

WTM-EV6 Board

supports Intel ATOM Processor

with POWER DC/ 2*VGA/ HDMI/ 24bit LVDS/ 2*SATA/1*RT8111DL

LAN/6*COM/1*DDR3/1*SIM/1*MINI-PCIE

User Manual

Manual Rev.: 2.0

Book Number: G4L-2011.03.15

Author chenyong

Copyright 2011

All Rights Reserved.

Manual's first edition:

For the purpose of improving reliability, design and function, the information in this document is subject to change without prior notice and does not represent a commitment on the part of the manufacturer.

In no event will the manufacturer be liable for direct, indirect, special, incidental, or consequential damages arising out of the use or inability to use the product or documentation, even if advised of the possibility of such damages.

This document contains proprietary information protected by copyright. All rights are reserved. No part of this manual may be reproduced by any mechanical, electronic, or other means in any form without prior written permission of the manufacturer.

Trademarks

WTM-EV6 is a registered trademarks of WTM; IBM PC is a registered trademark of the International Business Machines Corporation; Pentium is a registered trademark of Intel Technologies Inc; Award is a registered trademark of Award Software International Inc; other product names mentioned herein are used for identification purposes only and may be trademarks and/or registered trademarks of their respective companies.

Specifications

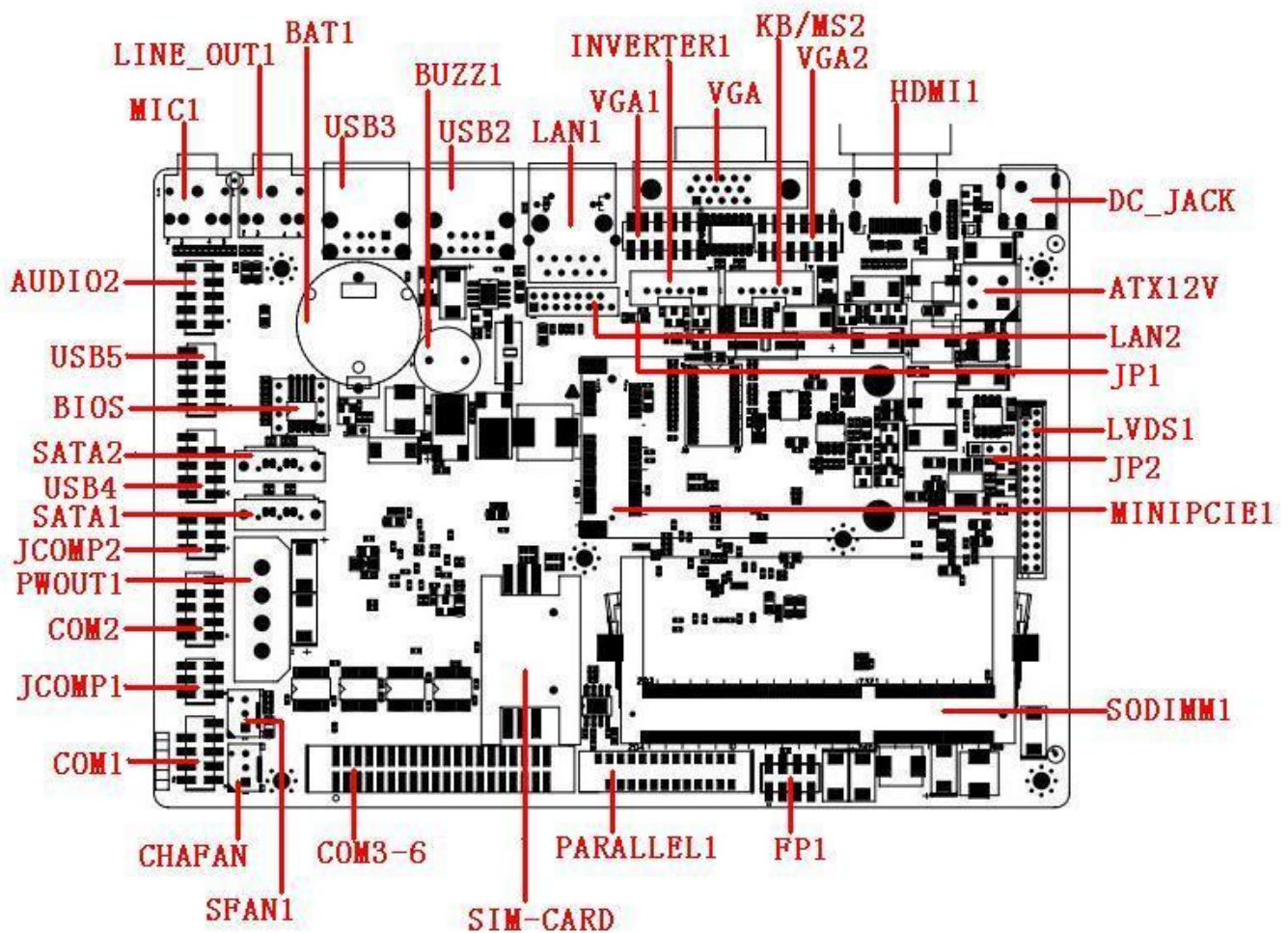
CPU	INTEL® Atom Single-Core Processor D425 CPU (45nm, 1.80GHz, 512KB L2 Cache) INTEL® Atom Dual-Core Processor D525 (45nm, 1.80GHz, 1024MB L2 Cache)
Chipset	INTEL® Atom D525/D425 + NM10
