PCM-5330

Embedded STPC ATLAS

133 MHz processor

with SVGA/LCD Interface
PC/104 CPU Module

Copyright Notice

Acknowledgments

- STPC® is a trademark of STMicroelectronics.

- Award is a trademark of Award Software International, Inc.

- Microsoft Windows® is a registered trademark of Microsoft Corp.

- CompactFlash™ is a trademark of the Compact Flash Association.

- PS/2 and VGA are trademarks of International Business Machines Corporation.

All other product names or trademarks are properties of their respective owners.

Packing List

Before you begin installing your card, please make sure that the following materials have been shipped:

- 1 PCM-5330 PC/104 CPU Module

- 1 Quick Installation Guide

- 1 CD-ROM for manual (in PDF format), drivers and utility

- 1 2mm to 2.54mm IDE flat cable, 44-pin to 40-pin

- 1 PS/2 keyboard & mouse cable

- 1 Serial port cables

- 1 Parallel cable

- 1 FDD flat cable

- 1 VGA flat cable

- 1 USB cable

- 1 Ethernet RJ-45 connector Conversion (for specific version only)

If any of these items are missing or damaged, contact your distributor or sales representative immediately.

Contents

Chapter 3　Award BIOS Setup

Chapter 4　Driver Installation

Appendix A　Programming the Watchdog Timer.........A-1

Chapter

1

General Information

PC/104 Module	PCM-5330

1.1 Features

- **STPC® ATLAS 133MHz processor**

- **Fanless Design**

- **Onboard 64MB SDRAM**

- **USB 1.1 compatible, support 2 USB ports**

- **Both CRT and flat panel simultaneously display**

- **10/100Mbps Fast Ethernet**

- **18-bit TFT LCD**

1.2 Specifications

System

- CPU   Embedded STPC ATLAS 133MHz processor

- Chipset   STPC® ATLAS 133MHz processor

- IO Chipset   STPC® ATLAS 133MHz processor, Winbond W83977

- BIOS   AWARD 256KB Flash ROM

- System Memory   Onboard 64MB SDRAM (32/128MB option, SDRAM clock up to 100MHz)

- Ethernet (optional)   ADMtek AN983B, 10/100Mbps Ethernet

- Enhanced IDE Interface   Supports up to two EIDE devices. BIOS auto-detect, PIO Mode 3 or Mode 4 transfer rate up to 22MB/sec

- FDD Interface
- USB Ports
- Serial Ports
- Parallel port
- Keyboard/mouse connector
- Watchdog Timer
- SSD
- Digital I/O
- IR Interface

Supports 3.5" FDD

USB 1.1 compatible, supports up to two USB devices

3 serial RS-232 ports, one serial RS-232/422/485 port

One parallel port, supports SPP/EPP/ECP mode

Mini-Din connector supports standard PS/2 keyboard and mouse

Can generate a system reset, software selectable time-out interval. (15sec ~ 127min 15sec, 30sec/step)

Type I CompactFlash™ socket

Provides 16 digital I/O channels for general purpose use

Supports one IrDA Tx/Rx header

Display

- Display Memory
- Display Type
- Flat Panel Display Mode
- CRT Display Mode

UMA architecture, share system memory up to 4MB

Supports CRT and TFT LCDs. Able to display both CRT and Flat Panel simultaneously

Supports 9/12/18-bit TFT flat panels with resolution up to 800 x 600

Interlaced or non-interlaced CRT monitor resolution up to 1024 x 768 x 75Hz@24bpp

◎ Please note the default BIOS supports "CRT and LCD (640x480)" while users also have two other options of display support mode:

- CRT and LCD (800x600)

- CRT only

Please refer to AAEON web (www.aaeon.com.tw) to download the latest support BIOS.

Expansion Interface

- PC/104 Connector   One 16-bit 104 pin connector onboard for PC/104 module expansion

Mechanical and Environment

- Board Dimension   96mm x 90mm (3.77" x 3.54")

  (L x W)

- Weight   0.6lb (0.25kg)

- Operating Temperature   0 ~60 (32 ~140)

- Operating Humidity   0% to 90% relative humidity, non-condensing

- Power Supply Voltage   +5V ± 5%

Chapter

2

Quick Installation Guide

OZONE SAFE
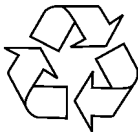
RECYCLABLE

2.1 Safety Precautions

Warning!

