

MC20805A6W-GPR-3.3-V2	2 x 8	5mm Character Height	LCD Module
Specification			
Version: 1		Date: 05/11/2017	
Revision			
1	31/10/2017	First Issue	

Display Features			
Character Count	2 x 8		
Appearance	Black on Yellow/Green		
Logic Voltage	3.3V		
Interface	Parallel		
Font Set	English / Japanese		
Display Mode	Reflective		
Character Height	5.56mm		
LC Type	STN Grey		
Module Size	58.00 x 32.00 x 9.50 mm		
Operating Temperature	-20°C ~ +70°C		
Construction	COB		
LED Backlight	N/A	Box Quantity	Weight / Display
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* - For full design functionality, please use this specification in conjunction with the RW1063 specification. (Provided Separately)



FEATURES

AVAILABLE OPTIONS	CHARACTERISTICS		
DISPLAY FORMAT	8 Characters by 2 Lines		
POLARIZER OPTIONS	Positive Reflective		
BACKLIGHT TYPE OPTIONS	No Backlight		
BACKLIGHT COLOR OPTIONS	No Backlight		
LCD PANEL OPTIONS	Gray STN		
VIEWING ANGLE OPTIONS	6:00 (Bottom)		
TEMPERATURE RANGE OPTIONS	-20°C ~ 70°C, Single Supply Voltage		
SUGGESTED DRIVING VOLTAGE	V _{lcm} = 3.3V		
SUGGESTED LED DRIVING MODE	No Backlight		
CONTROLLER ▲1	ST7066U		
FONT MAP CODE	E Version		
DRIVING DUTY	1/16		
DRIVING BIAS	1/5		

▲1 Please ask for datasheet of the mentioned controller from Midas or Midas's authorized distributors. You can find the related information including AC & DC characteristics, Write & Read Timing diagram, Instruction table and descriptions, DDRAM & CGRAM, Rest Function and so on from the datasheet of controller.

▲1 You can ask for the example of software program (C language) from Midas or Midas's authorized distributors.

MECHANICAL SPECIFICATIONS

OVERALL SIZE	58.0W x 32.0H	mm	THICKNESS	max 9.5	mm
VIEWING AREA	38.0W x 16.0H	mm	HOLE-HOLE	53.0W x 27.0H	mm
CHARACTER SIZE	2.96W x 5.56H	mm	CHARACTER PITCH	0.59W x 0.36H	mm
DOT SIZE	0.56W x 0.66H	mm	DOT PITCH	0.04W x 0.04H	mm

