

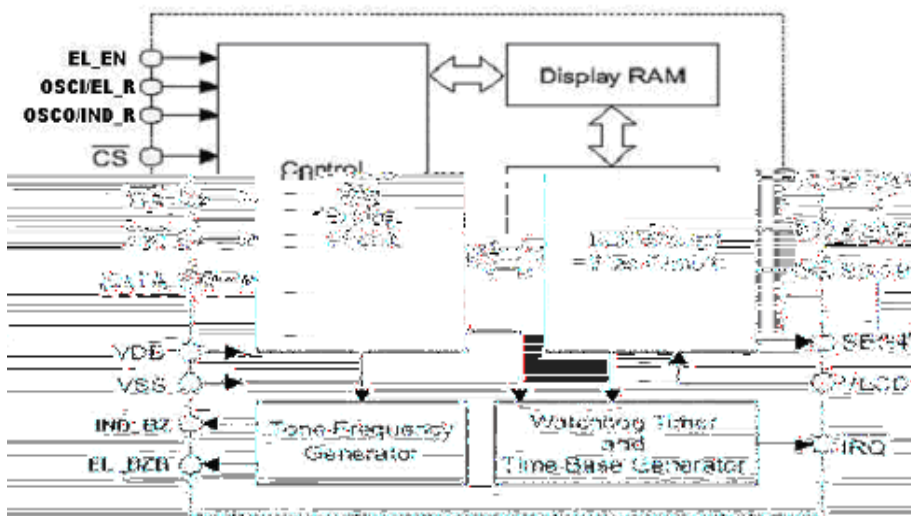


VK1623

48x8段位LCD驱动器

-
- : 2.4V~5.2V
- 256KHz RC oscillator
- 1/4 1/8 COM
-
- 48x8 LCD
- 48x8 bit
- 3-wire serial interface
-
-
- VLCD LCD
-
- 8 WDT
- WDT
- 32.768KHz 256KHz
- (2KHz/4KHz)
- time base generator WDT
- Time base or WDT

●
 VK1623 48x8 LCD LCD 3 4
 LCD



Note: CSB:
 WRB, DATA:
 COM0~COM7, SEG0~SEG47: LCD

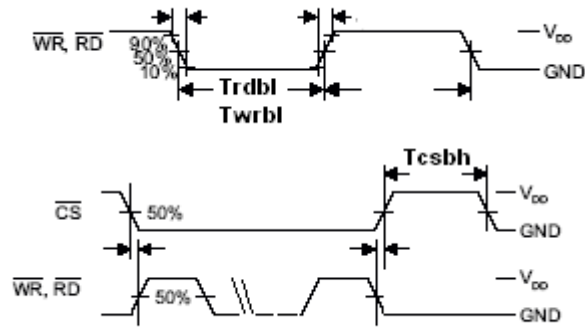


Pad No.	Pad Name	I/O	Function
1	CSB	I	
2	RDB	I	RAM
3	WRB	I	DATA
4	DATA	I/O	
5	EN0	I	
6	VSS	-	
7	OSCI	I	32KHz RC
8	OSCO	O	
9	VDD	-	
10	VLCD	I	LCD
11	IRQB	O	WDT, NMOS open drain
12,13	IND_BZ, EL_BZB	O	
14~21	COM0~COM7	O	LCD common
22~69	SEG0~SEG47	O	LCD segment

..... - 0.3V ~ 5.5V
..... - 50°C ~ 125°C
..... VSS - 0.3V ~ VDD + 0.3V
..... - 25°C ~ 75°C

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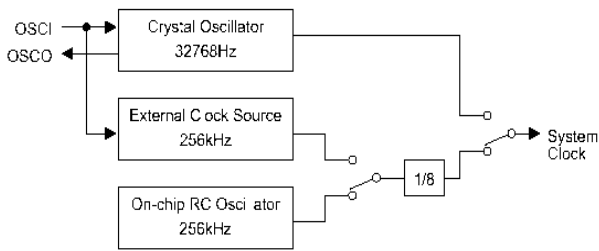
Symbol	Parameter	Test Conditions		Min	Typ.	Max	Unit.
		VDD	Conditions				
ISTDB5	Standby Current	5V					



