

**3.5" SBC with ULV Intel® Celeron® 400/650MHz CPU, Audio,
VGA/LCD and LAN**

WAFER-9371A

Quick Installation Guide

Version 1.1

Oct 30 2007

Package Contents

WAFER-9371A package includes the following items:

- 1 x WAFER-9371A single board computer
- 1 x Mini Jumper Pack
- 1 x IDE cable
- 1 x RS-232/422/485 cable
- 1 x KB/MS Y cable
- 1 x USB cable
- 1 x Audio cable
- 1 x Utility CD
- 1 x QIG (Quick Installation Guide)



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Specifications

- CPU: ULV Intel[®] Celeron[®] 400/ 650MHz
- System Chipset: VIA[®] VT8606 + VIA[®] VT82C686B
- BIOS: AMI BIOS
- System Memory
 - 1 x 144-Pin SO-DIMM PC 100/133MHz SDRAM up to 512MB
- Ethernet: 10/100Mbps Realtek 8100C Ethernet chipsets
- I/O Interface
 - 2 x USB 1.1
 - 1 x IDE
 - 1 x CF Type II
 - 1 x PS/2 for KB/MS
 - 1 x RS-232
 - 1 x RS-232/422/485
 - 1 x LPT
- Expansion: 1 x PC/104 (ISA Bus)
- Audio: AC'97 codec Realtek ALC655
- IrDA: 1 x IrDA by pin hearer
- Display Interface:
 - VGA Integrated in VIA[®] VT8606
 - 18-bit Dual channel LVDS interface
- WDT: Software programmable supports 1~255 sec. system reset
- Power Supply: AT/ATX Power
- Power Consumption:
 - 5V@2.01A
 - (Celeron[®] 400MHz with PC133 256MB RAM)
- Temperature: 0°C ~ +60°C
- Humidity: 0% ~ 90%, non-condensing
- Dimension: 146mm x 102mm
- Weight: GW: 670g / NW:240g

Ordering Information

WAFER-9371A-R11:

3.5 SBC with ULV Intel® Celeron® 400MHz CPU, VGA/LCD, Ethernet and Audio

WAFER-9371A-650-R11:

3.5 SBC with ULV Intel® Celeron® 650MHz CPU, VGA/LCD, Ethernet and Audio

WAFER-9371A-CENET050:

3.5 SBC with ULV Intel® Celeron® 400MHz CPU, VGA/LCD, LVDS, Ethernet, Audio, IFM 32MB, Window® CE5.0 Image

WAFER-9371A-WINXPE:

3.5 SBC with ULV Intel® Celeron® 400MHz CPU, VGA/LCD, LVDS, Ethernet, Audio, IFM 512MB, Window® XPE Image

32200-015100-RS: LPT Cable

Jumpers setting and Connectors

JP1: Clear CMOS Setup (Default 1-2)

JP1	DESCRIPTION
1-2	Normal Operation
2-3	Clear CMOS Setup

JP4: Select RS-232 or RS-485/RS-422 on COM2 (Default 1-2)

JP4	DESCRIPTION
1-3	RS-232
3-5,2-4	RS-422
3-5,4-6	RS-485

JP3: Select RESET or IRQ11 on Watch dog timing function (Default 1-2)

JP3	DESCRIPTION
1-2	RESET
3-4	IRQ11

CN3: POWER 4P CONNECTOR

PIN	DESCRIPTION
1	+5V
2	GROUND
3	GROUND
4	+12V

COM2: 2*7 14 PIN 2.0MM CONNECTOR

PIN	DESCRIPTION	PIN	DESCRIPTION
1	DCD2	2	DSR2
3	RX2	4	RTS2
5	TX2	6	CTS2
7	DTR2	8	RI2
9	GND	10	GND
11	TX2+	12	TX2-
13	RX2+	14	RX2-

FAN1: FAN CONNECTOR

PIN	DESCRIPTION
1	Fan Speed Detect
2	+5V
3	GND

CN2: CF CARD			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	GROUND	26	VCC-IN CHECK1
2	DATA 3	27	DATA 11
3	DATA 4	28	DATA 12
4	DATA 5	29	DATA 13
5	DATA 6	30	DATA 14
6	DATA 7	31	DATA 15
7	HDC_CS0#	32	HDC_CS1
8	N/C	33	N/C
9	GROUND	34	IOR#
10	N/C	35	IOW#
11	N/C	36	VCC_COM
12	N/C	37	IRQ15
13	VCC_COM	38	VCC_COM
14	N/C	39	CSEL
15	N/C	40	N/C
16	N/C	41	HDD_RESET
17	N/C	42	IORDY
18	SA2	43	SDREQ
19	SA1	44	SDACK#
20	SA0	45	HDD_ACTIVE#
21	DATA 0	46	66DET
22	DATA 1	47	DATA 8
23	DATA 2	48	DATA 9
24	N/C	49	DATA 10
25	VCC-IN CHECK2	50	GROUND

