



LCD Controller Manual

MCT4827K Version 1.00



3 48-6

110002

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2. MCT4827K Connector

- 2-1 RS-232C Connector
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4. MCT4827K Image Overwrite

[1.] MCT4827K Special Font

1. MCT4827K

◆ MCT4827K

◆ LCD Resolution : 24bit Color TFT 480*272 dots

◆

:

KS5601

◆ LCD Back Light : LED Type

◆ Font : 16*16 dots

16*16 dots

8*16 dots

8*16 dots

16*16

◆ Image File Memory

24bit Color/480*272 => 38 [Page] .

Font

/

◆ MCT4827K

◆ CPU : ARM920T 200[MHz]

◆ Display Type : 24Bit Color TFT 480*272 dots

◆ : +5[VDC]

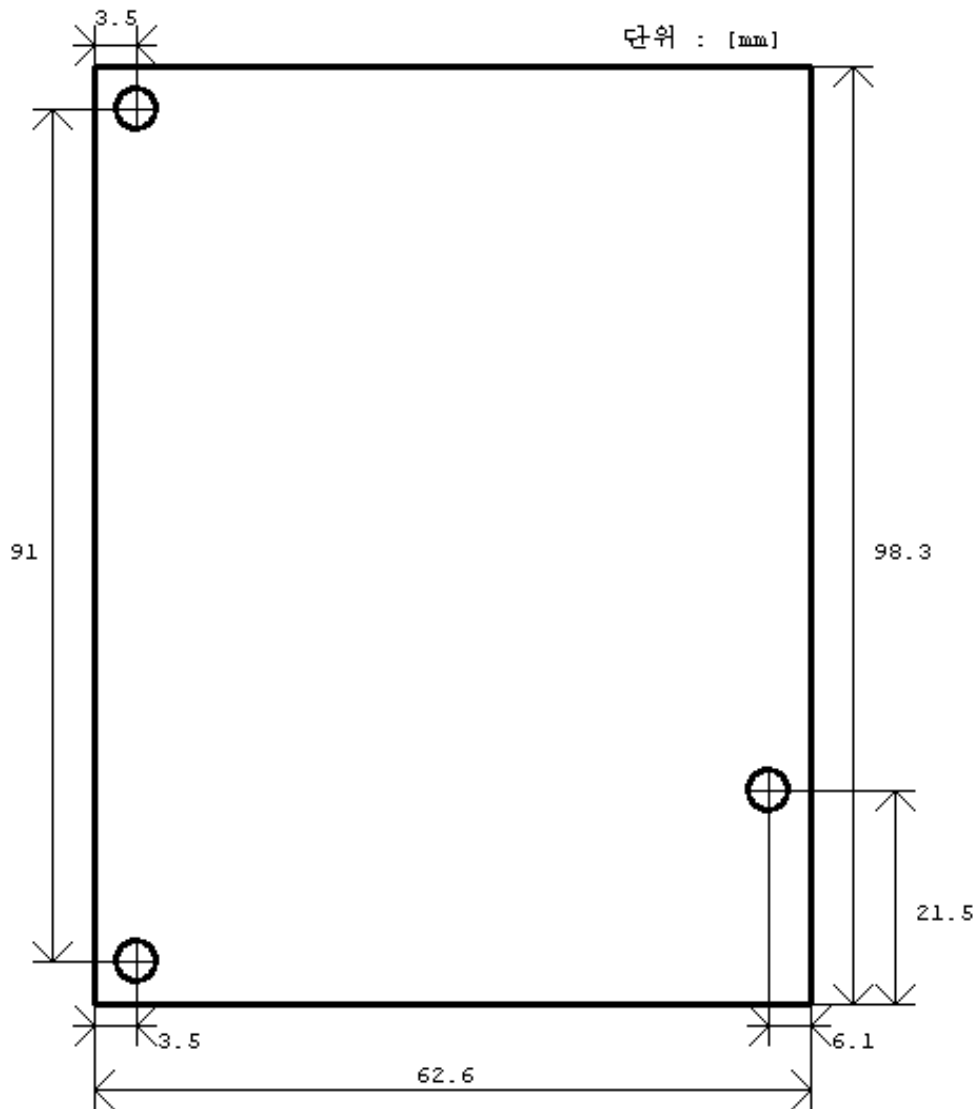
◆ : 1.5[A]