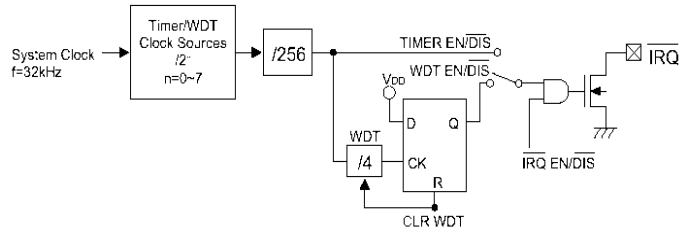
Symbol	Parameter	Vdd	Min	Typ.	Max	Unit.
F_{int3}	Internal RC oscillator	3V		226		KHz
F_{int5}	Internal RC oscillator	5V		430		KHz
F_{ext5}	External input clock	5V			150	KHz
T_{rdbl3}	Minimum read low pulse	3V	350			ns
T_{rdbl5}	Minimum read low pulse	5V	350			ns
T_{wrbl3}	Minimum write low pulse	3V	350			ns
T_{wrbl5}	Minimum write low pulse	5V	350			ns
T_{csbh5}	Minimum CSB high pulse	5V	50			ns

48x8 bits WRITE
common, segment

WDT CLR TIMER



System oscillator configuration



Timer and WDT configuration

CLR WDT CLR TIMER WDT EN TIMER EN . IRQ EN , CLR
 WDT CLR TIMER. WDT time base CLR TIMER. WDT time out
 ,IRQ 0 CLR WDT IRQ DIS. IRQ IRQ EN IRQ DIS
 . IRQ EN time base generator WDT time out IRQ .

VK1623 , ID 1 0 0 . ,LCD

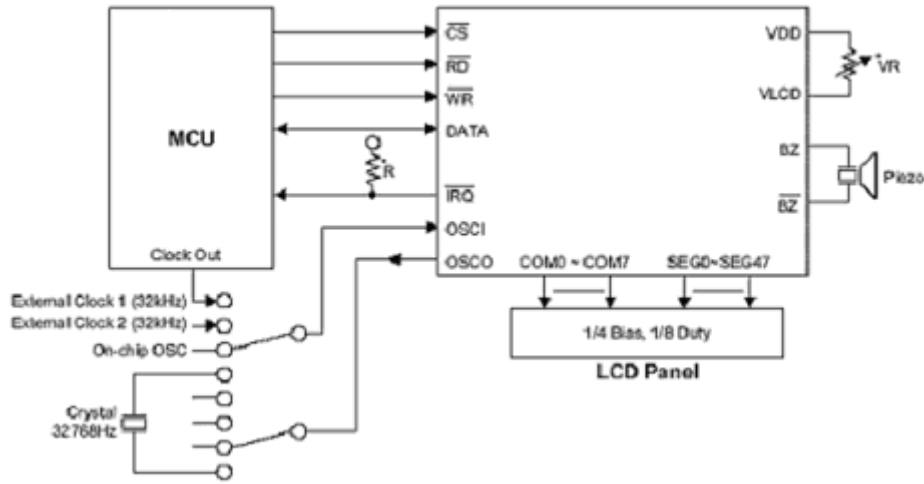
ID:

Operation	Mode	ID
READ	Data	1 1 0
WRITE	Data	1 0 1
READ-MODIFY-WRITE	Data	1 0 1
COMMAND	Command	1 0 0

ID. 1 0 0

.CS

. CS

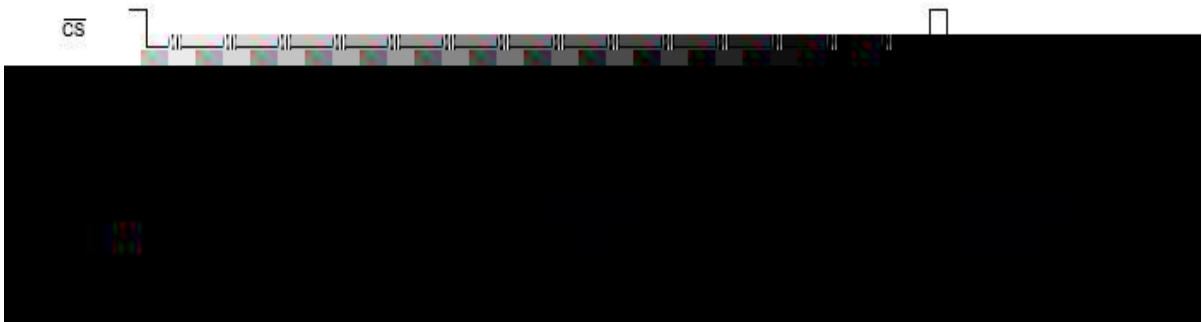


Note:

VLCD VDD
 VR LCD , $V_{DD} = 5V, V_{LCD} = 4V, VR = 24Kohm$
 R

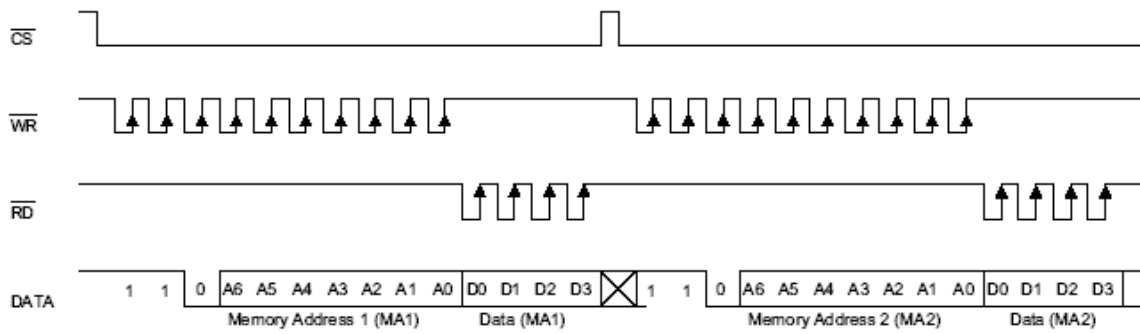
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Command mode (command code : 1 0 0)

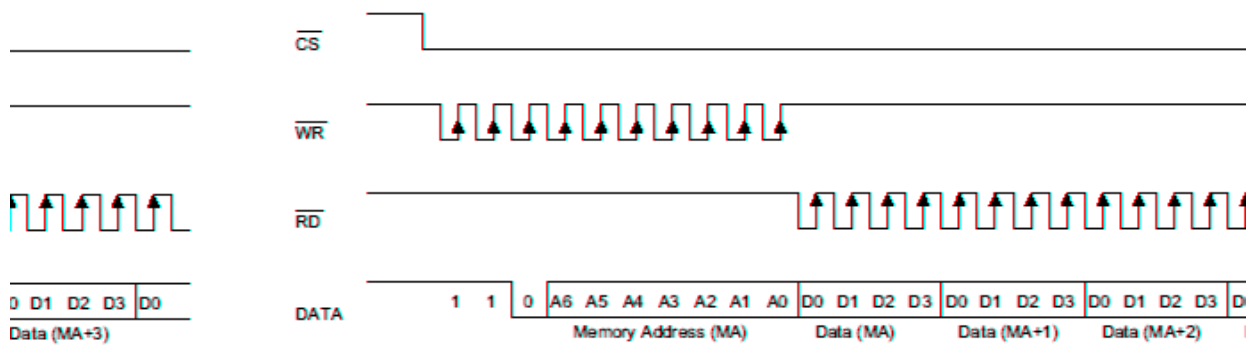




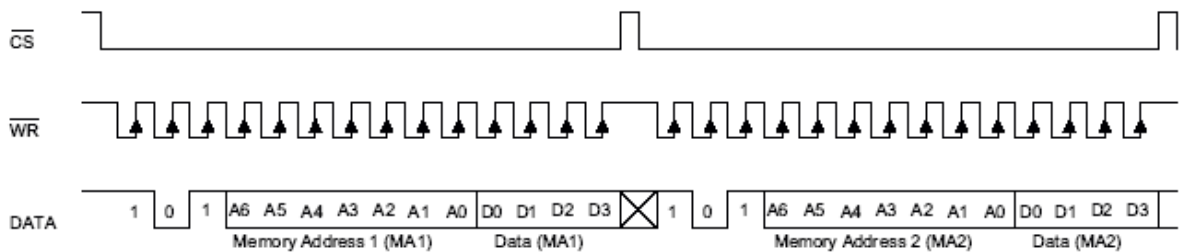
READ mode (command code : 1 1 0)



