

MicroPCI VGA Card with SMI SM721G4/G8 VGA Controller

User's Guide
Ver 1.0A



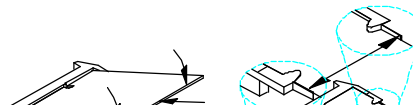
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Features

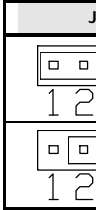
- IBD21/IBD218 SMI SM721G4/G8 VGA controller with 4MB/8MB memory
- Supports 1024x768 (85Mhz refresh rate) / 800x600 (60/75Mhz refresh rate) / 640x480 (60/75/85Mhz refresh rate) in 8/16/24 bit color format
- High performance, power managed 3D
- Motion Compensation
- Multi-display support under Windows 95/98/NT with one device
- SMI Dual View support under Windows 95/NT/98
- Dual Digital support
- Adaptive Power Management (Dynamic functional block shut-down control)
- DSTN and TFT panel support up to 1600x1200
- 300Mhz 31-bit RAMDAC

MicroPCI Card Installation

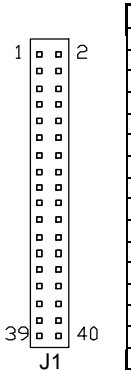
To insert the MicroPCI daughter cards, position it at 30° to the PCB and gently push it into the MicroPCI connector (Figure 1). The card will not fit when inserted at an angle of 45° or 15°. Once inserted, slowly press the card towards the PCB until it locks on both sides to the clips of the connector. Screw the card to the PCB to secure the installation. To remove the MicroPCI card, pull the 'clips' sideways as shown in Figure 2.



JP2: Panel P



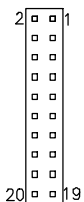
J1: LCD Pan



□	Ground	13	14	P33
□	P32	15	16	P35
□	P34	17	18	P37
□	P36	19	20	P39
□	P38	21	22	VBIASEN
□	ENABKL	23	24	P41
□	P40	25	26	P43
□	P42	27	28	P45
□	P44	29	30	P47
□	P46	31	32	Ground
□	Ground	33	34	P23
□	P14/CLK	35	36	P22
□	5V/3.3V	37	38	5V/3.3V
□	NC	39	40	P15

39 40
J2

J3: 18-Bit LVDS Connector (DF13-20)



Signal Name	Pin #	Pin #	Signal Name
TX0-	2	1	TX0+
Ground	4	3	Ground
TX1-	6	5	TX1+
5V/3.3V	8	7	Ground
TX3-	10	9	TX3+
TX2-	12	11	TX2+
Ground	14	13	Ground
TXC-	16	15	TXC+
5V/3.3V	18	17	ENABKL
+12V	20	19	+12V

Driver Installation for Windows 95

- Under the Windows 95 environment, click Start → Settings → Control Panel → Display → Settings → Advanced Properties → Change → Have disk.
- Enter the path location as "d:\vga\sm721\win95", assuming Drive D: is your CDROM drive. Click OK.
- Close all tasks and restart the computer for changes to take effect.

Driver Installation for Windows 98SE

- Under the Windows 98SE environment, click Start → Settings → Control Panel
- Double click Display → Settings → Advanced → Adapter → Change → Next.
- Select "Search for a better driver than the one your device is using now. (Recommended)," then click Next.
- Select "Specify a location."
- Enter the path location as "d:\vga\sm721\win98," and click Next.
- Click Next → Finish. Click Yes to restart the computer and for changes to take effect.

Driver Installation for Windows 98 ME

- Under the Windows 98 ME environment, click Start → Settings →

- Select "Specify a location," then click Next.
- Enter the path location as "d:\vga\sm721\win2000," and click OK.
- Click Next → Finish. Close all tasks and restart the computer for changes to take effect.

Driver Installation for Windows NT 4.0

- Under the Windows NT environment, click Start → Settings → Control Panel
- Double click Display → Settings → Type → Change → Have Disk.
- Enter the path location as "d:\vga\sm721\winnt40," then click OK → OK → Yes → OK.
- Close all tasks and restart the computer for changes to take effect.

Flat Panel Interface Pin Listing for DSTN / Color TFT LCD

Pin Name	DSTN				TFT			
	16-bit	24-bit	9-bit	12-bit	18-bit	24-bit	12-bit x2	18-bit x2
LPFHSYNC	LP	LP	HSYNC	HSYNC	HSYNC	HSYNC	HSYNC	HSYNC
FPFVSYNC	FP	FP	VSYNC	VSYNC	VSYNC	VSYNC	VSYNC	VSYNC
FPSClk	XCK	XCK	CK	CK	CK	CK	CK	CK
DE			ENAB	ENAB	ENAB	ENAB	ENAB	ENAB
FPEN	FPEN	FPEN	FPEN	FPEN	FPEN	FPEN	FPEN	FPEN
FPVDDEN	VDD	VDD	VDD	VDD	VDD	VDD	VDD	VDD
VBIASEN	VEE	VEE	VEE	VEE	VEE	VEE	VEE	VEE
P35								RB5
P34								RB4
P33								RB5
P32								RB4
P31								GB5
P30								GB4
P29								GB5
P28								GA4
P27								BB5
P26								BB4
P25								BA5
P24								BA4
P23		UD11				R7	RB3	RB3
P22		UD10				R6	RB2	RB2
P21		UD9			R5	R5	RB1	RB1
P20		UD8			R4	R4	RB0	RB0
P19	UD7	UD7		R3	R3	R3	RA3	RA3
P18	UD6	UD6	R2	R2	R2	R2	RA2	RA2
P17	UD5	UD5	R1	R1	R1	R1	RA1	RA1
P16	UD4	UD4	R0	R0	R0	R0	RA0	RA0
P15	UD3	UD3				G7	GB3	GB3
P14	UD2	UD2				G6	GB2	GB2
P13	UD1	UD1			G5	G5	GB1	GB1
P12	UD0	UD0			G4	G4	GB0	GB0
P11		LD11		G3	G3	G3	GA3	GA3
P10		LD10	G2	G2	G2	G2	GA2	GA2
P9		LD9	G1	G1	G1	G1	GA1	GA1
P8		LD8	G0	G0	G0	G0	GA0	GA0
P7	LD7	LD7				B7	BB3	BB3

VBIASEN	VB
P47	RB
P46	RB
P45	RA
P44	RA
P43	GB
P42	GB
P41	GA
P40	GA
P39	BB
P38	BB
P37	BA
P36	BA
P35	RB
P34	RB
P33	RA
P32	RA
P31	GB
P30	GB
P29	GA
P28	GA
P27	BB
P26	BB
P25	BA
P24	BA
P23	RB
P22	RB
P21	RB
P20	RB
P19	RA
P18	RA
P17	RA
P16	RA
P15	GB
P14	GB
P13	GB
P12	GB
P11	GA
P10	GA
P9	GA
P8	GA
P7	BB
P6	BB
P5	BB
P4	BB
P3	BA
P2	BA
P1	BA
P0	BA
LVDSCLK	