FDD1: Floppy 2*13 PIN Header 2MM CONNECTOR			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	VCC	2	INDEX#
3	VCC	4	DISKSEL0#
5	VCC	6	DSKCHG#
7	NC	8	NC
9	NC	10	MTR0#
11	NC	12	DIR#
13	NC	14	STEP#
15	GROUND	16	WDATA#
17	GROUND	18	WGATE#
19	GROUND	20	TRAK0#
21	GROUND	22	WRTPRT#
23	GROUND	24	RDATA#
25	GROUND	26	HDSEL#

FLAT1: Flat panel display connector			
PIN	Description	PIN	Description
1	LCD5V	2	LCD5V
3	GROUND	4	GROUND
5	LCD3V	6	LCD3V
7	NC	8	GROUND
9	FPD0	10	FPD1
11	FPD2	12	FPD3
13	FPD4	14	FPD5
15	FPD6	16	FPD7
17	FPD8	18	FPD9
19	FPD10	20	FPD11
21	FPD12	22	FPD13
23	FPD14	24	FPD15
25	FPD16	26	FPD17
27	FPD18	28	FPD19
29	FPD20	30	FPD21
31	FPD22	32	FPD23
33	GROUND	34	GROUND
35	FPCLK	36	FPVS
37	FPDEN	38	FPHS
39	NC	40	ENVEE

FLAT2: Extension flat panel connector			
PIN	Description	PIN	Description
1	GROUND	2	GROUND
3	FPD24	4	FPD25
5	FPD26	6	FPD27
7	FPD28	8	FPD29
9	FPD30	10	FPD31
11	FPD32	12	FPD33
13	FPD34	14	FPD35
15	GROUND	16	GROUND
17	NC	18	NC
19	NC	20	NC

LVDS1: LVDS LCD Panel TWO CHANNEL 36BIT CONNECTOR			
PIN	CH0 Description	PIN	CH1 Description
1	GND	2	GND
3	LVDS_Y0+	4	LVDS_Z0+
5	LVDS_Y0-	6	LVDS_Z0-
7	LVDS_Y1+	8	LVDS_Z1+
9	LVDS_Y1-	10	LVDS_Z1-
11	LVDS_Y2+	12	LVDS_Z2+
13	LVDS_Y2-	14	LVDS_Z2-
15	LVDS_YCLK+	16	LVDS_ZCLK+
17	LVDS_YCLK-	18	LVDS_ZCLK-
19	LCD3V	20	LCD3V

IDE0: PRIMARY IDE 2.54MM 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

IR1: IR 1*5 2.54MM CONNECTOR	
PIN	DESCRIPTION
1	VCC5
2	NC
3	IRRX
4	GROUND
5	IRTX

IVTC: LCD Panel Inverter backlight Control Connector 1*5 Wafer 2mm	
PIN	DESCRIPTION
1	VCC12
2	GROUND
3	VEEON
4	BLADJ
5	VCC5

LPT1: LPT PORT 2*13 PIN HEADER 2MM CONNECTOR			
PIN	DESCRIPTION	PIN	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	GROUND
25	GROUND	26	NC

PWRON: ATX power on/off connector	
PIN	DESCRIPTION
1	PWR_SW
2	GROUND

SBVCC: ATX Power Feature Connector 1*3 WAFER 2mm CONNECTOR	
PIN	DESCRIPTION
1	5VSB
2	GROUND
3	PSON

AUDIO1: AUDIO 2*6 PIN HEADER 2.0MM CONNECTOR			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	Line out R	2	LINEIN R
3	GND	4	GND
5	Line out L	6	LINEIN L
7	GND	8	GND
9	MIC IN	10	NC

USB01: USB0 / 1, 2*5 9PIN HEADER 2.0MM CONNECTOR			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	USBVCC	2	USBVCC
3	USB0-	4	USB1-
5	USB0+	6	USB1+
7	GND	8	GND
9	GND		

-VCC: Peripheral Power Connector	
PIN	DESCRIPTION
1	-5V
2	GROUND
3	-12V

Board Layout: Jumper and Connector Locations



