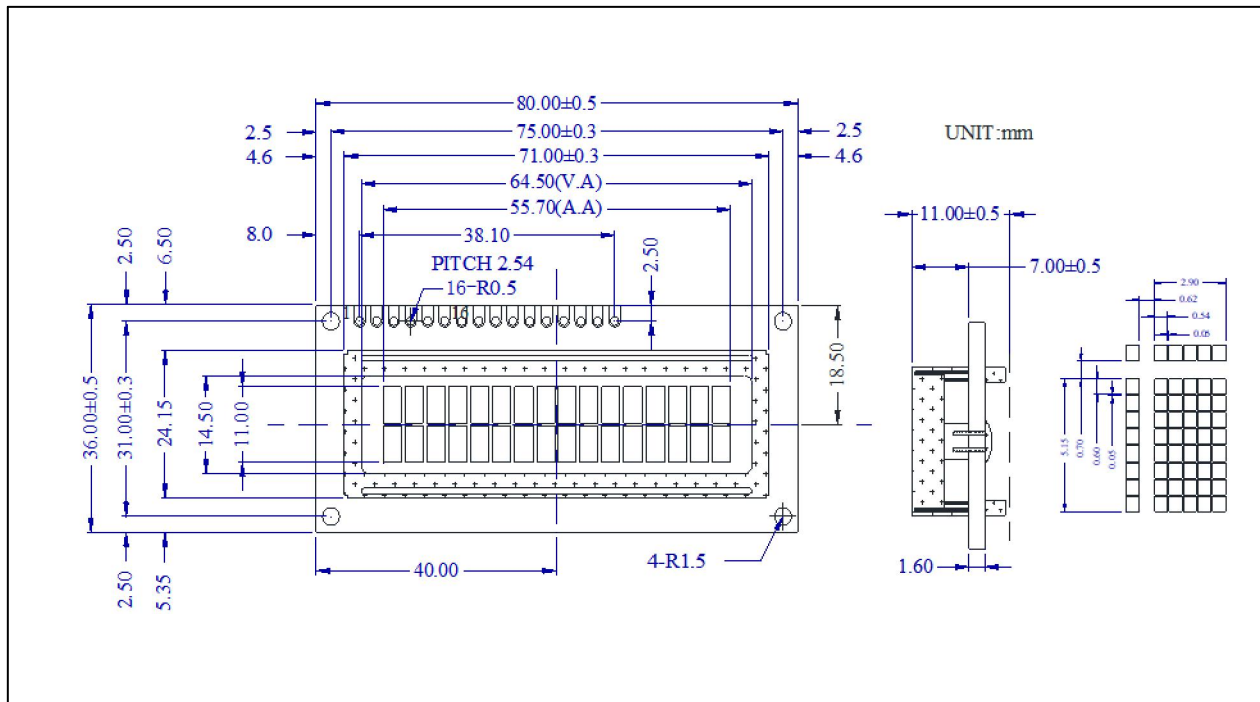


# HXC160201-V1

16 characters x 2 rows + white LED backlight, 8-bit parallel



## ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Min.	Max.	Unit
Supply Voltage(Logic)	V <sub>DD</sub> -V <sub>EE</sub>	-0.3	7.0	V
Supply Voltage(LCD)	V <sub>O</sub> -V <sub>EE</sub>	-0.3	10.0	V
Input Voltage	V <sub>I</sub>	-0.3	V <sub>DD</sub> +0.3	V
Operating Temp.	T <sub>opr</sub>	-20	70	°C
Storage Temp.	T <sub>stg</sub>	-40	80	°C

## MECHANICAL DATA

Item	Nominal Dimensions	Unit
Module Size (W x H x T)	80.0 x 36.0 x 13.0	mm
Viewing Area (W x H)	64.5 x 14.5	mm
Character size (W x H)	2.90 x 5.15	mm
Dot Size (W x H)	0.54 x 0.80	mm
Weight	Approx. 36	g

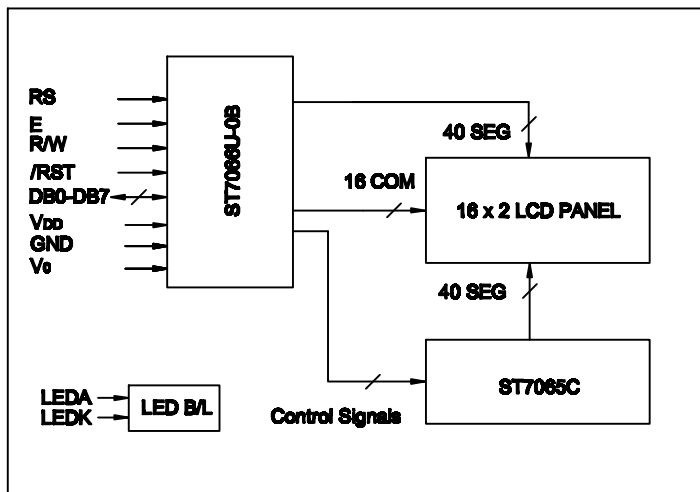
## ELECTRICAL CHARACTERISTICS (V<sub>DD</sub>=5V±0.15V)

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Input High Voltage	V <sub>IH</sub>	-	0.7V <sub>DD</sub>	-	V <sub>DD</sub>	V
Input Low Voltage	V <sub>IL</sub>	-	-0.3	-	0.6	V
Output High Voltage	V <sub>OH</sub>	I <sub>OH</sub> = -0.1mA	0.8V <sub>DD</sub>	-	V <sub>DD</sub>	V
Output Low Voltage	V <sub>OL</sub>	I <sub>OL</sub> = 0.1mA	0	-	0.4	V
Supply Current	I <sub>DD</sub>	V <sub>DD</sub> = 5.0V	-	1.5	3.0	mA
LCD Driving Voltage	V <sub>O</sub> -V <sub>EE</sub>	T <sub>a</sub> =25°C	-	4.6	-	V

## PIN DESCRIPTIONS

Pin	Symbol	Level	Function
1	GND	0V	GND
2	V <sub>DD</sub>	5V(3.3V)	Power supply for logic
3	V <sub>O</sub>	-	No connection
4	RS	H/L	H : Data L : Instruction code
5	R/W	H/L	H : Read L : Write
6	E	H,H→L	Enable signal Read data when E is high Write data at falling edge of E
7	DB0	H/L	Data bus
8	DB1	H/L	
9	DB2	H/L	
10	DB3	H/L	
11	DB4	H/L	
12	DB5	H/L	
13	DB6	H/L	
14	DB7	H/L	Power supply for LED backlight
15	LEDA	5V(3.3V)	
16	LEDK	0V	

## BLOCK DIAGRAM(PARALLEL MODE)



## LED BACKLIGHT SPECIFICATIONS (T<sub>a</sub>=25° C)

Item	Symbol	Typ.	Max.	Unit
Forward Voltage	V <sub>r</sub>	5.0		V
Forward Current	I <sub>r</sub>	15	20	mA
LED Color		White		