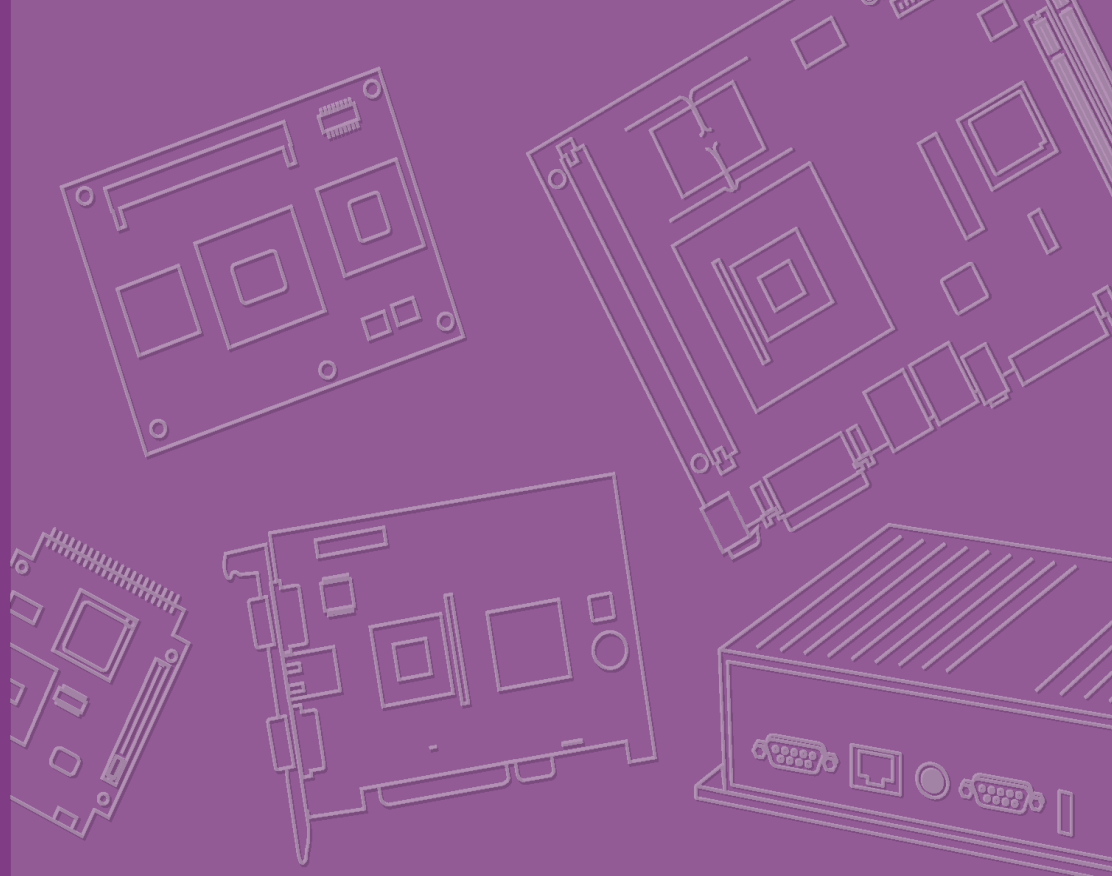


User Manual



SOM-DB4700

Development Board

ADVANTECH

Enabling an Intelligent Planet

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Chapter 1

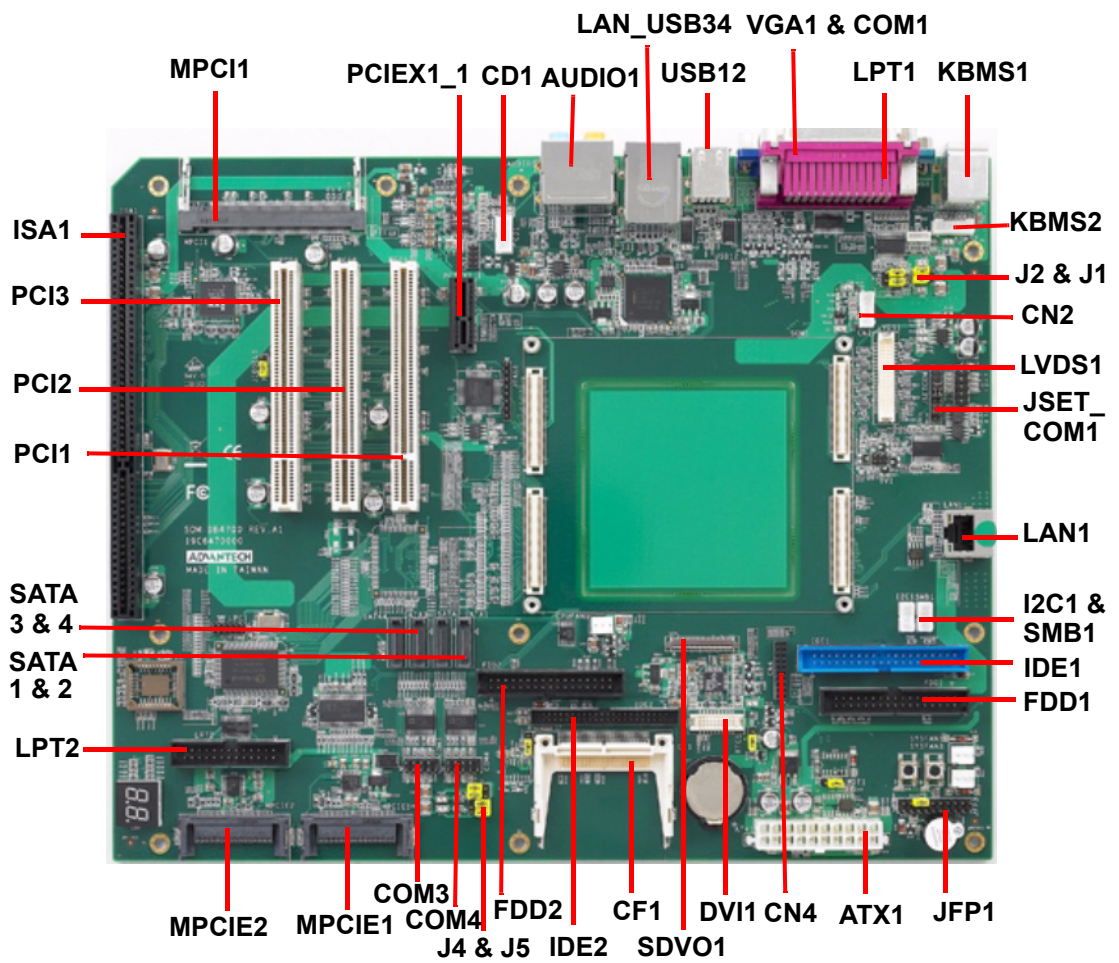
Connector and Jumper Setting

This chapter gives you connector and jumper information on the SOM-DB4700 Evaluation Carrier Board.

Sections include:

- Connector and Jumper Table
- Connector and Jumper Pin Definition

1.1 Location of Connectors



1.2 Connector List

ATX1	ATX Power Connector*
Audio1	HD Audio Connector*
CD1	CD Line-in Connector
CF1	Compact Flash Connector*
CN1	HD Audio Digital I/O Connector (XTX only)
CN2	LCD Inverter Power Connector
CN4	Test Connector
COM1	COM Port 1 Connector
COM2	COM Port 2 Connector
COM3	COM Port 3 Connector
COM4	COM Port 4 Connector
CPUFAN1	CPU Fan 1 Connector
DVI1	DVI Connector
IDE1	IDE Connector*
IDE2	IDE Connector*
IRR1	IRDA Connector
ISA1	ISA Connector*
I2C1	I2C Connector
FDD1	FDD 1 Connector*
JFP1	Front Panel 1 Connector
JIDSEL1	PCI3-IDSELECT Connector