Always completely disconnect the power cord from your board whenever you are working on it. Do not make connections while the power is on, because sensitive electronic components can be damaged by a sudden rush of power.

Caution!

Always ground yourself to remove any static charge before touching the board. Modern electronic devices are very sensitive to static electric charges. Use a grounding wrist strap at all times. Place all electronic components on a static-dissipative surface or in a static-shielded bag when they are not in the chassis

2.2 Location of Connectors and Jumpers

2.2.1 Locating connectors and jumpers (component side)
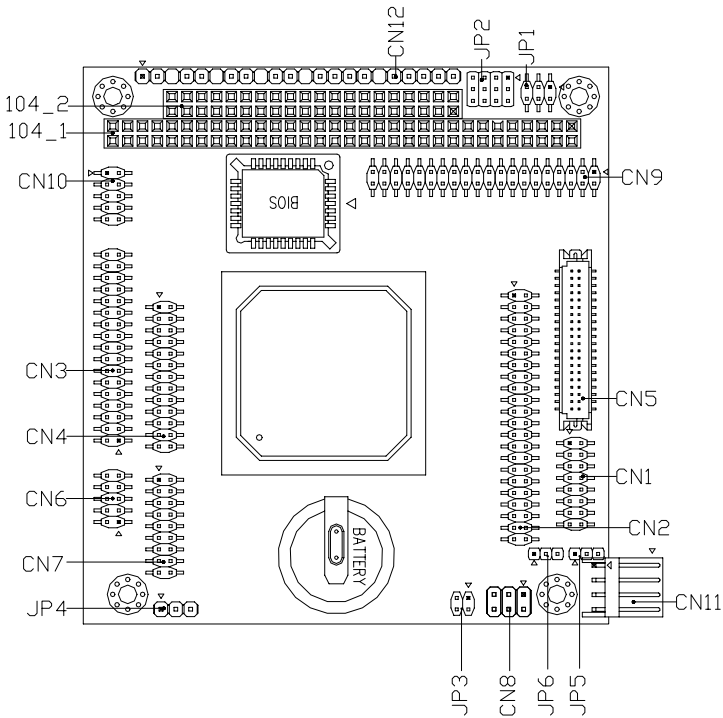
2.2.2   Locating connectors and jumpers (soldering side)

