

Mini-ITX Motherboard, Intel® Pentium® M FSB 533/400MHz
CPU, LVDS, SATA, COM, USB 2.0 and TV-out Function

KINO-6612

Quick Installation Guide

Version 1.3

July 14, 2008

Package Contents

KINO-6612 package includes the following items:

- 1 x KINO-6612 Single Board Computer
- 1 x IDE Flat cable 40p/40p/40p
- 1 x IDE Flat cable 44p/44p
- 2 x SATA cable
- 1 x SATA Power cable
- 2 x Daul RS-232 cable
- 1 x I/O Shielding
- 1 x Mini Jumper Pack
- 1 x Utility CD
- 1 x QIG (Quick Installation Guide)



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Specifications

- CPU

Socket 479 Intel® Pentium® M/Celeron® M support 400/533 MHz
FSB up to 2.26GHz

System Chipset: SIS® 661CX+ SIS® 964

- BIOS: AMI BIOS

- System memory: 2x 184-pin DDR 400/333MHz up to 2GB

- Ethernet: Dual RealTek RTL8110SC GbE

- I/O

6 x USB 2.0

2 x SATA-150 with RAID 0,1 function support

2 x IDE

1 x LPT

5 x RS-232

1 x RS-232/422/485

2 x PS/2 for KB/MS

- IrDA: By super I/O

- Super I/O: Winbond W83697HG

- Digital I/O: 8 bit digital I/O, 4-bit input / 4-bit output by super I/O

- Audio: AC'97 codec with Realtek ALC655

- Display: CRT integrated in SIS® 661CX

LVDS (KINO-6612LVDS-R13)

Dual channel 24-bit LVDS / TV-out integrated in SIS® 302LV

- WDT: Software programmable supports 1-255 sec. system reset

- Power Supply: AT / ATX power supply

- Power Consumption:

3.3V@0.74A ; +5V@3.42A; 5VSB@0.4A; +12V@0.34A;;

(Intel Celeron M 1.0GHz / L2:0KB / FSB:400MHz CPU with 1GB
DDR 400MHz RAM)-3D Mark

- Temperature: 0 ~ 60°C(32 ~ 140°F)

- Humidity: 5% ~ 95% non-condensing

- Dimension: 170mm x 170mm

- Weight: GW: 1100g; NW: 400g

Ordering Information

Standard

KINO-6612LVDS-R13

Mini-ITX Motherboard with Socket 479 Intel® Pentium® M / Celeron® M FSB 400/533 MHz CPU, VGA ,LVDS, TV-out, Dual GbE, Audio and SATA

KINO-6612-R13

Mini-ITX Motherboard with Socket 479 Intel® Pentium® M / Celeron® M FSB 400/533 MHz CPU, VGA, Dual GbE, Audio and SATA

KINO-6612LVDS-1GZ-R13

Mini-ITX Motherboard with Intel® Celeron® M 1GHz zero cache CPU, VGA, LVDS, TV-out, Dual GbE, Audio and SATA

KINO-6612-1GZ-R13

Mini-ITX Motherboard with Intel® Celeron® M 1GHz zero cache CPU, VGA, Dual GbE, Audio and SATA

19800-000056-RS: TV-out cable

CF-479B-RS: KINO-6612 Socket 479 Type CPU Cooler

32200-000077-RS: RS-232/422/485 Cable with Bracket

CB-USB02-RS: Dual USB Cable

Jumpers setting and Connectors

J1 : FOR 533FSB CPU	
JP1	DESCRIPTION
OPEN	DEFAULT
CLOSE	FOR 533FSB CPU

J2 : CPU FREQUENCY	
JP2	DESCRIPTION
OPEN	100MHZ
CLOSE	133MHZ

J3 : LCD voltage setup	
PIN	DESCRIPTION
1-2	3V(Default)
3-4	5V
5-6	12V

J4 : Clear CMOS Setup	
J4	DESCRIPTION
1-2	Normal Operation
2-3	Clear CMOS Setup

J6 : CF card setup	
PIN	DESCRIPTION
Open	Slave(Default)
Close	Master

J10/J14: Termination Resister Setting, Support COM3 RS-422/485 1.5KM transmission (1 x2 pin; 2.0mm pitch)	
PIN	Description
Open	Normal (default)
Close	Support 1.5KM Transmission

F_PANEL1: System Panel Connector (2x7pin 2.54mm pitch)					
Function	PIN	Description	Function	PIN	Description
POWER LED	1	LED+	BUZZER	2	Speaker+
	3	NC		4	NC
	5	LED-		6	NC
POWER BUTTON	7	Power Button-		8	Speker-
	9	Power Button+	RESET	10	NC
HDD LED	11	IDE LED+		12	Reset Button+
	13	IDE LED -		14	Reset Button-

LVDS1 : LCD LVDS Interface Connector			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	GND	2	GND
3	A0P	4	A0M
5	A1P	6	A1M
7	A2P	8	A2M
9	CLK1P	10	CLK1M
11	A3P	12	A3M
13	GND	14	GND
15	A4P	16	A4M
17	A5P	18	A5M
19	A6P	20	A6M
21	CLK2P	22	CLK2M
23	A7P	24	A7M
25	GND	26	GND
27	LCD_VDD	28	LCD_VDD
29	LCD_VDD	30	LCD_VDD

INV1 : Inverter Power Connector	
PIN	DESCRIPTION
1	BRIGHTNESS
2	GND
3	12V
4	GND
5	EN_BL