JSETCOM1	COM Port Mode Setting Connector
JTAG1	JTAG Test Connector
JWDT1	WDT and ISA IRQ Setting Connector
KBMS1	PS/2 KB/MS 1 Connector
KBMS2	PS/2 KB/MS 2 Connector
LAN1	Onboard LAN Connector*
LAN2_USB34	LAN2 and USB Port 3, 4 Connector* (XTX only)
LPC	LPC Connector (XTX only)
LPT1	LPT 1 Connector*
LPT2	LPT 2 Connector
LVDS1	LVDS/TTL Interface Connector
MPC11	Mini PCI Connector*
MPCIE1	Mini PCIe 1 Connector* (XTX only)
MPCIE2	Mini PCIe 2 Connector* (XTX only)
PCIEx1_	PCIe x1 Connector* (XTX only)
PCI1	PCI1 Connector*
PCI2	PCI2 Connector*
PCI3	PCI3 Connector*
SATA1	SATA1 Connector* (XTX only)
SATA2	SATA2 Connector* (XTX only)
SATA3	SATA3 Connector* (XTX only)
SATA4	SATA4 Connector* (XTX only)
SMB1	SMBus Connector
SOM1A	ETX Connector A*

SOM1B	ETX Connector B*
SOM1C	ETX Connector C*
SOM1D	ETX Connector D*
SYSFAN1	System Fan 1 Connector
SYSFAN2	System Fan 2 Connector
TV1	TV-out Connector
USB12	USB1, 2 Connector*
VGA1	VGA Connector*

Note! * These interfaces are common in the market at present and will not be described in detail in this document.



