### Notice:

This guide is designed for experienced users to setup the system within the shortest time. For detailed information, please always refer to the electronic user's manual.

### Safety Precautions



Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges. Only experienced electronics personnel should open the PC chassis.

Caution!



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

### **Jumpers & Connectors**

Jumpers	
Label	Function
J3	LCD Inverter Power Connector
J4	Chipset select
JP4	Chipset select
Connectors	
CN2	Hirose DF-13-20P
CN3	Hirose DF-13-10P
CN4	Hirose DF-13-40P

#### PCM-3536 Board Layout





#### PCM-3536 Mechanical Drawing



#### **Installing PCM-3536**

PCM-3536 can be incorporated with four SBC manufactured by AAEON including PCM-6896, SBC-659, SBC-659P and PCM-6898.

When installing the PCM-3536 to any of our single board computers, you must first find the DVI connector on the SBC. Please refer to either the quick installation guide or manual for exact connector location. Gently and slowly insert the daughter card down onto the Digital Video Interface (DVI) connector. When complete the board should look similar to the picture on the following page. Connectors on PCM-3536 should be facing inwards toward the board.

#### PCM-6896 & PCM-3536



#### PCM-6898 & PCM-3536



#### LCD Inverter Power Connector (J3)

Built onboard PCM-3536 is a 4-Pin LCD Inverter Power Connector. By using this Connector you will attain back light & on screen image for your panel. However you will need to customize your inverter cable to coexist with this connector.

(JJ) I in definition		
Pin	Function	
1	5V	
2	GND	
3	GND	
4	12V	

#### (J3) Pin definition

#### Chipset Select (J4 & JP4)

PCM-3536 can be incorporated with four Single Board Computers manufactured by AAEON Technology. (PCM-6896, SBC-659, SBC-659P and PCM-6898). Three of these SBC utilizes the Intel 815E chipset, PCM-6896, SBC-659, and SBC-659P. PCM-6898 however is controlled by the VIA 8604 chipset. Due to the discrepancies between these boards two sets of jumpers (J4, JP4) must be adjusted to allow for proper compatibility. The diagram below will guide you through the procedure for setting the jumpers. Please follow it carefully.

#### Chipset Select (JP4)

Intel 815E*	VIA 8604
1 2 3	1 2 3
000	000

Default\*

Chipset Select (J4)



Default\*

#### **DVO Interface Pin Definition (CN1)**

A1	FTCLK0(DVO_CLK0)	B1	FTD0
A2	FTCLK1(DVO_CLK1)	B2	FTD1
A3	NC	B3	FTD2
A4	FTBLANK#(DVO_DE)	B4	GND
A5	FTHSYNC(DVO_HS)	B5	FTD3
A6	FTVSYNC(DVO_VS)	B6	FTD4
A7	NC	B7	FTD5
A8	GND	B8	NC
A9	3VFTSCL(DDC_SCL)	B9	FTD6
A10	3VFTSDA(DDC_SDA)	B10	FTD7
A11	NC	B11	FTD8
A12	VCC(5V)	B12	NC
A13	PCIRST#	B13	FTD9
A14	VCC(12V)	B14	FTD10
A15	FPVDDEN	B15	FTD11
A16	GND	B16	VCC(3.3V)
A17	PGMSEL (H:SMB/L:3VFT)	B17	VCC(3.3V)
A18	SMBSDA	B18	GND
A19	SMBSCL	B19	VCC(3.3V)
A20	VCC(5V)	B20	FPBLEN

#### Hirose DF-13-10P (CN3)

1	GND	2	GND
3	ODD BLUE DATA-0 (48)	4	ODD BLUE DATA-1 (48)
5	ODD GREEN DATA-0 (48)	6	ODD GREEN DATA-1 (48)
7	ODD RED DATA-0 (48)	8	ODD RED DATA-1 (48)
9	GND	10	GND