CF D1
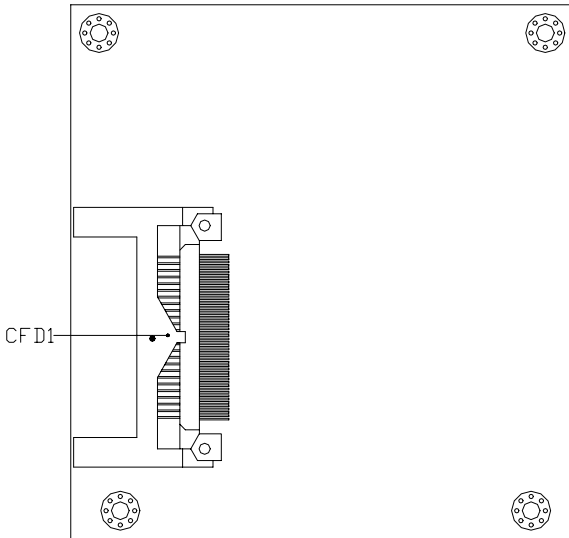
2.3 Mechanical Drawing

2.3.1 Mechanical drawing (component side)
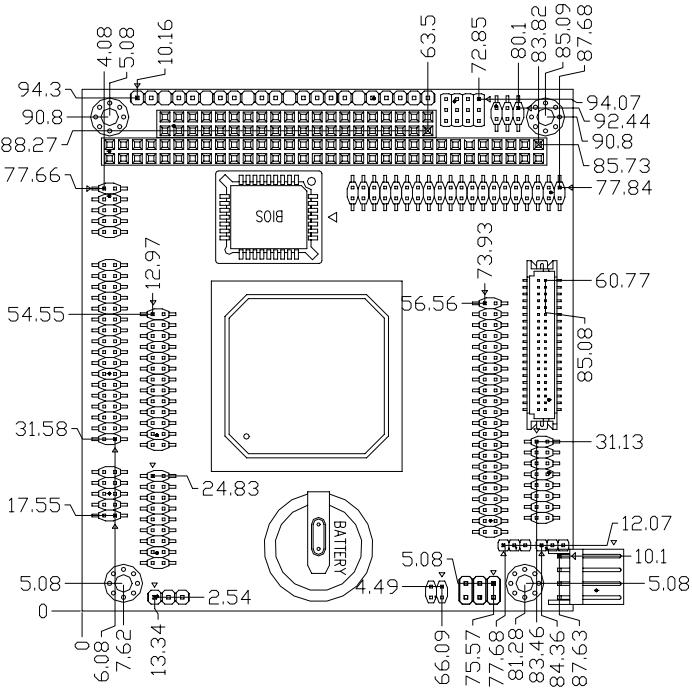
2.3.2   Mechanical drawing (soldering side)
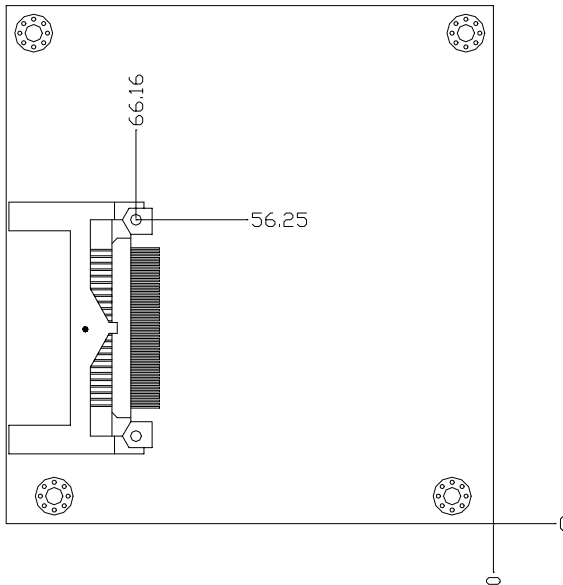
2.4 List of Jumpers

The number of jumpers ideally allow users to manually customize the system configurations to meet their application requirements.

The following chart consists the list of each jumper function:

Jumpers

Label	Function
JP1	COM2 RS-232/422/485 Selection
JP2	COM2 RS-232/422/485 Selection
JP3	COM1/2 Enable/Disable Selection
JP4	Clear CMOS
JP5	LCD Voltage Selection
JP6	TTL_LCD Clock Selection

2.5 List of Connectors

The board has a number of connectors that allow you to configure your system to suit your application. Connectors on board link to external devices such as hard disk drives, keyboard, or floppy drives.

The table below shows the function of each of the board's connectors:

Connectors

Label	Function
CN1	VGA Display Connector
CN2	IDE Connector
CN3	Floppy Connector
CN4	LPT Port Connector
CN5	TTL_LCD Connector
CN6	USB 1/USB 2 Connector
CN7	GPIO Connector
CN8	PS2 Keyboard/Mouse Connector
CN9	Serial Port Connector
CN10	10/100Base-T Ethernet Connector
CN11	Power Connector
CN12	Front Panel Connector
CFD1	CompactFlash™ Slot
104_1/2	PC/104

2.6 Setting Jumpers

You configure your card to match the needs of your application by setting jumpers. A jumper is the simplest kind of electric switch. It consists of two metal pins and a small metal clip (often protected by a plastic cover) that slides over the pins to connect them. To "close" a jumper you connect the pins with the clip.

To "open" a jumper you remove the clip. Sometimes a jumper will have three pins, labeled 1, 2 and 3. In this case you would connect either pins 1 and 2 or 2 and 3.

Open   **Closed**   **Closed 2-3**
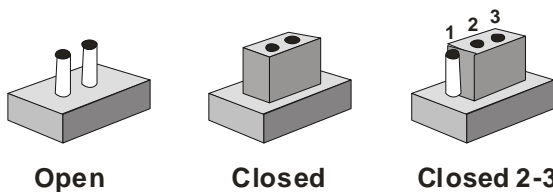
A pair of needle-nose pliers may be helpful when working with jumpers.

If you have any doubts about the best hardware configuration for your application, contact your local distributor or sales representative before you make any changes.

Generally, you simply need a standard cable to make most connections.

2.7   COM2 RS-232/422/485 Selection

(JP1 & JP2)

The COM2 port can be selected as RS-232, RS-422 or RS-485 by setting JP1, JP2 and JP3. The following chart shows the jumper setting.