1.3 Jumper Table

J1, J2	COM port 1, 2 function selection
J4, J5	COM port 3, 4 function selection
RTC1	RTC power and clear selection
J3	CF Master/Slave selection
CN5	ISA and PCI3 function selection
PSON1	AT/ATX mode selection

1.4 Connector Pin Definition and Jumper Settings

CD1	CD Line-In Connector
Pin	Pin Name
1	CD-L_B
2	CD-G_B
3	CD-G_B
4	CD-R_B

CN1	HD Audio Digital I/O Connector (XTX only)
Pin	Pin Name
1	+V5
2	GND
3	AZ_SYNC
4	AZ_BITCLK
5	AZ_SDOUT
6	AZ_SDIN0
7	AZ_SDIN1
8	AZ_RST#
9	+V12
10	GND
11	GND

CN2	LCD Inverter Power Connector	
Pin	Pin Name	# : low active
1	+12 V	
2	BLON#	
3	VBR	
4	+V5	

COM1		COM Port 1 Connector	
Pin	Pin Name	#	low active
1	NDCD#1		
2	NRXD1		
3	NTXD1		
4	NDTR#1		
5	GND		
6	NDSR#1		
7	NRTS#1		
8	NCTS#1		
9	COMA		
10	GND		
11	GND		

COM2		COM Port 2 Connector	
Pin	Pin Name	#	low active
1	NDCD#2		
2	NDSR#2		
3	NRXD2_TXD485+		
4	NRTS#2		
5	NTXD2_RXD485+		
6	NCTS#2		
7	NDTR#2_RXD485-		
8	COMB		
9	GND		
10	NC		

COM3		COM Port 3 Connector	
Pin	Pin Name	#	low active
1	NDCD#3		
2	NDSR#3		
3	NRXD3_TXD485+		
4	NRTS#3		
5	NTXD3_RXD485+		
6	NCTS#3		
7	NDTR#3_RXD485-		
8	COMC		
9	GND		
10	NC		

COM4		COM Port 4 Connector	
Pin	Pin Name	# : low active	
1	NDCD#4		
2	NDSR#4		
3	NRXD4_TXD485+		
4	NRTS#4		
5	NTXD4_RXD485+		
6	NCTS#4		
7	NDTR#4_RXD485-		
8	COMD		
9	GND		
10	NC		

CPUFAN1		CPU FAN 1 Connector	
Pin	Pin Name		
1	GND		
2	FAN_Power		
3	FAN_TACHOIN		

DVI1		DVI Connector	
Pin	Pin Name		
1	DVI1_Z_TDC-0		
2	VCC_TMDS		
3	DVI1_Z_TDC+0		
4	DVI1_Z_TLC-		
5	GND		
6	DVI1_Z_TLC+		
7	DVI1_Z_TDC-1		
8	GND		
9	DVI1_Z_TDC+1		
10	DVI1-SC_DDC		
11	GND		
12	DVI1-SD_DDC		
13	DVI1_Z_TDC-2		
14	DVI1_HPDETT		
15	DVI1_Z_TDC+2		
16	NC		
17	VCC_TMDS		
18	NC		
19	NC		
20	NC		
21	NC		
22	NC		
23	GND		
24	GND		

IRR1	IRDA Connector
Pin	Pin Name
1	IR_5V
2	NC
3	IRRX_A
4	IR_GD
5	IRTX_A

I2C1	I2C Connector
Pin	Pin Name
1	GND
2	I2C_DAT
3	I2C_CLK
4	+V5

JFP1	Front Panel Connector
Pin	Pin Name
1	PW-LED
2	+V5
3	PW-LED
4	GND
5	GND
6	BUZZER
7	KBINH#
8	SPEKER
9	GND
10	NC
11	GND
12	HD_LED
13	PWRBIN#
14	+V5
15	NC
16	NC
17	NC
18	FPRST1
19	GND
20	GND

Pin Function Description	
11 & 13	Power Button
18 & 20	Reset Button
6 & 8	Speaker to Buzzer (Default)
12 & 14	HDD LED

JSETCOM1		COM port mode setting Connector	
Pin	Pin Name	# : low active	
1	COM_RXD2		
2	RXD485		
3	COM_RXD2		
4	RXD422		
5	COM_RXD2		
6	RXD232		
7	NDCD#2		
8	NRXD2		
9	NDCD#2_TXD485-		
10	NRXD2_TXD485+		
11	TXD485-		
12	TXD485+		
13	NTXD2		
14	NDTR#2		
15	NTXD2_RXD485+		
16	NDTR#2_RXD485-		
17	RXD422+		
18	RXD422-		

