

TM12864A

Series

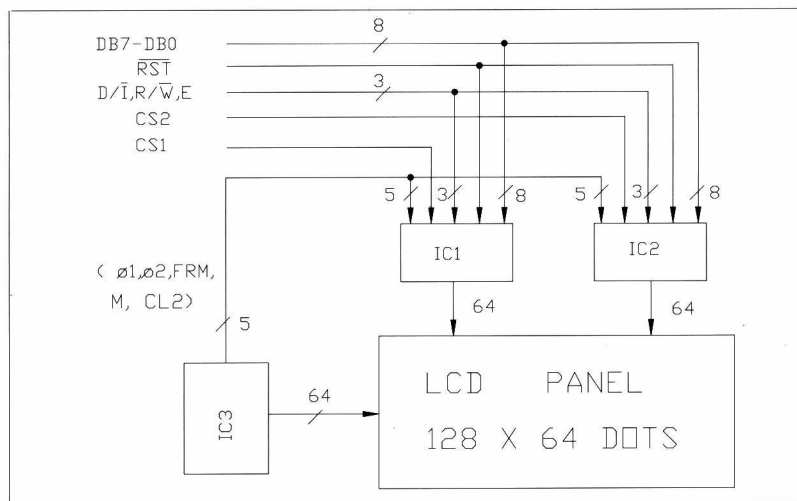
Display Format

128 × 64 dots

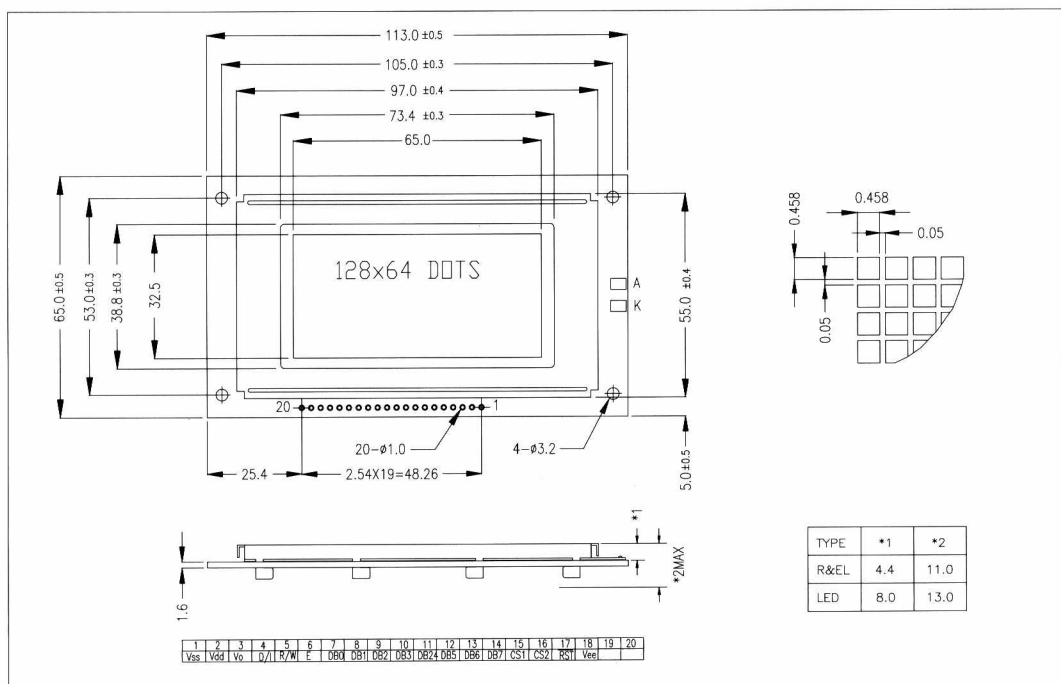
Driving Method

1/64 D

Block Diagram



External Dimensions/Display Pattern



Absolute Maximum Ratings

Item	Symbol	Condition	Standard Value		Unit
			min.	max.	
Supply Voltage for Logic	$V_{DD}-V_{SS}$	$T_a=25^{\circ}\text{C}$	0	6.5	V
Supply Voltage for LCD	$V_{DD}-V_{EE}$		0	18.0	V
Input Voltage	V_i		0	V_{DD}	V

Electrical Characteristics

Item		Symbol	Condition	Standard Value			Unit
				min.	typ.	max.	
Supply Voltage for	Logic	$V_{DD}-V_{SS}$	-	4.75	5.0	5.25	V
	LCD	$V_{DD}-V_{EE}$	-	-	12.0	-	V
Supply Current for	Logic	I_{DD}	-	-	7.0	-	mA
	LCD	I_{EX}	-	-	3.0	-	mA
Operating Voltage for LCD (Recommended)		$V_{DD}-V_o$	0°C	-	13.0	-	V
			25°C	-	12.0	-	V
			40°C	-	11.0	-	V
Input Voltage	'H' Level	V_{HI}	High Level	$0.7V_{DD}$	-	V_{DD}	V
	'L' Level	V_{LI}	Low Level	0	-	$0.3V_{DD}$	V

Interface Pin Connections

Pin No	Symbol	Level	Description
1	V_{SS}	0V	Ground
2	V_{DD}	5.0V	Supply voltage for logic and LCD (+)
3	V_o	-	Operating voltage for LCD (variable)
4	D/I	H/L	H:Data,L:Instruction code
5	R/W	H/L	H:Read (MPU ← Module),L:Write (MUP → Module)
6	E	H,H → L	Chip enable signal
7	DB0	H/L	Data bit 0
8	DB1	H/L	Data bit 1
9	DB2	H/L	Data bit 2
10	DB3	H/L	Data bit 3
11	DB4	H/L	Data bit 4
12	DB5	H/L	Data bit 5
13	DB6	H/L	Data bit 6
14	DB7	H/L	Data bit 7
15	CS1	H	Chip select signal for IC1
16	CS2	H	Chip select signal for IC2
17	RST	L	Reset signal
18	V_{EE}	-10.0V	Negative Voltage for LCD driving
19	A	4.2V	Supply Voltage for LED (+)
20	k	0	Supply Voltage for LED (-)