◆ : RS-232C => 9600, 19200, 57600, 115200 [bps]

2. MCT4827K Connector

2 MCT4827K Dimensions Connector

MCT4827K Dimensions



2-1. RS-232C Connector : CN1

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

2-2. Power Connector : CN2

Pin Number	Symbol	Description
1	VCC5	+5[VDC]/1 [A]
2	GND	DC Ground

2-3. System configuration setting

Pin Number	Symbol	Description
1	-	RS232C BaudRate Select
2	-	RS232C BaudRate Select
3		USB Device Select
4		Reserved
5		Reserved
6		Reserved

**** BaudRate**

J5 Head pin

Pin NO.	J2_1	J2_2	BaudRate [bps]
	ON	ON	9,600
	OFF	ON	19,200
	ON	OFF	57,600
	OFF	OFF	115,200

**** Color**

J5 Head pin

Pin NO.	J2_3	J2_4	Color
	OFF	OFF	24BIT
	OFF	ON	16BIT
	ON	OFF	Reserved
	ON	ON	Reserved

**** J2_5 - USB****** J2_6 - Logo on/off**

3.

'Esc' = 0x1b [hex]

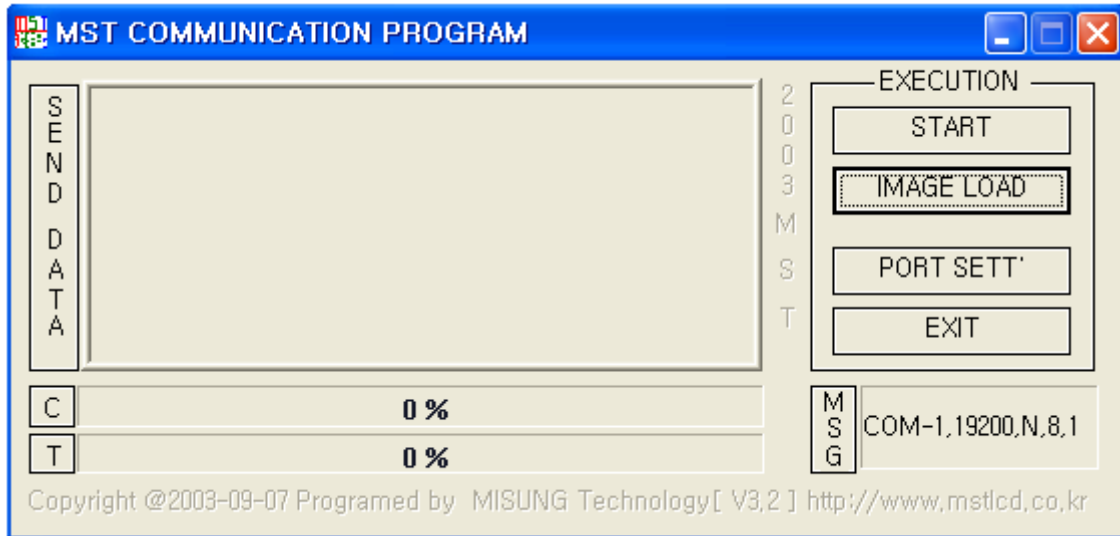
			Parameter	
'Esc'	'K'	'0x01'		
		'0x02'		KS5601
		'0x03'		(default)
		'0x04'		
'Esc'	'E'	'0x01'		
		'0x02'		
		'0x03'		(default)
		'0x04'		
		'0x05'		MST1 FONT
'Esc'	'P'	'0x01'		Text reverse off
		'0x02'		Text reverse on
		'0x03'		Reserved
		'0x04'		Reserved
		'0x05'		Text under line on
		'0x06'		Text under line off
		'0x07'		Font ON
		'0x08'		Font 가 ON
		'0x09'		Font ON
		'0x0a'		Font OFF
		'0x0b'		Reserved
		'0x0c'		Reserved
		'0x0d'		Reserved
		'0x0e'		Reserved
		'0x0f'		Reserved
		'0x10'		Reserved
		'0x11'		Reserved
		'0x12'		Reserved
'0x13'		Reserved		
'0x14'		Font 가 3 , 2		
'0x15'		Font 가 2 , 3		
'0x16'		Font 가 3 , 3		
'Esc'	'D'	'0x01'		clear
		'0x02'	(X1,Y1,X2,Y2)	Text Clear (X1, Y1, X2, Y2 hex X1,X2:0x00 ~ 0x3b, Y1,Y2:0x00 ~ 0x10)
		'0x03'		Reserved
		'0x04'	(X1,Y1,X2,Y2)	Graphic clear (X1, Y1, X2, Y2 hex