KBMS1		PS2 KB/MS 1 Connector	
Pin	Pin Name		
1	KBDAT1		
2	NC		
3	GND		
4	VCCKB		
5	KBCLK1		
6	NC		
7	MSDAT1		
8	NC		
9	GND		
10	VCCKB		
11	MSCLK1		
12	NC		
13	GND		
14	GND		
15	GND		
16	GND		

KBMS2	PS2 KB/MS 2 Connector
Pin	Pin Name
1	KBCLK1
2	KBDAT1
3	MSCLK1
4	GND
5	VCKKB
6	MSDAT1

LPC	LPC Connector (XTX only)
Pin	Pin Name
1	LPC_DRQ#0
2	LPC_AD0
3	LPC_DRQ#1
4	LPC_AD1
5	LPC_SERIRQ
6	LPC_AD2
7	LPC_FRAME#
8	LPC_AD3
9	LPC_a_RST#
10	GND
11	CLK33M_LPC2
12	+V3.3

LPT2	LPT 2 Connector
Pin	Pin Name
1	SSTB_A#
2	SAFD#
3	SSPD0
4	SERR#
5	SSPD1
6	SINIT#
7	SSPD2
8	SSLIN#
9	SSPD3
10	GND
11	SSPD4
12	GND
13	SSPD5
14	GND
15	SSPD6
16	GND
17	SSPD7
18	GND
19	SACK#

20	GND
21	SBUSY
22	GND
23	SPE
24	GND
25	SSLCT

LVDS1	LVDS/TTL interface Connector
Pin	Pin Name
1	+V5_LCD
2	+V5_LCD
3	GND
4	GND
5	+V3.3_LCD
6	+V3.3_LCD
7	NC
8	GND
9	TXCLK1-/LCDB0_A
10	TXCLK1+/LCDB1_A
11	TX13-/LCDB2_A
12	TX13+/LCDB3_A
13	TXCLK0-/LCDB4_A
14	TXCLK0+/LCDB5_A
15	NC
16	NC
17	TX03-/LCDG0_A
18	TX03+/LCDG1_A
19	TX10-/LCDG2_A
20	TX10+/LCDG3_A
21	TX11-/LCDG4_A
22	TX11+/LCDG5_A
23	NC
24	NC
25	TX00-/LCDR0_A
26	TX00+/LCDR1_A
27	TX01-/LCDR2_A
28	TX01+/LCDR3_A
29	TX02-/LCDR4_A
30	TX02+/LCDR5_A
31	DDAT
32	DCLK
33	GND
34	GND
35	SHFCLK
36	TX12+/FPVSYNC_A
37	LCD_DETECT#/DE
38	TX12-/FPHSYNC_A

39	BLON_A#
40	LTGIO0

SMB1	SMBus Connector
Pin	Pin Name
1	GND
2	SMB_DAT
3	SMB_CLK
4	+V5

SYSFAN1	System Fan 1 Connector
Pin	Pin Name
1	GND
2	12 V
3	FAN_IO1

SYSFAN2	System Fan 2 Connector
Pin	Pin Name
4	GND
5	12 V
6	FAN_IO2

TV1	TV-out Connector
Pin	Pin Name
1	TV_Y
2	TV_C
3	TV_COMP
4	GND
5	TV_SYNC
6	GND

Jumper Settings:

1. COM Port 1&2 Mode Setting

Jumper Setting	J1	J2
RING	DON'T CARE	3-5/4-6
VCC5	1-3/2-4	1-3/2-4
+12 V	3-5/4-6	1-3/2-4

2. COM Port 3&4 Mode Setting

Jumper Setting		
	J3	J4
RING	DON'T CARE	3-5/4-6
VCC5	1-3/2-4	1-3/2-4
+12 V	3-5/4-6	1-3/2-4

3. VBAT Power Setting

Jumper Setting	
	RTC1
1-2	Clear CMOS
2-3	Normal (Default)

4. CF Master/Slave Select

Jumper Setting	
	J3
1-2	Master (Default)
2-3	Slave

5. ISA&PCI3 Function Setting

Jumper Setting				
	CN5			
PCI3	3-5	4-6	9-11	10-12
ISA	1-3	2-4	7-9	8-10 (Default)

6. AT/ATX mode setting

Jumper Setting	
	PSO1
1-2	AT Power MODE
2-3	ATX Power MODE (Default)

Note! The “#” sign indicates low-active or negative-level triggered signals.



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