Memory	1 * 204-pin DIMM Sockets for un-buffered Single Channel DDR3 800/1066/1333 SDRAM up to 4 GB
Expansion Slots	1 * Mini PCI-E socket , 1 * SIM
Storage	2 * Serial ATA2 3Gb/s connectors
Audio	Realtek ALC662 6-Channel HD Audio CODEC
Ethernet LAN	1 * RTL8111DL LAN
HDMI	1 * HDMI
LVDS	Onboard 24-bit single channel LVDS connector
USB	Embedded 7 * USB 2.0/1.1
Special Features	Intel Pineview Processor Support DC FAN Support CPU Smart Fan
Rear Panel I/O	DC_JACK 12V 5A in 1 * VGA port 1 * RJ-45 port 4 * USB 2.0/1.1 ports LINE_OUT MIC1
Internal I/O	3 USB 2.0 ports 1 * 12V DC in 2 * NB / Chassis Fan connectors; 1 * LVDS header 2 * VGA header 1 * PS/2 Mouse & 1 * Keyboard connector header 1 * AUDIO header 1 * COM3-6(RS232) connector header 1 * COM1-2 P9 Voltage connecto 1 * MINI PCI-E connector 1 * PWOUT Voltage OUT 1 * PARALLEL1 1 * FP1
BIOS	AMI 8MB DPI Flash ROM
Functional	ATM, Automation, medical Equipment, Security, Networking, POS, General Application, Gaming Machine, Transportation
Packing	Color Box Dimension 170(W) x 140(D) x 45(H)mm
Certificate	CE, FCC, RoHS
Temperature	Operating within 0~40 centigrade (Suggest to use system FAN) Storage within -20-85 centigrade
Form Factor	EPIC Form Factor (165mm x 115mm x 27mm)

Package Contents

Check if the following items are included in the package.

- 1 * WTM-EV6 board
- 1 * Quick Manual
- 1 * Software Utility CD

Locations(TopSide)



Connector and Jumper Setting

1)JBAT 1: CMOS Data retention/clear

A diagram of a 2-pin jumper labeled 'JBAT 1'.

STATUS	SETTING
Open	CMOS data retention. (Default).
Short	CMOS data Clear

2)ATX 12V_IN: External +12V DC Power input connector

A diagram of a 4-pin ATX 12V_IN connector.