			Parameter	
				X1,X2:0x0000 ~ 0x01e0, Y1,Y2:0x0000 ~ 0x0110)
'Esc'	'C'	'0x01'	(X,Y)	Text X,Y cursor (X,Y hex 가 :0x00 ~ 0x3c :0x00 ~ 0x11)
		'0x02'		Reserved
		'0x03'		Reserved
		'0x04'		Reserved
		'0x05'		Reserved
		'0x06'	(X,Y)	Graphic X,Y cursor (X, Y) X:0x0000 ~ 0x01e0, Y:0x0000 ~ 0x0110
'Esc'	'L'	'0x01'		LCD Back Light OFF
		'0x02'		LCD Back Light ON
'Esc'	'V'	'0x01'		LCD Back Light UP
		'0x02'		LCD Back Light DOWN
'Esc'	'G'	'0x01'	(X,Y)	Graphic _____ X:0x0000 ~ 0x01e0, Y:0x0000 ~ 0x0110
		'0x02'	(X,Y)	Graphic _____ X:0x0000 ~ 0x01e0, Y:0x0000 ~ 0x0110
		'0x03'	(X1,Y1,X2,Y2)	Graphic Line _____ X1,X2:0x0000 ~ 0x01e0 Y1,Y2:0x0000 ~ 0x0110
		'0x04'	(X1,Y1,X2,Y2)	Graphic Line _____ X1,X2:0x0000 ~ 0x01e0 Y1,Y2:0x0000 ~ 0x0110
		'0x05'	(X1,Y1,X2,Y2)	Graphic Rectangle _____ X1,X2:0x0000 ~ 0x01e0f Y1,Y2:0x0000 ~ 0x0110
		'0x06'	(X1,Y1,X2,Y2)	Graphic Rectangle _____ X1,X2:0x0000 ~ 0x01e0 Y1,Y2:0x0000 ~ 0x0110
		'0x07'	(X1,Y1,X2,Y2)	Graphic Rectangle _____ X1,X2:0x0000 ~ 0x01e0 Y1,Y2:0x0000 ~ 0x0110
		'0x08'	(X1,Y1,X2,Y2)	Graphic Rectangle _____ X1,X2:0x0000 ~ 0x01e0 Y1,Y2:0x0000 ~ 0x0110
		'0x09'	(X,Y,radius)	Graphic _____ X Y X:0x0000 ~ 0x01e0, Y:0x0000 ~ 0x0110 Radius :0x00 ~ 0x110
		'0x0a'	(X,Y,radius)	Graphic _____ X Y X:0x0000 ~ 0x01e0, Y:0x0000 ~ 0x0110 Radius :0x00 ~ 0x110
		'0x0b'	(X,Y,radius)	Graphic _____ X Y X:0x0000 ~ 0x01e0, Y:0x0000 ~ 0x0110 Radius :0x00 ~ 0x110
		'0x0c'	(X,Y,radius)	Graphic _____ X Y X:0x0000 ~ 0x01e0, Y:0x0000 ~ 0x0110 Radius :0x00 ~ 0x110
		'0x0d'	(X,Y,a,b)	Graphic _____ X Y X:0x0000 ~ 0x01e0, Y:0x0000 ~ 0x0110 a :480/2 b :272/2

