LCD Controller Manual
MMS1232C Version 1.0

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[1.] MMS1232C   Special Font

1. MMS1232C   ,

♦ MMS1232C

   ♦   LCD Resolution   : FSTN Mono 122*32 dots
   ♦   :   (GB2132-80)
   ♦   Font   :   (GB2312-80) 16*16 dots
                                    8*16 dots
                                    16*16 dots

♦ MMS1232C

   ♦   CPU   : 8BIT micro controller
   ♦   Display Type   : FSTN Mono 122*32 dots
   ♦   : DC 5[V]
   ♦   : RS-232C 9600, 19200, 57600,115200 [bps]
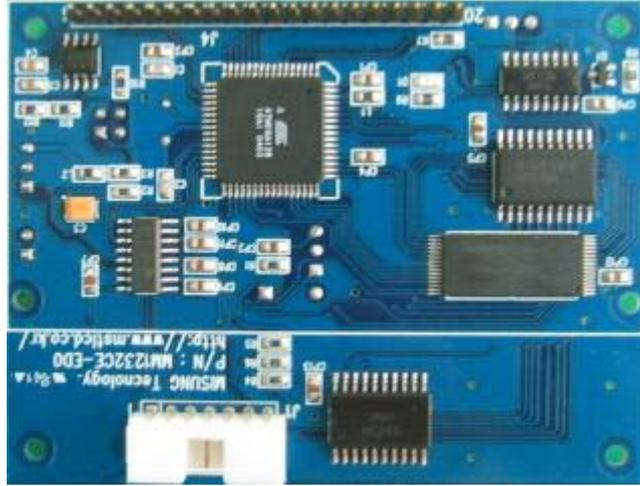   Default 57600 [bps]

♦ MMS1232C

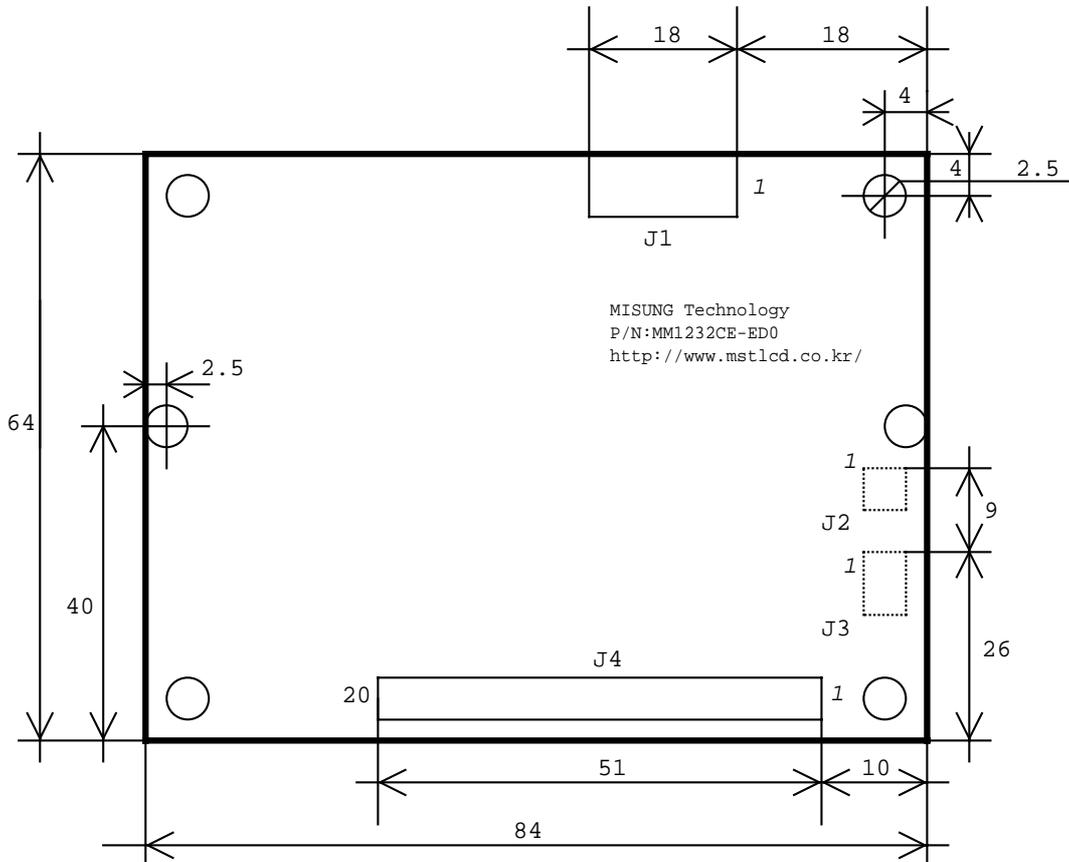   ♦   ,   :   2   ,   2   ,   2
   ♦   /   Font
   ♦
   ♦   : Enter
   ♦   Clear   :   Clear
   ♦

2. MMS1232C   Connector

2   MMS1232C   Dimensions   Connector   .

MMS1232C

MMS1232C   Dimensions

MISUNG Technology
P/N:MM1232CE-ED0
http://www.mstlcd.co.kr/

2- 1. RS- 232C Connector : J3

Pin Number	Symbol	Description
1	RXD	Receive Data : LCD Controller
2	TXD	Transmit Data : LCD Controller
3	GND	Ground

2- 2. Power Connector : J2

Pin Number	Symbol	Description
1	VCC	+ 5[VDC]
2	GND	Ground

3.