#### Hirose DF-13-20P Connector (CN2)

	-		-
1	GND	2	GND
3	ODD BLUE DATA-2 (36)	4	ODD BLUE DATA-3 (36)
5	ODD BLUE DATA-4 (36)	6	ODD BLUE DATA-5 (36)
7	ODD BLUE DATA-6 (36)	8	ODD BLUE DATA-7 (36)
9	ODD GREEN DATA-2 (36)	10	ODD GREEN DATA-3 (36)
11	ODD GREEN DATA-4 (36)	12	ODD GREEN DATA-5 (36)
13	ODD GREEN DATA-6 (36)	14	ODD GREEN DATA-7 (36)
15	ODD RED DATA-2 (36)	16	ODD RED DATA-3 (36)
17	ODD RED DATA-4 (36)	18	ODD RED DATA-5 (36)
19	ODD RED DATA-6 (36)	20	ODD RED DATA-7 (36)

#### Hirose DF-13-40P Connector (CN4)

1	VDD SAFE 5V	2	VDD SAFE 5V
3	GND	4	GND
5	VDD SAFE 3.3V	6	VDD SAFE 3.3V
7	GND	8	GND
9	EVEN BLUE DATA-0 (18/24/36/48)	10	EVEN BLUE DATA-1 (18/24/36/48)
11	EVEN BLUE DATA-2 (18/24/36/48)	12	EVEN BLUE DATA-3 (18/24/36/48)
13	EVEN BLUE DATA-4 (18/24/36/48)	14	EVEN BLUE DATA-5 (18/24/36/48)
15	EVEN BLUE DATA-6 (18/24/36/48)	16	EVEN BLUE DATA-7 (18/24/36/48)
17	EVEN GREEN DATA-0 (18/24/36/48)	18	EVEN GREEN DATA-1 (18/24/36/48)
19	EVEN GREEN DATA-2 (18/24/36/48)	20	EVEN GREEN DATA-3 (18/24/36/48)
21	EVEN GREEN DATA-4 (18/24/36/48)	22	EVEN GREEN DATA-5 (18/24/36/48)
23	EVEN GREEN DATA-6 (18/24/36/48)	24	EVEN GREEN DATA-7 (18/24/36/48)
25	EVEN RED DATA-0 (18/24/36/48)	26	EVEN RED DATA-1 (18/24/36/48)
27	EVEN RED DATA-2 (18/24/36/48)	28	EVEN RED DATA-3 (18/24/36/48)
29	EVEN RED DATA-4 (18/24/36/48)	30	EVEN RED DATA-5 (18/24/36/48)
31	EVEN RED DATA-6 (18/24/36/48)	32	EVEN RED DATA-7 (18/24/36/48)
33	GND	34	GND
35	SHIFT CLK (LCD_CLK) OUTPUT	36	FLM (LCD_VS) OUTPUT
37	M (LCD_DE) OUTPUT	38	LP (LCD_HS) OUTPUT
39	VCC3	40	NC

#### Adjusting LCD Resolution for PCM-3536

PCM-3536 supports three different resolution fields, 800 X 600, 640 x 480, and 1024 x 768. Default setting is set at 800 x 600. Resolution fields may be changes in order to support your LCD panels. Using MS-DOS you may select the resolution setting of your choice. Follow the procedure below carefully.

==>Open the MS-DOS program

==>Type: WEDID\_02 (Notice a customized wizard appears)

#### You will be asked to make a selection from a list of three options:

1. For VIA VT8604 Chipset

2. For Intel 815E Chipset

3. Exit

==>Select the type of chipset incorporated with your SBC.

Upon selecting either option 1 or 2 you will be asked to input U1 and U4 file names. According to the resolution of your panel type enter the follow information under U1 & U4 file name. U1 is used for onboard programming EDID and U4 functions as a scaling ROM.

		<u>Resolution</u>
Input U1 file n	800 x 600	
or	d:\U1_640.bin	640 x 480
or	d:\U1_1024.bin	1024 x 768
Input U4 file n	ame: d:\U4_800.bin	800 x 600
or	d:\U4_640.bin	640 x 480
or	d:\U4_1024.bin	1024 x 768