			Parameter	
		'0x0e'	(X,Y,a,b)	X Y X:0x0000 ~ 0x01e0, Y:0x0000 ~ 0x0110 a :480/2 b :272/2
		'0x0f'	(X,Y,a,b)	Graphic _____ X Y X:0x0000 ~ 0x01e0, Y:0x0000 ~ 0x0110 a :480/2 b :272/2
		'0x10'	(X,Y,a,b)	Graphic _____ X Y X:0x0000 ~ 0x01e0, Y:0x0000 ~ 0x0110 a :480/2 b :272/2
'Esc'	'A'	'0x01'		Reset (MCT4827K Rebooting)
		'0x02'		LCD Back light -> delay 3sec
		'0x03'		Echo '0x06' Send
		'0x04'		User font display 16Byte Send Image data가 16Byte dummy data 16Byte .
		'0x05'	(l)	16/24Bit Color mode l:R.G.B [Bytes]. R.G.B =>R:0x00~0xff; G:0x00~0xff; B:0x00~0xff; 1Byte : 8Bit -> 0~255
		'0x06'	(l)	Text background color , l:0x00~0xff 16/24Bit Color mode l:R.G.B [Bytes]. 1Byte : 8Bit -> 0~255
		'0x07'		Reserved
		'0x08'	(l)	Text overlay on
		'0x09'	(l)	Text overlay off
		'0x0a'	(l)	Image overlay on
		'0x0b'	(l)	Image overlay off
		'0x0c'	(l)	Image overlay background color setting
'Esc'	'I'	'0x01'	(l)	Image One page draw (l 24bit-0x00~0x26 16bit-0x00~0x36 8bit-0x00~0x6f)
		'0x02'		Reserved
		'0x03'		Reserved
		'0x04'	(X,Y)	Reserved
		'0x05'	(I,J)	Reserved
		'0x06'	(l,X1,Y1,X2,Y2)	l: Page Number, X1,Y1(start point), X2,Y2(end point) 2byte .
		'0x07'	(l,X1,Y1,X2,Y2)	l: Page Number, X1,Y1 - image start point X2,Y2 - image size
'Esc'	'T'	'0x01'		Reserved
		'0x02'		Reserved
		'0x03'		Reserved

4. MCT4827K Image Overwrite

Image Overwrite Application Program



MCT4827K Image display ,
 Image page Overwrite .