JP2	JP1	Function
1-2, 4-5, 7-8, 10-11	1-2	RS-232 *
2-3, 5-6, 8-9, 11-12	3-4	RS-422
2-3, 5-6, 8-9, 11-12	5-6	RS-485

* Default

2.8 COM1/2 Enable/Disable Selection (JP3)

JP3	Function	JP3	Function
1-2(COM1) 3-4(COM2) Close	Disable	1-2(COM1) 3-4(COM2) Open *	Enable

*Default

2.9 Clear CMOS (JP4)

JP4	Function	JP4	Function
1-2*	Protected	2-3	Clear

* Default

2.10 LCD Voltage Selection (JP5)

JP5	Function	JP5	Function
1-2*	+3.3V	2-3	+5V

* Default

2.11 TTL-LCD Clock Selection (JP6)

JP6	Function	JP6	Function
1-2	Reverse CLK	2-3*	CLK

* Default

2.12 VGA Display Connector (CN1)

Pin	Signal	Pin	Signal
1	RED	2	+5V
3	GREEN	4	GND
5	BLUE	6	N.C
7	N.C	8	DDCDAT
9	GND	10	HSYNC
11	GND	12	VSYNC
13	GND	14	DDCCLK

15	GND	16	GND

2.13 IDE Connector (CN2)

Pin	Signal	Pin	Signal
1	IDE RESET	2	GND
3	DATA7	4	DATA8
5	DATA6	6	DATA9
7	DATA5	8	DATA10
9	DATA4	10	DATA11
11	DATA3	12	DATA12
13	DATA2	14	DATA13
15	DATA1	16	DATA14
17	DATA0	18	DATA15
19	GND	20	N.C
21	REQ	22	GND
23	IO WRITE	24	GND
25	IO READ	26	GND
27	IO READY	28	GND
29	DACK	30	GND
31	IRQ14	32	N.C
33	ADDR1	34	UDMA DETECT
35	ADDR0	36	ADDR2
37	CS#1	38	CS#3

39	LED	40	GND
41	+5V	42	+5V
43	GND	44	N.C

2.14 Floppy Connector (CN3)

Pin	Signal	Pin	Signal
1	GND	2	#REDWC
3	GND	4	N.C
5	GND	6	#DS1
7	GND	8	#INDEX
9	GND	10	#MOTOR A
11	GND	12	#DRIVE SELECT B
13	GND	14	#DRIVE SELECT A
15	GND	16	#MOTOR B
17	GND	18	#DIR
19	GND	20	#STEP
21	GND	22	#WRITE DATA
23	GND	24	#WRITE GATE
25	GND	26	#TRACK0
27	GND	28	#WRITE PROTECT
29	GND	30	#READ DATA
31	GND	32	#SIDE1
33	GND	34	#DISK CHANGE

2.15 LPT Port Connector (CN4)

Pin	Signal	Pin	Signal
1	#STROBE	2	#AFD
3	DATA0	4	#ERROR
5	DATA1	6	#INIT
7	DATA2	8	#SLIN
9	DATA3	10	GND
11	DATA4	12	GND
13	DATA5	14	GND
15	DATA6	16	GND
17	DATA7	18	GND
19	#ACK	20	GND
21	BUSY	22	GND
23	PE	24	GND
25	SELECT	26	N.C

2.16 TTL_LCD Connector (CN5)

Pin	Signal	Pin	Signal
1	+5V	2	+5V
3	GND	4	GND
5	+3.3V	6	+3.3V
7	ENBKL	8	GND
9	BLUE0	10	BLUE1
11	BLUE2	12	BLUE3
13	BLUE4	14	BLUE5
15	BLUE6	16	BLUE7
17	GREEN0	18	GREEN1
19	GREEN2	20	GREEN3
21	GREEN4	22	GREEN5
23	GREEN6	24	GREEN7
25	RED0	26	RED1
27	RED2	28	RED3
29	RED4	30	RED5
31	RED6	32	RED7
33	GND	34	GND
35	DOT_CLOCK	36	VSYNC
37	DE	38	HSYNC
39	N.C	40	ENAVEE

2.17 USB1 / USB2 Connector (CN6)

Pin	Signal	Pin	Signal
1	+5V	2	GND
3	USBD1-	4	GND
5	USBD1+	6	USBD2+
7	GND	8	USBD2-
9	GND	10	+5V

2.18 GPIO Connector (CN7)

Master Address is 326 with control pin 1, 3, 5, ~, 15
Slave Address is 32E with control pin 2, 4, 6, ~, 16