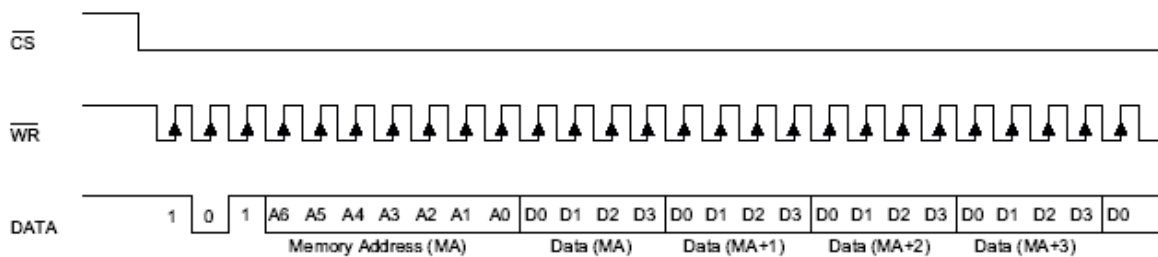
READ mode (successive address reading)



WRITE mode (command code : 1 0 1)



WRITE mode (successive address writing)

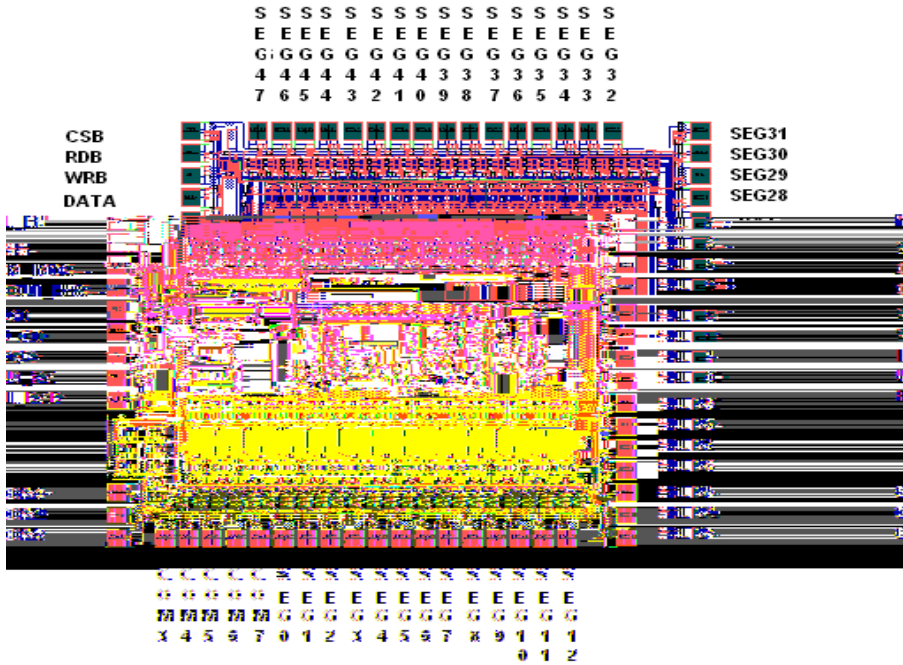


Name	ID	Command Code	D/C	Function	Def.
READ	1 1 0	A6A5A4A3A2A1A0D0D1D2 D3	D	RAM	
WRITE	1 0 1	A6A5A4A3A2A1A0D0D1D2 D3	D	RAM	
READ- MODIFY- WRITE	1 0 1	A6A5A4A3A2A1A0D0D1D2 D3	D	RAM	
SYS DIS	1 0 0	0000-0000-X	C	LCD bias	
SYS EN	1 0 0	0000-0001-X	C		
LCD OFF	1 0 0	0000-0010-X	C	LCD bias	Yes
LCD ON	1 0 0	0000-0011-X	C	LCD bias	



Note:

A5~A0: RAM
D3~D0: RAM
D/C: /
Def.:
110 101 100



92.23 285 05123813 462.23 04 0512388 462.23 6.8 05123813 462.23 04 08

No.	Pin Name	X	Y	No.	Pin Name	X	Y
1	CSB	60.8	2386	38	SEG16	2821.2	444.8
2	RDB	60.8	2258	39	SEG17	2821.2	572.8
3	WRB	60.8	2130	40	SEG18	2821.2	700.8
4	DATA	60.8	2002	41	SEG19	2821.2	828.8
5	EL_EN	60.8	1874	42	SEG20	2821.2	956.8
6	VSS	60.8	1746	43	SEG21	2821.2	1084.8
7	XIN_INDR	60.8	1618	44	SEG22	2821.2	1212.8
8	XOUT_ELR	60.8	1490	45	SEG23	2821.2	1340.8
9	VDD	60.8	1362	46	SEG24	2821.2	1490
10	VLCD	60.8	1234	47	SEG25	2821.2	1618
11	IRQB	60.8	1106	48	SEG26	2821.2	1746
12	IND_BZ	60.8	978	49	SEG27	2821.2	1874
13	EL_BZB	60.8	850	50	SEG28	2821.2	2002
14	COM0	60.8	316.8	51	SEG29	2821.2	2130
15	COM1	60.8	188.8	52	SEG30	2821.2	2258
16	COM2	60.8	60.8	53	SEG31	2821.2	2386
17	COM3	324	60.8	54	SEG32	2342.8	

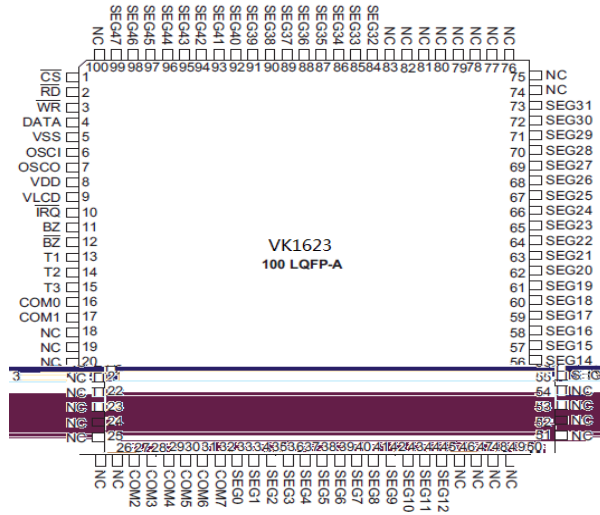


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48x8段位LCD驱动器

35	SEG13	2821.2	60.8				
36	SEG14	2821.2	188.8				
37	SEG15	2821.2	316.8		LOGO	1220	1504

LQFP100



100-pin LQFP (14mm×14mm) Outline Dimensions



VK1623

48x8 段位 LCD 驱动器

Symbol	Dimensions in inch		
	Min.	Nom.	Max.
A	0.626	—	0.634
B	0.547	—	0.555
C	0.626	—	0.634
D	0.547	—	0.555
E	—	0.020	—
F	—	0.008	—
G	0.053	—	0.057
H	—	—	0.063
I	—	0.004	—
J	0.018	—	0.030
K	0.004	—	0.008
α	0°	—	7°

Symbol	Dimensions in mm		
	Min.	Nom.	Max.
A	15.90	—	16.10
B	13.90	—	14.10
C	15.90	—	16.10
D	13.90	—	14.10
E	—	0.50	—
F	—	0.20	—
G	1.35	—	1.45
H	—	—	1.60
I	—	0.10	—
J	0.45	—	0.75
K	0.10	—	0.20
α	0°	—	7°

LCD

	IC 家					
1904	1995uM*1406uM	3000pcs	0.2%	4com*19seg76	DVD	
1621	1596uM*1564uM	1000pcs	0.2%	4com*32seg128	MP3	HT1621
1622	2648uM*2708uM	600pcs	0.2%	8com*32seg256		HT1622
VK1623	2821uM*2386uM	500PCS	0.2%	8com*48seg384		HT1623
1626	2777uM*3387uM	500pcs	0.2%	16com*48seg768		HT1626

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