MCT4827K PC Serial Cable

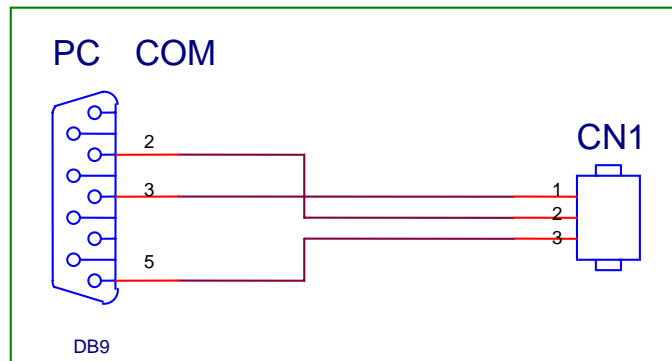
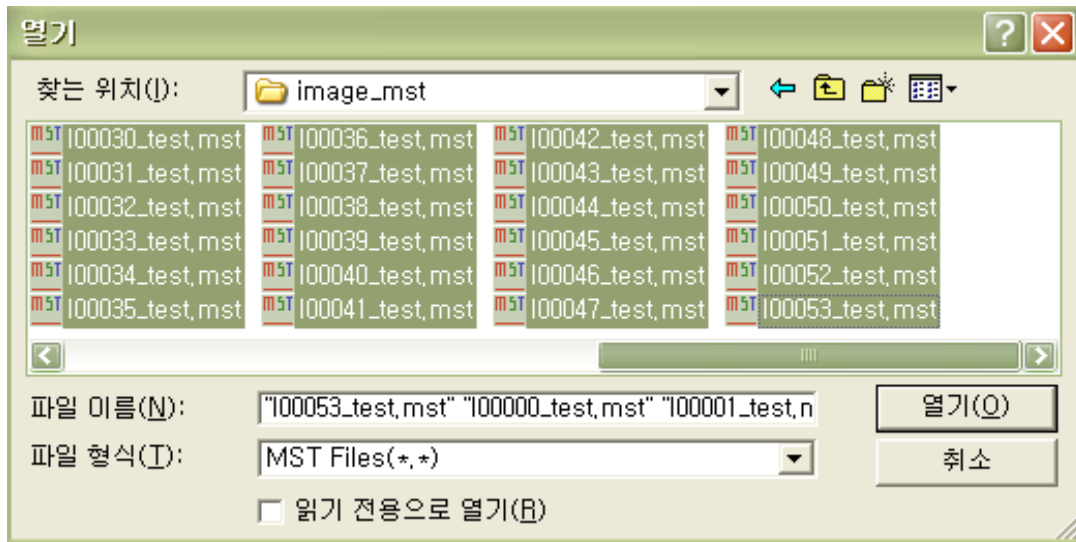
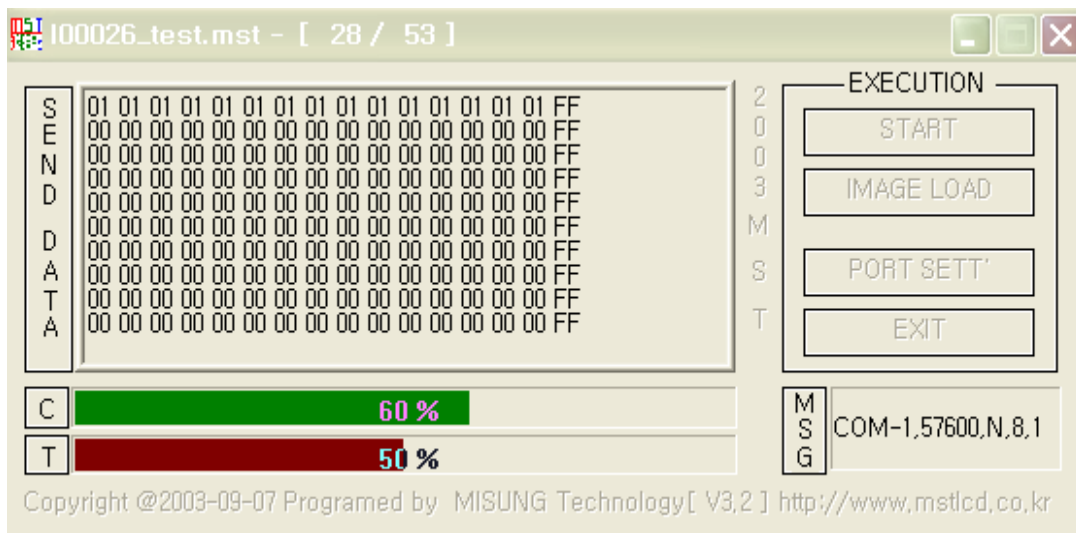


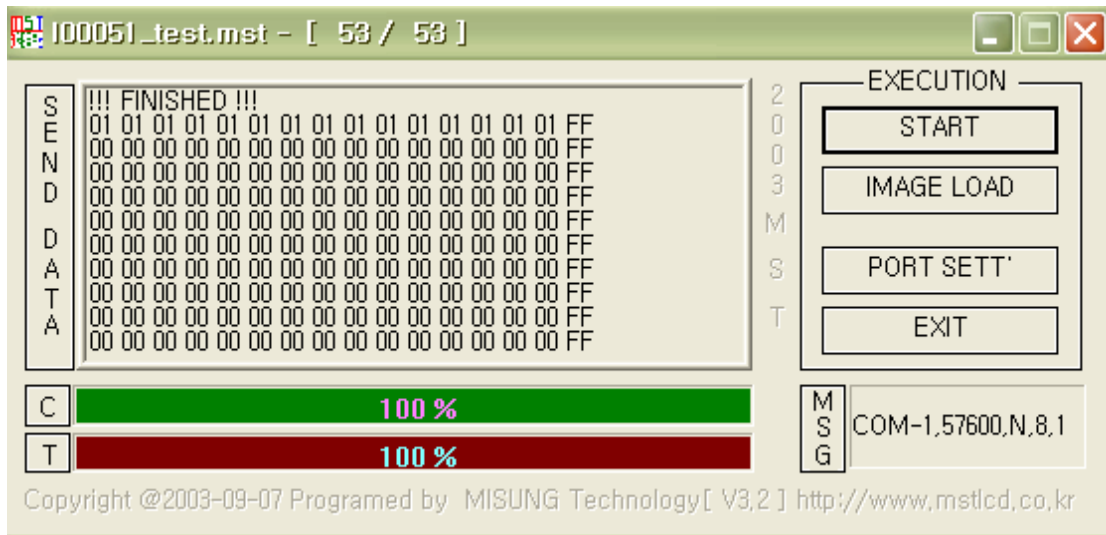
image , 'IMAGE LOAD'



