C46KA586NIHAB Board Specification

Features

- Compatible from VGA up to Full HDresolution(1920x1080) TFT LCD panel.
- Supply single pixel(24bits)or dual pixel(48bits) digital RGB output.
- Support Vertical refresh rate up to 75Hz for VGA~SXGA+(1400x1050) and 60Hz for higher resolution of VESA Standard Timing.
- Support VGA analog standard input signal(15-pin D-Sub connectors).
- Automatic detection of separate synchronize and composite synchronizes of VGA.
- Support Digital Signal input (DVI)
- Support High-Definition Multimedia Interface (HDMI) input .
- RS232 support(Option)
- IR remote control(Option)
- **Used conductive polymer aluminum solid electrolytic capacitors**
- DC 12V input   . (4 pin wafer)
- Operating   temperature : -20 ℃ to +70 ℃ .
- Storage   temperature : -40 ℃ to +70 ℃ .
- RoHS compliant .

1. Support Timing Table

Mode	Resolution	H Freq.(KHz)	V Freq.(Hz)
1	640*350@70	31.469	70.087
2	640*480@60	31.469	59.940
3	640*480@72	37.861	72.809
4	640*480@75	37.500	75.000
5	720*400@70	31.469	70.087
6	800*600@56	35.156	56.250
7	800*600@60	37.879	60.317
8	800*600@72	48.077	72.188
9	800*600@75	46.875	75.00
10	1024*768@60	48.363	60.004
11	1024*768@70	56.476	70.069
12	1024*768@72	58.038	71.918
13	1024*768@75	60.023	75.029
14	1280*70@50	36.91	49.82
15	1280*720@60	44.62	59.81
16	1280*1024@60	63.980	60.000
17	1280*1024@70	74.882	69.853
18	1280*1024@75	79.976	75.025

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19	1360*768@60	47.72	59.799
20	1440*900@60	55.935	59.887
21	1680*1050@60	65.3	60
22	1920*1080@50	56.25	50.00
23	1920*1080@60	66.6	60

2. Connector Description

- Connector List

Connector	Function	Note
CN1	VGA connector	D-15F
CN2	HDMI Connector	
CN4	DVI connector	
CN5	Power connector	ϕ 2.5
J4	Power connector	PH 2.0mm. 4Pin.180°
J5	LCD Panel for LVDS	PH 2.0mm. 32Pin.180°
J6	Key pad connector	PH 2.0mm. 10Pin.180°
J7	Inverter connector	PH 2.0mm. 8Pin.180°
J9	UART Connector	PH 2.0mm. 5Pin.180°
J11	IR Connector	PH 2.0mm. 3Pin.180°
J12	Ext. Amp. connector	PH 2.0mm. 5Pin.180°
JP1	3.3V/5V/ 12V selector	PH 2.5mm. 2x3Pin.180°
JP2	PWM / Analog selector	PH 2.5mm. 3Pin.180°

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Pin definition for connector

J7: Inverter Connector (2.0mm 8 Pin DIP)

Pin	Function	Note
1,2	12V Input	
4,6	GND	
3	Brightness control	0V – 5V Analog or PWM
5	ON/OFF Control	5V ON;0V OFF
7,8	5V Input/Output	

Note : 2.0mm 5 pin connector(Pin1~5) is used for standard 12V input And stand alone Inverter .

2.0mm 3 pin connector (Pin6~8) is used for 2-in-1 power supply with 5V input .

J6: Key Board Connector (2.0 mm 10Pin DIP)

Pin	Function	Note
1	SEL+(RIGHT)	
2	SEL-(LEFT)	
3	AUTO	
4	MENU	
5	POWER	
6	LED-G	
7	LED-R	
8	GND	
9	N.C.	
10	N.C.	

J9: Connector (2.0 mm 5Pin DIP)

Pin	Description	Note
1	V5B	
2	Key2	
3	Tx	
4	Rx	
5	GND	

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J11: Connector (2.0 mm 3Pin DIP)

Pin	Description	Note
1	V5A	
2	IR	
3	GND	

J4: Connector (2.0 mm 4Pin DIP)

Pin	Description	Note
1	DC 12V	
2	GND	
3	GND	
4	DC 12V	

J12: Connector (2.0 mm 5Pin DIP)

Pin	Description	Note
1	L_10W	
2	R_10W	
3	Mute_AMP	
4	STB_AMP	
5	GND	

JP1: Panel B+ 5V / 12V selector (2.5 mm 2*3Pin DIP)

Pin	Description	Note
1- 6	3.3V	
2 - 5	5V	
3 - 4	12V	

JP2: PWM / Analog selector (2.5 mm 3Pin DIP)

Pin	Description	Note
1- 2	PWM	
2 - 3	Analog	

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J5:Panel Connector (2.0 mm 32 Pin DIP)

Pin	Name (8 bit)	
1	VDD	
2	VDD	
3	VDD	
4	VDD	
5	GND	
6	GND	
7	RXEIN3-	
8	RXEIN3+	
9	RXEINC-	
10	RXEINC+	
11	RXEIN2-	
12	RXEIN2+	
13	RXEIN1-	
14	RXEIN1+	
15	RXEIN0	
16	RXEIN0+	
17	RXOIN3-	
18	RXOIN3+	
19	RXOINC-	
20	RXOINC+	
21	RXOIN2-	
22	RXOIN2+	
23	RXOIN1-	
24	RXOIN1+	
25	RXOIN0	
26	RXOIN0+	
27	NC	
28	NC	
29	NC	
30	GND	
31	GND	
32	GND	

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Board Dimension :113mm*95mm