'Esc' =   0x1b [hex]

			Parameter		
'Esc'	'J'	'0x01'		GB2312-80	3-1-1
'Esc'	'E'	'0x01'			3-1-2
		'0x02'			
'Esc'	'P'	'0x01'		Text Layer ON	3-1-3
		'0x02'		Text Layer ON	
		'0x03'		Text Layer ON	3-1-4
		'0x04'		Text Layer OFF	
		'0x05'		Text Layer Font ON	3-1-5
		'0x06'		Text Layer Font ON	
		'0x07'		Text Layer Font ON	
		'0x08'		Text Layer Font OFF	
'Esc'	'D'	'0x01'		clear	3-1-7
'Esc'	'C'	'0x01'	(X,Y)	X,Y cursor (X,Y hex :0x00 ~ 0x1d :0x00 ~ 0x07)	3-1-8
'Esc'	'L'	'0x01'		Backlight ON	3-1-9
		'0x02'		Backlight OFF	
'Esc'	'A'	'0x01'		Reset	

3-1.

Parameter '+ ' .

'Esc' = 0x1b (Hex)

Graphic X MMS1232C byte(Hex)

.

3-1-1.

	'ESC'+ 'J'
	'0x01'
Parameter	
	'ESC'+ 'J'+ '0x01' => GB2312-80 ' GB2312-80 2byte . 'ESC'+ 'J'+ '0xB0'+ '0xA2' 阿 display .

3-1-2.

	'ESC'+ 'E'
	'0x01' or '0x02'
Parameter	
	'ESC'+ 'E'+ '0x01' => ASCII 256 'ESC'+ 'E'+ '0x02' =>

3-1-3. Text Layer

	'ESC'+ 'P'
	'0x01' or '0x02'
Parameter	
	'ESC'+ 'P'+ '0x01' => Text Layer 'ESC'+ 'P'+ '0x02' => Text Layer

3-1-4. Text Layer ON/OFF

	'ESC'+ 'P'
	'0x03' or '0x04'
Parameter	
	'ESC'+ 'P'+ '0x03' => Text Layer ON 'ESC'+ 'P'+ '0x04' => Text Layer OFF

3-1-5. Text Layer

	'ESC'+ 'P'
	'0x04' or '0x05' or '0x06' or '0x07'
Parameter	

	'ESC'+ 'P'+ '0x04' => Text Layer　　Font 　　　8*16 dots => 16*32 dots 　　　16*16 dots => 32*32 dots 'ESC'+ 'P'+ '0x05' => Text Layer　　Font 　　　8*16 dots => 16*16 dots 　　　16*16 dots => 32*16 dots 'ESC'+ 'P'+ '0x06' => Text Layer　　Font 　　　8*16 dots => 8*32 dots 　　　16*16 dots => 16*32 dots 'ESC'+ 'P'+ '0x07' => Text Layer　　Font　　　　　　　OFF

3-1-6. Serial Baud Rate

	J5　　Header pin
Parameter	
	J5　　Header pin　　　　　　.(default:57600)

3-1-7.　　　　Clear

	'ESC'+ 'D'
	'0x01'
Parameter	'X1'+ 'Y1'+ 'X2'+ 'Y2'
	'ESC'+ 'D'+ '0x01' =>　　　　Clear

3-1-8. Cursor

	'ESC'+ 'C'
	'0x01'
Parameter	'X'+ 'Y'
	'ESC'+ 'C'+ '0x01'+ 'X'+ 'Y' => Text Layer (X, Y)　　　　Cursor 　　(Text Layer) : X　　　0x00 ~ 0x1d, Y　　　0x00 ~ 0x07

3-1-9. Backlight ON/OFF

	'ESC'+ 'L'
	'0x01' or '0x02'
Parameter	
	'ESC'+ 'L'+ '0x01' => CCFL Power ON 'ESC'+ 'L'+ '0x02' => CCFL Power OFF

[1.] MMS1232C   Special Font

<   1- 1 > MMS1232C   (Special Font)   .
Special   <   1- 1 >   .

	0x00	0x01	0x02	0x03	0x04	0x05	0x06	0x07	0x08	0x09	0x0A	0x0B	0x0C	0x0D	0x0E	0x0F
0x00		☎	☎				¶				No.	Co.	TM.	am.		FM. Tel.
0x10	I	II	III	IV	V	VI	VII	VIII	IX	X						
0x20															ha	
0x30			kt	cal	kcal	dB			ps	ns		ms	PV	nV		mV
0x40	kV	MV	pA	nA		mA	kA						Hz	kHz	MHz	
0x50	GHz	THz	Ω	kΩ	MΩ	pF	nF		mol	cd	rad			sr	Pa	kPa
0x60	MPa	GPa	Wb	lm	lx	Bq	Gy	Sv								
0x70																
0x80						ⓐ	ⓑ	ⓒ	ⓓ	ⓔ	ⓕ	ⓖ	ⓗ	ⓘ	ⓙ	ⓚ
0x90	ⓛ	ⓜ	ⓝ	ⓞ	ⓟ	ⓠ	ⓡ	ⓢ	ⓣ	ⓤ	ⓥ	ⓦ	ⓧ	ⓨ	ⓩ	①
0xA0	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮	½	⅓
0xB0	⅔	¼	¾	⅛	⅜	⅝	⅞									
0xC0																
0xD0				(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)
0xE0	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)	(w)	(x)	(y)	(z)	(1)	(2)	(3)
0xF0	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)				

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