, 'START' MCT4827K Overwrite

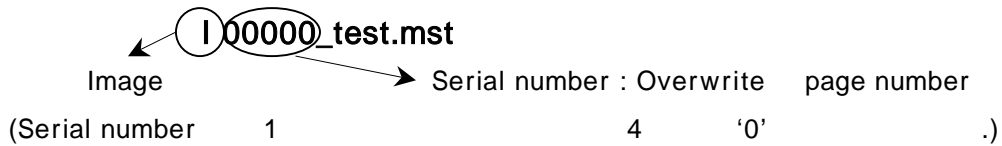


Bar Bar Download
 , Bar
 Bar 가 '100%' Image Overwrite



'IMAGE LOAD'

Image



Ex) 1 page Overwrite file I00001_test.mst

[1.] MCT4827K

Special Font

< 1- 1 > MCT4827K (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	ℓℓ	mℓ	dℓ	ℓ	kℓ	cc
0x20	mm ³	cm ³	m ³	km ³	fm	nm	μm	mm	cm	km	mm ²	cm ²	m ²	km ²	ha	ℓg
0x30	m ^g	k ^g	kt	cal	kcal	dB	m ³ /s	m ³ /s	ps	ns	μs	ms	pV	nV	μV	mV
0x40	kV	MV	PA	nA	μA	mA	KA	FW	nW	μW	mW	kW	MW	Hz	kHz	MHz
0x50	GHz	THz	Ω	kΩ	MΩ	PF	nF	μF	mol	cd	rad	rad ² /s	rad ³ /s	sr	Pa	kPa
0x60	MPa	GPa	Wb	Im	lx	Bq	Gy	Sv	°/kg	㉿	㊀	㊁	㊂	㊃	㊄	㊅
0x70	㊆	㊇	㊈	㊉	㊊	㊋	㊌	㊍	㊎	㊏	㊑	㊒	㊓	㊔	㊕	㊖
0x80	㊗	㊘	㊙	㊚	㊛	㊜	㊝	㊞	㊟	㊠	㊡	㊢	㊣	㊤	㊥	㊦
0x90	㊧	㊨	㊩	㊪	㊫	㊬	㊭	㊮	㊯	㊰	㊱	㊲	㊳	㊴	㊵	㊶
0xA0	㊷	㊸	㊹	㊺	㊻	㊼	㊽	㊾	㊿	①	②	③	④	⑤	⑥	⑦
0xB0	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮	⑯	⑰	⑱	⑲	⑳	㉑	㉒	㉓
0xC0	㉔	㉕	㉖	㉗	㉘	㉙	㉚	㉛	㉜	㉝	㉞	㉟	㊀	㊁	㊂	㊃
0xD0	㊄	㊅	㊆	㊇	㊈	㊉	㊊	㊋	㊌	㊍	㊎	㊏	㊑	㊒	㊓	㊔
0xE0	㊕	㊖	㊗	㊘	㊙	㊚	㊛	㊜	㊝	㊞	㊟	㊠	㊡	㊢	㊣	㊤
0xF0	㊥	㊦	㊧	㊨	㊩	㊪	㊫	㊬	㊭	㊮	㊯	㊰	㊱	㊲	㊳	㊴

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