Pin	Signal	Pin	Signal
1	GPIO0	2	GPIO8
3	GPIO1	4	GPIO9
5	GPIO2	6	GPIO10
7	GPIO3	8	GPIO11
9	GPIO4	10	GPIO12
11	GPIO5	12	GPIO13
13	GPIO6	14	GPIO14
15	GPIO7	16	GPIO15
17	GND	18	+5V

2.19 PS2 Keyboard/Mouse Connector (CN8)

Pin	Signal
1	KB_DATA
2	KB_CLK
3	GND
4	+5V
5	MS_DATA
6	MS_CLK

2.20 Serial Port Connector (CN9)

PCM-5330 offers four serial ports, 3 serial RS-232 ports, one serial RS-232/422/485 port, which allows you to connect them to serial devices (mouse, printer, etc.).

Pin	Signal	Pin	Signal
1	DCD1	2	DSR1
3	RXD1	4	RTS1
5	TXD1	6	CTS1
7	DTR1	8	RI1
9	GND	10	N.C
11	DCD2(422TXD-/485DATA -)	12	DSR2
13	RXD2(422RXD+)	14	RTS2

PC/104 Module		PCM-5330	
15	TXD2(422TXD+/485DATA+)	16	CTS2
17	DTR2(422RXD-)	18	RI2
19	GND	20	N.C
21	DCD3	22	DSR3
23	RXD3	24	RTS3
25	TXD3	26	CTS3
27	DTR3	28	RI3
29	GND	30	N.C
31	DCD4	32	DSR4
33	RXD4	34	RTS4
35	TXD4	36	CTS4
37	DTR4	38	RI4
39	GND	40	N.C

2.21 10/100Base-T Ethernet Connector (CN10)

Pin	Signal	Pin	Signal
1	RX-	2	Rx+
3	Temp_GND	4	Temp_GND
5	GND	6	GND
7	Temp_GND	8	Temp_GND
9	TX+	10	TX-

2.22 Power Connector (CN11)

Pin	Signal
1	+5V
2	GND
3	GND
4	+12V

2.23 Front Panel Connector (CN12)

Pin	Signal
1	Power LED(+)
2	Power LED(-)
3	External Buzzer(+)
4	External Buzzer(-)
5	IDE LED(+)
6	IDE LED(-)
7	Reset Switch(+)
8	Reset Switch(-)
9	+5V
10	Speed LED
11	Active LED
12	Link LED

13	+5V
14	N.C
15	IRRX
16	GND
17	IRTX

2.24 CompactFlash™ Connector (CFD1)

The PCM-5330 is equipped with a CompactFlash type I socket on the solder side, which supports the IDE interface CompactFlash card. The socket itself is specially designed to prevent any incorrect installation of the CompactFlash card. When installing or removing the CompactFlash card, please make sure that the system power is off.

The CompactFlash card is acted as a disk drive in your PC system. To fit the AAEON CompactFlash card into the PCM-5330, simply plug it into the designated connector. It will only fit when the red triangle on the CompactFlash card is aligned with the triangle on the connector. The card will not fit any other way (do NOT use excessive force).

Pin	Signal	Pin	Signal
1	GND	26	GND
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	CS#1	32	CS#3

PC/104 Module		PCM-5330	
8	GND	33	GND
9	GND	34	IO READ
10	GND	35	IO WRITE
11	GND	36	+5V
12	GND	37	IRQ15
13	+5V	38	+5V
14	GND	39	CSEL
15	GND	40	N.C.
16	GND	41	IDE RESET
17	GND	42	IO READY
18	ADDR 2	43	N.C.
19	ADDR 1	44	+5V
20	ADDR 0	45	DASP
21	DATA 0	46	DIAG
22	DATA 1	47	DATA 8
23	DATA 2	48	DATA 9
24	N.C.	49	DATA 10
25	GND	50	GND

2.25 PC/104 Connector (104_1/2)

Chapter

3

Award
BIOS Setup

3.1 System test and initialization

These routines test and initialize board hardware. If the routines encounter an error during the tests, you will either hear a few short beeps or see an error message on the screen. There are two kinds of errors: fatal and non-fatal. The system can usually continue the boot up sequence with non-fatal errors. Non-fatal error messages usually appear on the screen along with the following instructions:

Press <F1> to RESUME

Write down the message and press the F1 key to continue the boot up sequence.