J12 : ATX Power Connector			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	NC	11	NC
2	NC	12	NC
3	GND	13	GND
4	5V	14	PSON
5	GND	15	GND
6	5V	16	GND
7	GND	17	GND
8	PWR OK	18	NC
9	5VSB	19	5V
10	12V	20	5V

DIO1 : GPIO Connector			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	GND	2	5V
3	GPI0	4	GPI1
5	GPI2	6	GPI3
7	GPO0	8	GPO1
9	GPO2	10	GPO3

JUSB1 : USB(4~5) Connector(2*4 Pin header)			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	USBV3L 5V	2	GND
3	USBP4N	4	USBP5P
5	USBP4P	6	USBP5N
7	GND	8	USBV3L 5V

TV1 : TV OUT			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	GND	2	Pb/GREEN
3	GND	4	Pr/RED
5	GND	6	Y/BLUE

COM2 (10-pin Pin Header)			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	DCD2	2	DSR2
3	RX2	4	RTS2
5	TX2	6	CTS2
7	DTR2	8	RI2
9	GND	10	NC

COM3 : COM3(RS-232/422/485) (14-pin Pin Header)			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	DCD3	2	DSR3
3	RX3	4	RTS3
5	TX3	6	CTS3
7	DTR3	8	RI3
9	GND	10	GND
11	TX3+	12	TX3-
13	RX3+	14	RX3-

J5 : RS-422/485 Setup(for COM3)	
PIN	DESCRIPTION
1-3,2-4	RS-422
3-5,4-6	RS-485

J8 : RS-232/422/485 Setup(for COM3)	
PIN	DESCRIPTION
1-2	RS-232(Default)
3-4	RS-422
5-6	RS-485

***For RS-422/485 functionality on COM3 both jumpers J8 and J5 must be set simultaneously.**

COM4 (10-pin Pin Header)			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	DCD4	2	DSR4
3	RX4	4	RTS4
5	TX4	6	CTS4
7	DTR4	8	RI4
9	GND	10	NC

COM5 (10-pin Pin Header)			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	DCD5	2	DSR5
3	RX5	4	RTS5
5	TX5	6	CTS5
7	DTR5	8	RI5
9	GND	10	

COM6 (10-pin Pin Header)			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	DCD6	2	DSR6
3	RX6	4	RTS6
5	TX6	6	CTS6
7	DTR6	8	RI6
9	GND	10	NC

LPT1 : Parallel Port Connector			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	STROBE#	2	DATA 0
3	DATA 1	4	DATA 2
5	DATA 3	6	DATA 4
7	DATA 5	8	DATA 6
9	DATA 7	10	ACKNOWLEDGE
11	BUSY	12	PAPER EMPTY
13	PRINTER SELECT	14	AUTO FORM FEED #
15	ERROR#	16	INITIALIZE
17	PRINTER SELECT LN#	18	GROUND
19	GROUND	20	GROUND
21	GROUND	22	GROUND
23	GROUND	24	N/C
25	GROUND	26	GROUND

COM1 : COM1 Connector(RS-232)			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	DCD1	6	DSR1
2	RX1	7	RTS1
3	TX1	8	CTS1
4	DTR1	9	RI1
5	GND	10	GND

VGA1 : CRT(15-pin Female Connector)			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	RED	9	NC
2	GREEN	10	GROUND
3	BLUE	11	NC
4	NC	12	DDCDAT
5	GROUND	13	HSYNC
6	GROUND	14	VSYNC
7	GROUND	15	DDCCLK
8	GROUND		

IR1: IR Interface	
PIN	DESCRIPTION
1	5V
2	NC
3	IRRX
4	GND
5	IRTX

FAN1 ,FAN2 : Fan Connector	
PIN	DESCRIPTION
1	Fan Speed Detect
2	+12V
3	GND

IDE1 : Primary IDE Interface Connector			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	RESET#	2	GROUND
3	DATA 7	4	DATA 8
5	DATA 6	6	DATA 9
7	DATA 5	8	DATA 10
9	DATA 4	10	DATA 11
11	DATA 3	12	DATA 12
13	DATA 2	14	DATA 13
15	DATA 1	16	DATA 14
17	DATA 0	18	DATA 15
19	GROUND	20	N/C
21	IDE DRQ	22	GROUND
23	IOW#	24	GROUND
25	IOR#	26	GROUND
27	IDE CHRDY	28	GROUND
29	IDE DACK	30	GROUND-DEFAULT
31	INTERRUPT	32	N/C
33	SA1	34	CBLIDA
35	SA0	36	SA2
37	HDC CS0#	38	HDC CS1#
39	HDD ACTIVE#	40	GROUND

IDE2 : Secondary IDE Interface Connector			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	RESET#	2	GROUND
3	DATA 7	4	DATA 8
5	DATA 6	6	DATA 9
7	DATA 5	8	DATA 10
9	DATA 4	10	DATA 11
11	DATA 3	12	DATA 12
13	DATA 2	14	DATA 13
15	DATA 1	16	DATA 14
17	DATA 0	18	DATA 15
19	GROUND	20	N/C
21	IDE DRQ	22	GROUND
23	IOW#	24	GROUND
25	IOR#	26	GROUND
27	IDE CHRDY	28	GROUND
29	IDE DACK	30	GROUND-DEFAULT
31	INTERRUPT	32	N/C
33	SA1	34	N/C
35	SA0	36	SA2
37	HDC CS0#	38	HDC CS1#
39	HDD ACTIVE#	40	GROUND
41	VCC	42	VCC
43	GROUND	44	N/C

Board Layout: Jumper and Connector Locations



