

阅读申明

- 1.本站收集的数据手册和产品资料都来自互联网，版权归原作者所有。如读者和版权方有任何异议请及时告之，我们将妥善解决。
- 2.本站提供的中文数据手册是英文数据手册的中文翻译，其目的是协助用户阅读，该译文无法自动跟随原稿更新，同时也可能存在翻译上的不当。建议读者以英文原稿为参考以便获得更精准的信息。
- 3.本站提供的产品资料，来自厂商的技术支持或者使用者的心得体会等，其内容可能存在描述上的差异，建议读者做出适当判断。
- 4.如需与我们联系，请发邮件到marketing@iczoom.com，主题请标有“数据手册”字样。

Read Statement

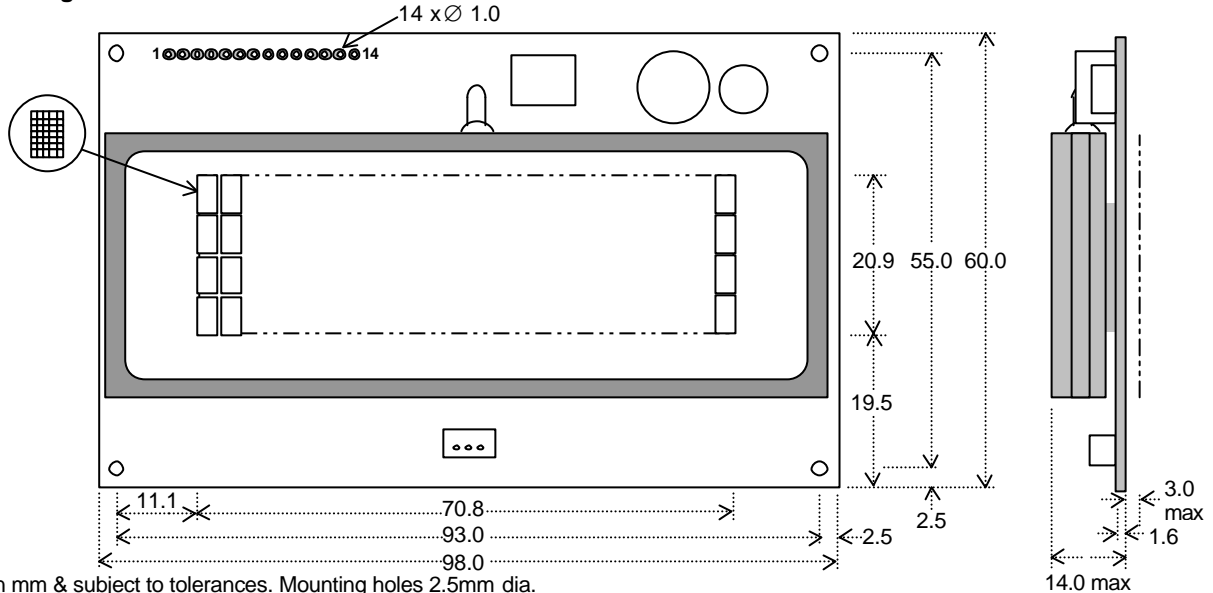
1. The datasheets and other product information on the site are all from network reference or other public materials, and the copyright belongs to the original author and original published source. If readers and copyright owners have any objections, please contact us and we will deal with it in a timely manner.
2. The Chinese datasheets provided on the website is a Chinese translation of the English datasheets. Its purpose is for reader's learning exchange only and do not involve commercial purposes. The translation cannot be automatically updated with the original manuscript, and there may also be improper translations. Readers are advised to use the English manuscript as a reference for more accurate information.
3. All product information provided on the website refer to solutions from manufacturers' technical support or users the contents may have differences in description, and readers are advised to take the original article as the standard.
4. If you have any questions, please contact us at marketing@iczoom.com and mark the subject with "Datasheets" .

5X7 Dot Character VFD Module

CU20045SCPB-W5J

- ❑ 4 X 20 Characters 5mm High
- ❑ LCD Compatible Design
- ❑ Operating Temp -40°C to +85°C
- ❑ Single 5V Supply with Power Save Mode
- ❑ High Brightness Blue Green Display
- ❑ Selectable 4/8 bit M68/i80 Interface
- ❑ ASCII + Extended Character Font
- ❑ 8 User Definable Character RAM
- ❑ 4 Level Brightness Control Function

The module includes the Vacuum Fluorescent Display glass, driver and micro-controller ICs with refresh RAM, character generator and interface logic. The high speed 8 bit parallel interface is 5V CMOS compatible suitable for connection to a host CPU bus which can be set to M68 or i80 series interface by a solder link on the module. Brightness control and power down functions are provided. A full data sheet is available.



Dimensions in mm & subject to tolerances. Mounting holes 2.5mm dia.