System configuration verification

These routines check the current system configuration against the values stored in the CMOS memory. If they do not match, the program outputs an error message. You will then need to run the BIOS setup program to set the configuration information in memory.

There are three situations in which you will need to change the CMOS settings:

1. You are starting your system for the first time

2. You have changed the hardware attached to your system

3. The CMOS memory has lost power and the configuration information has been erased.

The PCM-5330 CMOS memory has an integral lithium battery backup for data retention. However, you will need to replace the complete unit when it finally runs down.

3.2 Award BIOS setup

Awards BIOS ROM has a built-in Setup program that allows users to modify the basic system configuration. This type of information is stored in battery-backed CMOS RAM so that it retains the Setup information when the power is turned off.

Entering setup

Power on the computer and press <Del> immediately. This will allow you to enter Setup.

Standard CMOS Features

Use this menu for basic system configuration. (Date, time, IDE, etc.)

Advanced BIOS Features

Use this menu to set the advanced features available on your system.

Advanced Chipset Features

Use this menu to change the values in the chipset registers and optimize your system performance.

Integrated Peripherals

Use this menu to specify your settings for integrated peripherals.
(Primary slave, secondary slave etc.)

Power Management Setup

Use this menu to specify your settings for power management.

PnP/PCI Configurations

This entry appears if your system supports PnP/PCI.

Load Fail-Safe Defaults

Use this menu to load the BIOS default values for the minimal/stable
performance for your system to operate.

Load Optimized Defaults

Use this menu to load the BIOS default values that are factory settings for
optimal performance system operations. While AWARD has designated
the custom BIOS to maximize performance, the factory has the right to
change these defaults to meet their needs.

Set Password

Use this menu to set User Passwords.

Save & Exit Setup

Save CMOS value changes to CMOS and exit setup.

Exit Without Saving

Abandon all CMOS value changes and exit setup.

3.3 Standard CMOS Features

When you choose the Standard CMOS Features option from the INITIAL
SETUP SCREEN menu, the screen shown below is displayed. This
standard Setup Menu allows users to configure system components such as
date, time, hard disk drive, floppy drive and display. Once a field is
highlighted, on-line help information is displayed in the right box of the
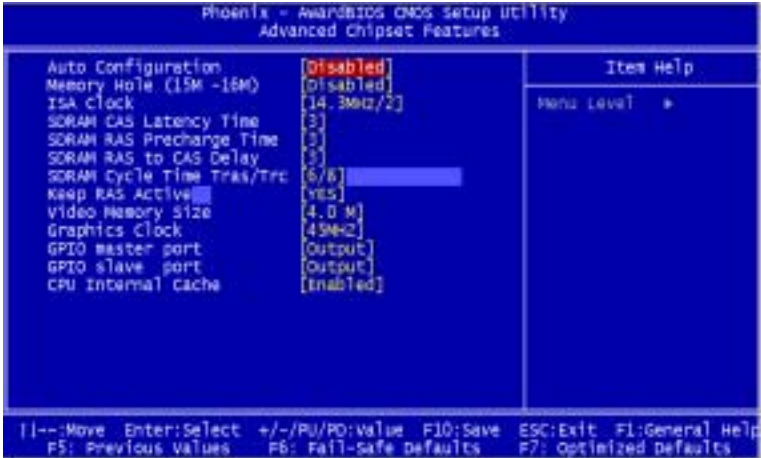Menu screen.

3.4 Advanced BIOS Features

By choosing the Advanced BIOS Features option from the INITIAL
SETUP SCREEN menu, the screen below is displayed. This sample screen
contains the manufacturer's default values for the PCM-5330.
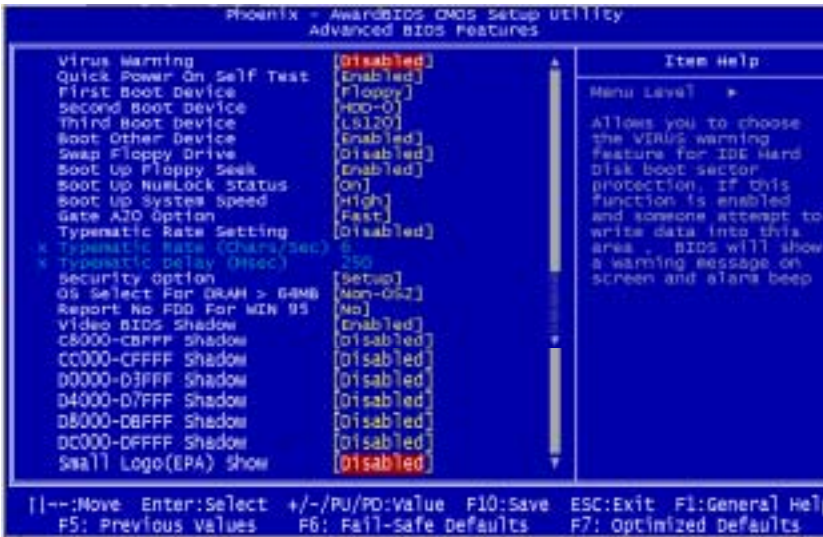
3.5 Advanced Chipset Features