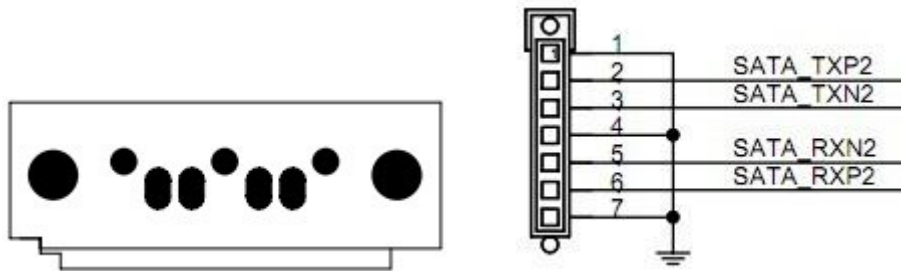
PIN	SETTING
1	GND
2	GND
3	+12V
4	+12V

3)USB4 USB5: Internal USB2.0 connector

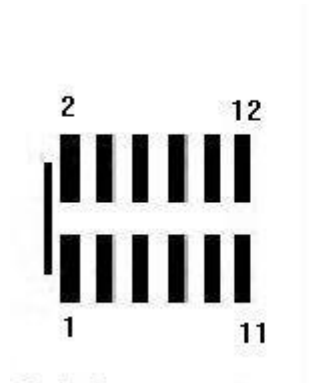
A diagram of a 10-pin internal USB2.0 connector.

PIN	SETTING	PIN	SETTING
1	+5V	2	+5V
3	USB3-	4	USB4-
5	USB3+	6	USB4+
7	GND	8	GND
9	GND	10	GND

4)SATA1/SATA2: SATA device connector #1 #2 #3 #4

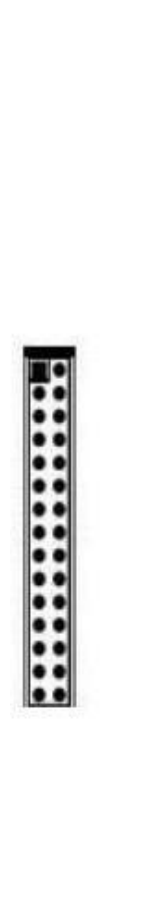


5) VGA1/VGA2: Extra VGA Signal connector



PIN	SETTING	PIN	SETTING
1	RED	2	GND
3	GREEN	4	GND
5	BLUE	6	GND
7	HSYNC	8	GND
9	VSYNC	10	VCC 5V
11	DDC_CLK	12	DDC_DAT

6) LVDS1: LCD panel (Onboard 18-bit single channel LVDS)connector

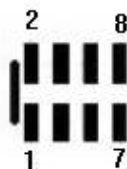


PIN	SETTING	PIN	SETTING
1	VCC	2	VCC
3	VCC-	4	GND
5	GND	6	GND
7	RX00-	8	RX00+
9	RX01-	10	RX01+
11	RX02-	12	RX02+
13	GND	14	GND
15	RX0C-	16	RX0C+
17	RX03-	18	RX03+
19	RXE0-	20	RXE0+
21	RXE1-	22	RXE1+
23	RXE2-	24	RXE2+
25	GND	26	GND
27	RXEC-	28	RXEC+
29	RXE3-	30	RXE3+

E: Even for dual channel.

O: Odd for single channel.

7)FP1: Front panel connector



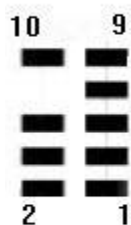
STATUS	SETTING
1-3	HD_LED.
2-4	PW_LED
5-7	Reset
6-8	PW_BN

8)JCOMP1/JCOMP2: COM 9pin 5V or 12V selection



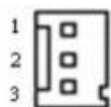
STATUS	SETTING
1-2	RS232. (Default)
3-4	12V.
5-6	5V.