ELECTRICAL SPECIFICATION

Parameter	Symbol	Value	Condition
Power Supply Voltage	V _{CC}	5.0VDC +/- 5%	GND=0V
Power Supply Current	I _{CC}	275mA DC typ.	V _{CC} =5V
Logic High Input (DB0-DB7)	V _{IH1}	V _{SS} +2.2VDC min.	V _{CC} =5V
Logic Low Input (DB0-DB7)	V _{IL1}	V _{SS} +0.6VDC max	V _{CC} =5V
Logic High Input (RS,R/W,E)	V _{IH2}	0.7 V _{CC} min.	V _{CC} =5V
Logic Low Input (RS,R/W,E)	V _{IL2}	0.3 V _{CC} max.	V _{CC} =5V
Logic High Output	V _{OH}	V _{CC} -0.6VDC min.	I _{OH} = -1.6mA
Logic Low Output	V _{OL}	V _{SS} +0.6VDC max	I _{OL} =1.6mA

The power on rise time should be less than 50ms. The inrush current at power on can be 2 x I_{CC}. The I_{CC} current is 10mA maximum while in power down mode.

OPTICAL and ENVIRONMENTAL SPECIFICATIONS

Parameter	Value
Character Size/Pitch (XxY mm)	2.4 x 4.7/3.6 x 5.4
Dot Size/Pitch (XxY mm)	0.4 x 0.5/0.5 x 0.7
Luminance	700 cd/m ² (204 fL) Typ.
Colour of Illumination	Blue-Green (Filter for more colours)
Operating Temperature	-40°C to +85°C
Storage Temperature	-50°C to +85°C
Operating Humidity (non condensing)	20 to 80% RH @ 25°C

SOFTWARE COMMANDS

Instruction	R/W	RS	D0-D7
Clear Display	L	L	01H
Cursor Return Home	L	L	02H-03H
Entry Mode Set	L	L	04H-07H
Display ON/OFF	L	L	08H-0FH
Cursor/Display Shift	L	L	10H-1FH
Function Set	L	L	20H-3FH
Brightness Set	L	H	00H-03H
Set CG RAM Addr.	L	L	40H-7FH
Set DD RAM Addr.	L	L	80H-E7H
Read BUSY/Addr.	H	L	00H-FFH
Write Data to RAM	L	H	00H-FFH
Read Data from RAM	H	H	00H-FFH

PIN CONNECTIONS

Pin	Sig	Pin	Sig
1	GND	2	V _{CC}
3	(FNC)	4	RS
5	R/W #	6	E #
7	D0	8	D1
9	D2	10	D3
11	D4	12	D5
13	D6	14	D7

TIMING PARAMETERS (min)

(E)nable Cycle Time	666ns
(E)nable Pulse Width	300ns
Hold after (E)nable	10ns

CHARACTER FONT

H _E X	00	10	20	30	40	50	60	70	80	90	A0	B0	C0	D0	E0	F0
00			0	a	P	`	F	Δ	F	-	∞	∞	∞	∞	∞	∞
01		!	1	A	Q	a	q	Δ	Δ	∞	7	7	Δ	Δ	∞	∞
02		"	2	B	R	b	r	Δ	Δ	E	r	∞	∞	∞	∞	∞
03		#	3	C	S	c	s	Δ	Δ	R	∞	∞	∞	∞	∞	∞
04		\$	4	D	T	d	t	Δ	Δ	∞	∞	∞	∞	∞	∞	∞
05		%	5	E	U	e	u	∞	∞	E	∞	∞	∞	∞	∞	∞
06		&	6	F	V	f	v	∞	∞	∞	∞	∞	∞	∞	∞	∞
07		'	7	G	W	w	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞
08		(8	H	X	h	x	∞	∞	∞	∞	∞	∞	∞	∞	∞
09)	9	I	Y	y	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞
0A		*	:	J	Z	j	z	∞	∞	∞	∞	∞	∞	∞	∞	∞
0B		+	;	K	k	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞
0C		,	<	L	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞
0D		-	=	M	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞
0E		.	>	N	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞
0F		∞	/	?	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞

JUMPER LINKS

Interface M68/i80
When jumper link JP9 is soldered, these inputs change to i80 series CPU control lines.
Pin 5= /WR Pin 6 = /RD

Pin 3 (Fnc) Input

This is normally open circuit. If pads JP2.1 and JP2.2 are linked. Pin 3 = /Reset.

CONTACT

Noritake Sales Office Tel Nos
Nagoya Japan: +81 (0)52-561-9867
Canada: +1-416-291-2946
Chicago USA: +1-847-439-9020
Munich (D): +49 (0)89-3214-290
Itron UK: +44 (0)1493 601144
Rest Europe: +49 (0)61-0520-9220
www.noritake-itron.com

Subject to change without notice.
IUK Doc Ref: 03443 Iss:1 11 July 2001