By choosing the Advanced Chipset Features option from the INITIAL
SETUP SCREEN menu, the screen below is displayed.

3.6 Integrated Peripherals

By choosing the Integrated Peripherals from the INITIAL SETUP SCREEN menu, the screen below is displayed. This sample screen contains the manufacturer's default values for the PCM-5330.

3.7 Power management setup

By choosing the Power Management Setup from the INITIAL SETUP SCREEN menu, the screen below is displayed. This sample screen contains the manufacturer's default values for the PCM-5330.

3.8 PnP/PCI configuration

By choosing the PnP/PCI configurations from the Initial Setup Screen menu, the screen below is displayed. This sample screen contains the manufacturer's default values for the PCM-5330.

3.9 Load Fail-Safe Defaults

When you press <Enter> on this item you get a confirmation dialog box with a message similar to:

Load Fail-Safe Default (Y/N)?

Pressing "Y" loads the BIOS default values for the most stable, minimal performance system operations.

3.10 Load Optimized Defaults

When you press <Enter> on this item you get a confirmation dialog box with a message similar to:

Load Optimized Defaults (Y/N)?

Pressing "Y" loads the default values that are factory settings for optimal performance system operations.

3.11 Set Password

To abort the process at any time, press Esc.

In the Security Option item in the BIOS Features Setup screen, select System or Setup:

System   Enter a password each time the system boots and when-

ever you enter Setup.

Setup   Enter a password whenever you enter Setup.

NOTE: To clear the password, simply press Enter when asked to enter a password. Then the password function is disabled.

3.12 Save & Exit setup

If you select this option and press <Enter>, the values entered in the setup utilities will be recorded in the chipset's CMOS memory. The microprocessor will check this every time you turn on your system and compare this to what it finds as it checks the system. This record is required for the system to operate.

3.13 Exit without saving

Selecting this option and pressing <Enter> allows you to exit the Setup program without recording any new value or changing old one.

Chapter

4

Driver Installation

The PCM-5330 comes with a CD-ROM which contains most of drivers and utilities of your needs.

We recommend that the system driver installation procedure must be performed first.

4.1 Installation 1:

Applicable for Windows 98SE

1. Insert the **PCM-5330 CD-ROM** into the CD-ROM Drive.

2. Click on **Start** button, select the **Settings**, then click on the **Control Panel** icon.

3. Double click on the **Add/Remove Hardware** icon and **Add New Hardware Wizard** will appear. Click on the **Next** button.

4. Select **Search for the best driver for your device (Recommended)** and click on the **Next** button.

5. Select **Specify a location,** click on **Have Disk** button then key in the CD-ROM path and specify component drivers and OS folders. Then click on the **Next** button.

6. The Wizard shows that Windows driver file search for the device: (For example, VGA devices of the board**)**. Click on the **Next** button.

7. The system will ask you to insert Windows 98 CD Diskette. Click on the **OK** button to insert Diskette and key in path.