9)AUDIO 2: 5.1channels Audio signal connector



PIN	SETTING	PIN	SETTING
1	MIC2_L	2	NC
3	MIC2_R	4	GPIO
5	LINEOUT2-R	6	GND
7	SENSE_B	8	
9	LINEOUT2-L	10	GND

10)CHAFAAN CPUFAN: System DC fan connector



PIN	SETTING
1	GND
2	+12V
3	Fan speed data

ON/OFF controlled by
system temperature settir
of BIOS.

11)JP1: INVERTER voltage selection



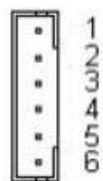
1-2	12V
3-4	5V

12)JP2: LCD panel driving voltage selection



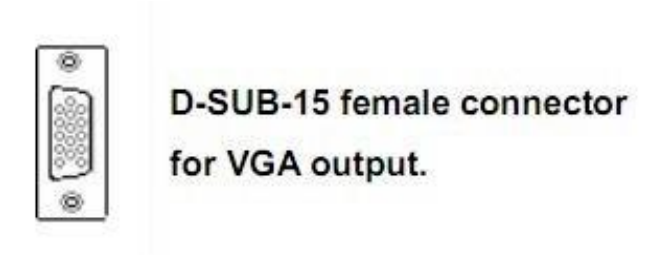
STATUS	SETTING
2-3	+3.3V for LCD panel. (Default).
1-2	+5V for LCD panel.

13)INVERTER1: LCD panel inverter

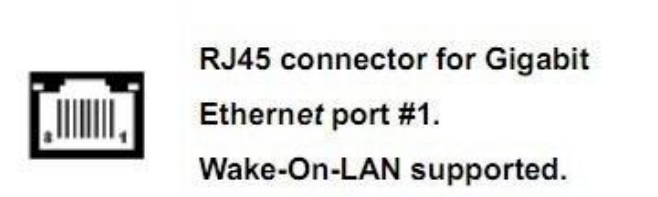


PIN	SETTING
1	GND
2	GND
3	BKL_CTL
4	BKL EN
5	12V
6	12V

14)VGA: D-SUB-15 female connector for VGA output



15)LAN1: RJ45 connector for Ethernet port #1 #2



16)COM1/COM2: COM connector

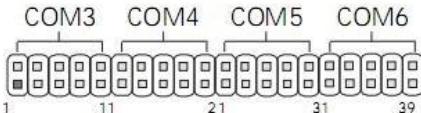
COM2 插针 (5*2Pin 2.54mm)


COM2

针脚	定义	针脚	定义
1	-NDCD	2	SIN
3	SOUT	4	DTR
5	GND	6	DSR
7	RTS	8	CTS
9	RI	10	N/A

17)COM3-6: COM3-6 connector

COM3-COM6 口 RS232 插针 (20*2Pin 2.0mm)


COM3-6

COM3		COM4		COM5		COM6	
针脚	定义	针脚	定义	针脚	定义	针脚	定义
1	-NDCD	11	-NDCD	21	-NDCD	31	-NDCD
2	SIN*	12	SIN	22	SIN	32	SIN
3	SOUT*	13	SOUT	23	SOUT	33	SOUT
4	DTR	14	DTR	24	DTR	34	DTR
5	GND	15	GND	25	GND	35	GND
6	DSR	16	DSR	26	DSR	36	DSR
7	RTS	17	RTS	27	RTS	37	RTS
8	CTS*	18	CTS	28	CTS	38	CTS
9	RI*	19	RI	29	RI	39	RI
10	GND	20	GND	30	GND	40	GND

BIOS SETTING

This chapter describes the BIOS menu displays and explains how to perform common tasks needed to get the system up and running. It also gives detailed explanation of the elements found in each of the BIOS menu displays. The following topics are covered:

Main Setup

Advanced Setup

Power Setup

PnP/PCI Setup

Peripherals Setup

PC Health Setup

Boot Setup

Exit Setup

Once you enter the BIOS CMOS setup utility, you can use the control keys that listed at the bottom of the menu to select the desired value in each item.