ABSOLUTE MAXIMUM RATINGS

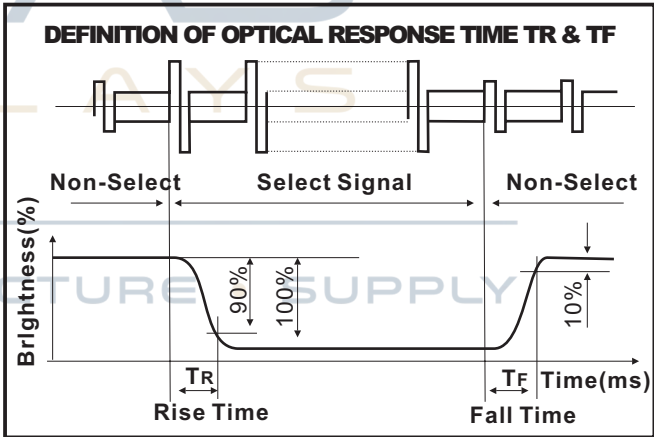
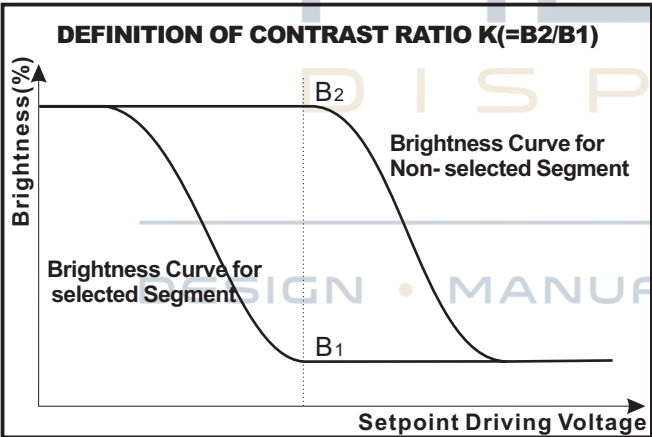
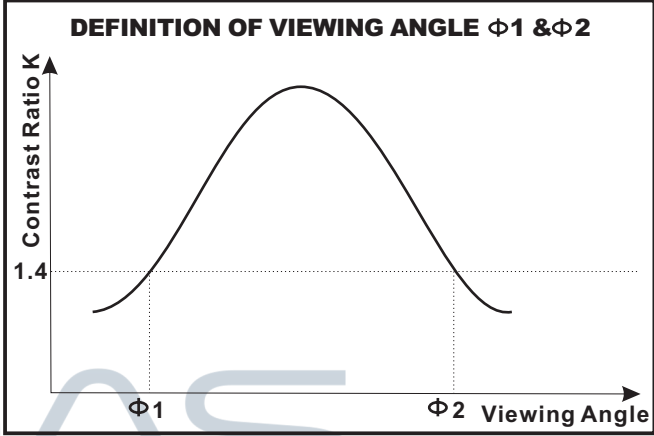
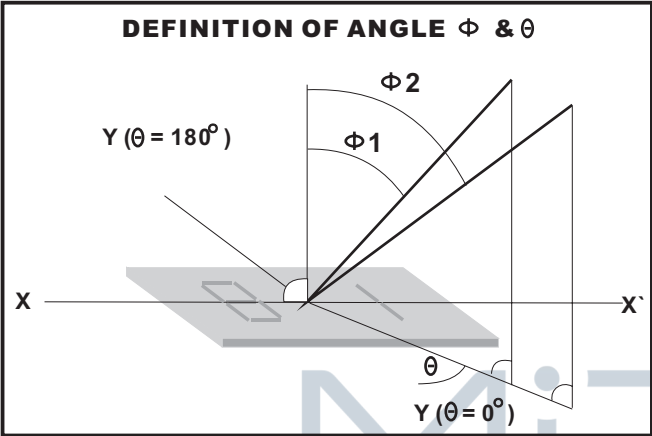
ITEM	SYMBOL	CONDITION	MIN	TYP	MAX	UNIT
POWER SUPPLY (LOGIC)	V _{dd}	25°C	-0.3	—	7.0	V
POWER SUPPLY (LCD)	V ₀	25°C	V _{dd} -13.5	—	V _{dd} +0.3	V
INPUT VOLTAGE	V _{in}	25°C	-0.3	—	V _{dd} +0.3	V
OPERATING TEMPERATURE	V _{opr}	—	-20	—	70	°C
STORAGE TEMPERATURE	V _{stg}	—	-30	—	80	°C

ELECTRONIC CHARACTERISTICS *

ICONS	ITEM	SYMBOL	CONDITION	MIN	TYP	MAX	UNIT
	INPUT VOLTAGE	V _{lcm} = V _{dd}	—	—	3.3	—	V
	SUPPLY CURRENT	I _{dd}	V _{dd} =3.3V	—	1.5	—	mA
	DRIVING VOLTAGE FOR LCD PANEL	V _{lcd} = (V _{dd} - V ₀)	-20°C	—	—	—	V
			0°C	—	—	—	
			25°C	—	—	—	
			50°C	—	—	—	
			70°C	—	—	—	

