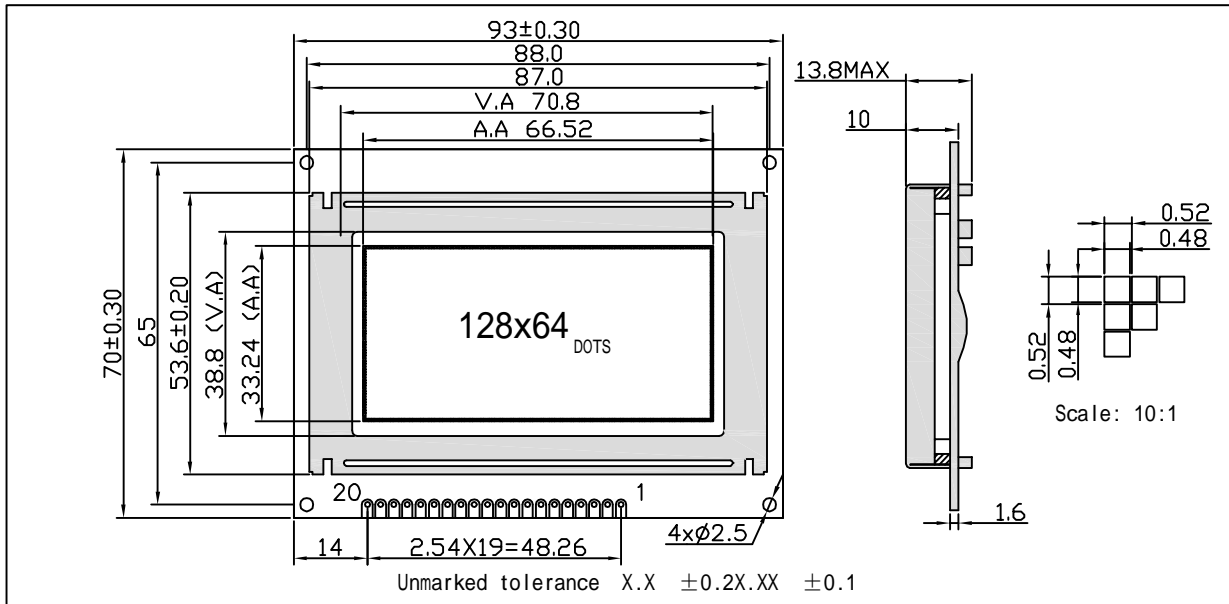


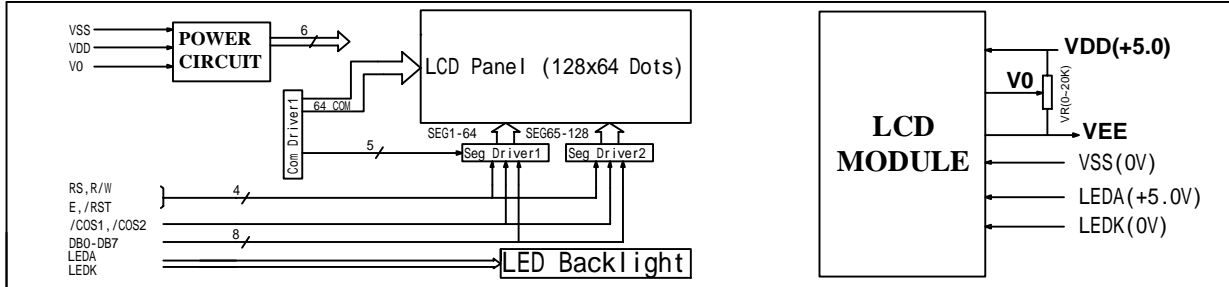
# ZL12864A1 Series

128x64 DOTS  
1/64 DUTY, 1/9 BIAS  
GRAPHIC-COB

## OUTLINE DIMENSIONS



## BLOCK DIAGRAM & POWER SUPPLY



## MECHANICAL SPECIFICATIONS & FEATURE

item	Normal Dimensions(mm)	Feature	
Module Size(W*H*T)	93.0x70.0x13.8MAX	LCD Type	STN FSTN
View Area(W*H)	70.8x38.8	LCD Colour	STN:Yellow-Green ,Gray Other:Gray
DotsxDots(W*H)	128X64	View Angle	6 O'clock , 12 O'clock
Dot Pitch(W*H)	0.52x0.52	Display Type	Positive Type,Negative Type
Dot Size(W*H)	0.48x0.48	Rear Polarizer	Transmissive,Reflective ,Transflective
---	---	Operating Temperature	0℃ ~50℃ , -20℃ ~70℃
---	---	Backlight	LED: Yellow

## ELECTRICAL CHARACTERISTICS

item	Symbol	Test Condition	Min.	Type.	Max.	Unit
Operating Voltage	Vdd	Ta=25℃	---	5.0V	---	V
Operating Voltage for LCD	Vlcd	Ta=25℃	---	8.0	---	V
Supply Current	Idd	Ta=25℃,Vdd=5.0V	---	2.0	3.0	mA
Supply Current for Backlight	If	Ta=25℃,Vf=4.1V	---	150	---	mA

## INTERFACE PIN CONNECTIONS

Pin No.	Symbol	Level	Description
1	VSS	--	Ground for Logic
2	VDD	--	Power supply for Logic
3	VO	--	Power supply for LCD drive
4	RS	H/L	Register selection (H:Data register,L:Instruction register)
5	R/W	H/L	Read/write selection (H:Read,L:Write)
6	E	H/L → L	Enable signal for LCM
7-14	DB0-DB7	H/L	Data Bus lines
15	/CS1	*H/L(option:HL)	Chip Select Signal for Left Half of the panel
16	/CS2	*H/L(option:HL)	Chip Select Signal for Right Half of the panel
17	/RST	L	Reset signal
18	VEE	--	Negative voltage output
19	LEDA	--	Power supply for backlight(+)
20	LEDK	--	Power supply for backlight(-)

## REMARK

1.Negative type LCD colour : Bule. 2.File Version:01