8. Click on the **OK** button.

9. Click on the **Finish** button to finish installation process. And allow the system to reboot.

Appendix

A

Programming the Watchdog Timer

Programming the watchdog timer

The PCM-5330 contains a watchdog timer reset pin (GP16). All reference material can be found below.

```
==========================================

** Title: WatchDog Timer Setup Utility (for W83977 GP16)

** Company: AAEON Technology Inc.

** Compiler: Borland C ++ Version 3.0

==========================================

#include <dos.h>
#include <io.h>
#include <bios.h>
#include <stdio.h>
#include <stdlib.h>
#include <conio.h>


/* Set I/O Address : 370/371 */
#define IO_INDEX_PORT      0x370
#define IO_DATA_PORT       0x371


/* Set Watchdog reset pin : 16 */
#define watch_dog_output_GP 16


#define UNLOCK_DATA         0x87
#define LOCK_DATA           0xAA
#define DEVICE_REGISTER     0x07


void EnterConfigMode()
```

```
{
    outportb(IO_INDEX_PORT, UNLOCK_DATA);
    outportb(IO_INDEX_PORT, UNLOCK_DATA);
}


void ExitConfigMode()
{
    outportb(IO_INDEX_PORT, LOCK_DATA);
}


void SelectDevice(unsigned char device)
{
    outportb(IO_INDEX_PORT, DEVICE_REGISTER);
    outportb(IO_DATA_PORT, device);
}


unsigned char ReadAData(short int reg)
{
    outportb(IO_INDEX_PORT, reg);
    return (inportb(IO_DATA_PORT));
}


void WriteAData(unsigned char reg, unsigned char data)
{
    outportb(IO_INDEX_PORT, reg);
    outportb(IO_DATA_PORT, data);
}


void SetWatchDogTime(unsigned char time_val)
{
    EnterConfigMode();
    SelectDevice(8);
    //Set Register F2
```

```
      //Set Watch-Dog Timer 1~ 256
      WriteAData(0xF2, time_val);
      //Set Register F3
      //keyboard and mouse interrupt reset Enable
      //When Watch-Dog Time-out occurs,Enable POWER LED
output
      WriteAData(0xF3, 0x0E);
      // set counter counts in second (or minute)
      // Register F4 Bit 6 = 0/1 (minutes/seconds)
      // For w83977EF only
      WriteAData(0xF4, 0x42);
//    ExitConfigMode();
}


void init_w83977tf_aw_watchdog()
{
      short int value;


      //Enter W83977 Configure Mode
//    EnterConfigMode();


      //Set Device Active
      WriteAData(0x30, 0x01);


      //Select Device 7
      SelectDevice(7);


      //caution:skip this step will be a mistake!!
      if (watch_dog_output_GP==12)
      {
            //Set Register E2 to define GP12
            WriteAData(0xE2, 0x0A);
      }
      else if(watch_dog_output_GP==13)
      {
```

```
        //Set Register E3 to define GP13
        WriteAData(0xE3, 0x0A);
}
else if(watch_dog_output_GP==16)
{
        //Set Register E6 to define GP16
        WriteAData(0xE6, 0x0A);
}


        //Set Device Active
        WriteAData(0x30, 0x01);


        //Select Device 8
//      SelectDevice(8);


        //caution:skip this step will be a mistake!!
        if (watch_dog_output_GP==12)
        {
                //Set Register 2A (PIN 57) Bit 7 = 0/1 (KBLOCK/GP12)
                //set to GP12 for WD Rst
                WriteAData(0x2A,ReadAData(0x2A)|0x80);
        }
        else if(watch_dog_output_GP==13)
        {
                //Set Register 2B (PIN 58) Bit 0 = 0/1 (KBLOCK/GP13)
                //set to GP13 for WD Rst
                WriteAData(0x2B,ReadAData(0x2B)|0x01);
        }
        else if(watch_dog_output_GP==16)
        {
                //Set Register 2C (PIN 119) Bit 5-4 = 01 (GP16)
                //set to GP16 for WD Rst
                WriteAData(0x2C,ReadAData(0x2C)|0x10);
        }
```

```
      //Exit W83977 Configure mode
      ExitConfigMode();
}



void main(int argc, char* argv[])
{
      int time_value=0;
      char *ptr;
      printf("WinBond 83977 WatchDog Timer Setup Utility Version 1.0
\n");
      printf("Copyright (c) 2000 AAEON Technology Inc.\n");
      printf("This version only for W83977 that using GP%d to Reset
System.\n",watch_dog_output_GP);
      if (argc == 1)
      {
            printf("\n Syntax: WATCHDOG    [time] \n");
            printf(" time range : 1 ~ 256 \n\n");
            return ;
      }
      if (argc > 1)
      {
            ptr = argv[1];
            time_value = atoi(ptr);
      }
      if (time_value > 0 && time_value < 256)
      {
            SetWatchDogTime((unsigned char) time_value);
            init_w83977tf_aw_watchdog();
            printf("Watch Dog Timer set up : %d \n",time_value);
      }
}
```