* All data are recorded from TEST REPORT #FSYP000700009

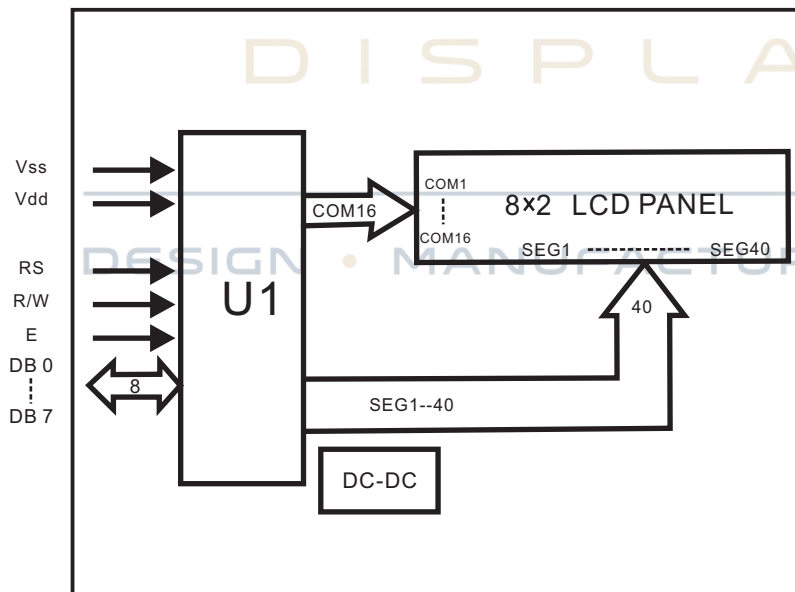
FOR STN/FSTN TYPE LCD Panel (TA=25 °C, Vlcd=5.0V ± 0.5V)							
ICONS	ITEM	SYMBOL	CONDITION	MIN	TYP	MAX	UNIT
	VIEWING ANGLE	$\Phi 2 - \Phi 1$	K=4	40	—	—	deg
		θ		60			
	CONTRAST RATIO	K	—	6	—	—	—
	RESPONSE TIME(RISE)	TR	—	—	150	250	ms
	RESPONSE TIME(FALL)	TF	—	—	150	250	ms



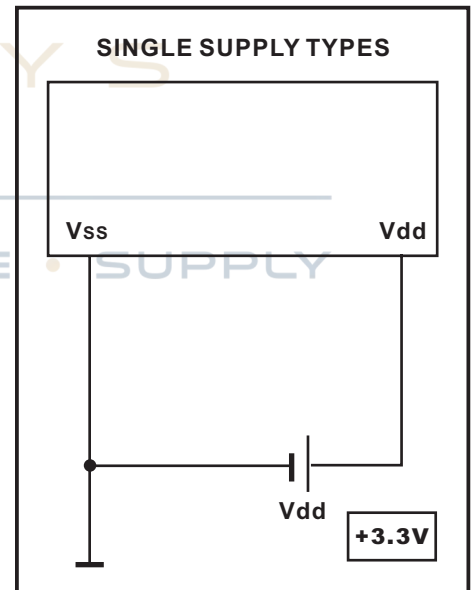
PIN ASSIGNMENT

PIN	SYMBOL	DESCRIPTION	REMARKS
1	Vss	GND	
2	Vdd	Power supply for LCM	3.3V
3	NC	No connection	
4	RS	Register Select Signal	
5	R/W	Data Read / Write	
6	E	Enable Signal	
7	DB0	Data bus line	
8	DB1	Data bus line	
9	DB2	Data bus line	
10	DB3	Data bus line	
11	DB4	Data bus line	
12	DB5	Data bus line	
13	DB6	Data bus line	
14	DB7	Data bus line	
15	NC	No connection	
16	NC	No connection	

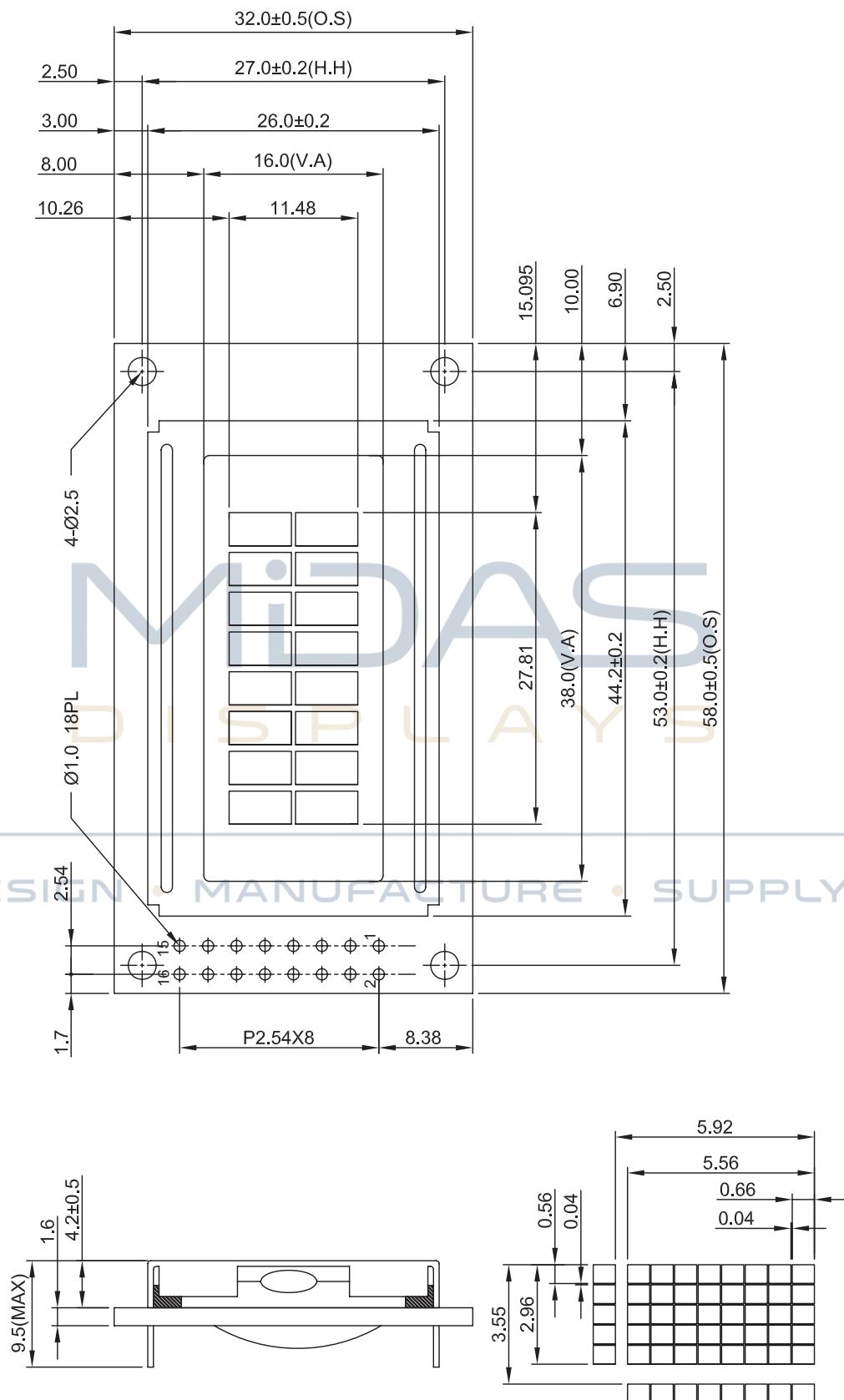
BLOCK DIAGRAM



POWER SUPPLY DIAGRAM



Upper 4bit Lower 4bit		LLLL	LLLH	LLHL	LLHH	LHLL	LHLH	LHHL	LHHH	HLLL	HLLH	HLHL	HLHH	HHLL	HHLH	HHHL	HHHH
LLLL	CG RAM (1)																
LLLH	(2)																
LLHL	(3)																
LLHH	(4)																
LHLL	(5)																
LHLH	(6)																
LHHL	(7)																
LHHH	(8)																
HLLL	(1)																
HLLH	(2)																
HLHL	(3)																
HLHH	(4)																
HHLL	(5)																
HHLH	(6)																
HHHL	(7)																
HHHH	(8)																



FULL-SIZED PACKAGE
45 PCS/BOX
10 BOXES/CARTON
450 PCS/CARTON
13.00 KGS/CTN(G.W.)
0.054 M ³ /CARTON

HALF-SIZED PACKAGE
45 PCS/BOX
5 BOXES/CARTON
225 PCS/CARTON
6.00 KGS/CTN(G.W.)
0.027 M ³ /CARTON

PACKING DECLARATION
1. This packaging information is for reference only. The actual information is subject to the actual packaging. Especially for packaging of LCL, tolerances may exist.
2. Midas will not be responsible for quality problems caused by unnormal transportation conditions (including but not limited to climate factors or human factors, such as improper handling).

