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Flora

Advanced TFT-LCD Monitor Control Board

SMART Modular Technologies' Flora is an advanced TFT-LCD monitor control board. Implemented as a single printed circuit board, this design enables a full conventional CRT monitor and/or video & audio replacement with a large-size Active Matrix LCD module.

Suitable for video resolution up to SXGA @ 75Hz in all video modes, the full display area of the module is used. The Flora is capable of acting as a full monitor and/or video & audio interface allowing the main functionality of an analog and digital video interface, also CVBS (x1), SVHS (x1) and stereo audio amplifier. Using BIOS settings Flora is designed to support various TFT-LCD under SXGA resolution.

Flora Specifications

- Analog RGB / DVI (Digital Video Interface) / CVBS (x1) & SVHS (x1) with NTSC, PAL, SECAM / Audio input (x3) / TV / Remote control / Speaker out (x1)
- Multi-sync capability up to SXGA resolution @ 75Hz, compatible standard DOS, VGA, SVGA, XGA and SXGA VESA timing
- Expand DOS, VGA, SVGA and XGA to full screen display
- Compatible with VESA DPMS power saving modes
- +12VDC single power
- OSD & Power switch board: FOSD-xxx
- LCD Voltage select on Board : 3.3V, 5.0V, 12V
- Add-on optional tuner board

Board Product Summary

Product	Size(mm)	Scaler	Function					Main Function	Video Quality	Main Appl. Size	Applicable Resolution	Main Resolution	Remarks
			AO	AD	AV	AVT	PIP/Zoom						
Lily Digital	100 x 150	RealTech RTD2523	Y	Y	Y	N	N	AOD AV	Excellent	6.4"~ 40.0"	VGA~ SXGA	VGA~ SXGA	Wide application Cost-effective
Lily Digital-S	100 x 120	RealTech RTD2523	Y	Y	Y	N	N	AOD AV	Excellent	6.4"~ 19.0"	VGA~ SXGA	VGA~ SXGA	Low Profile Cost-effective
Lily-TV	85 x 185	RealTech RTD2523	Y	Y	Y	Y	N	AVD AVT	Excellent	15.0"~ 40.0"	SVGA~ SXGA	XGA~ SXGA	Monitor application Cost-effective
Flora Digital	100 x 150	PW130	Y	Y	N	Y	N	AO DVI	Excellent	15.0"~ 19.0"	SVGA~ SXGA	XGA~ SXGA	Cost-effective High-qual. SXGA
Flora	120 x 150	PW112	Y	Y	Y	Y	N	AO AVT	Excellent	15.0"~ 19.0"	VGA~ SXGA	XGA~ SXGA	Low Cost High-qual.
Flora Plus	135 x 150	PW165	Y	Y	Y	Y	Y	AO/AVT PIP	Excellent	15.0"~ 19.0"	VGA~ SXGA	XGA~ SXGA	High-qual. SXGA AVT Function
Sunflower II	135 x 270	PW181	Y	Y	Y	Y	Y	AVT PIP DVI	Excellent	19.0"~ 40.0"	VGA~ WUXGA	SXGA~ UXGA	

- Function
 - AO : Analog Only
 - AD : Analog + DVI
 - AV : Analog + Video
 - AVT : Analog + Video + TV
 - AVD : Analog + Video + DVI
 - PIP : Picture in Picture

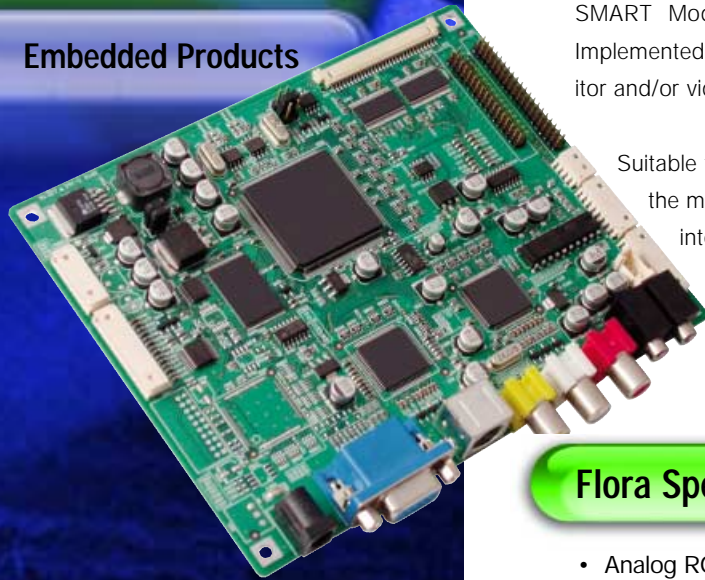
Board Mounting Hole:
At least, one side of mounting hole for the board is compatible with others

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FEATURES

- Optional input combination, e.g., PC Monitor only, PC Monitor with TV
- Full CRT multi-sync monitor compatibility
- True color (16.7 M) data processing and display driving
- Single control operated & transparent On-Screen-Display (OSD) user interface
- Full control of all relevant display and interface parameters via OSD
- Multi-language support
- VESA DDC1/2 B compliant
- Form factor: 120 mm (L) x 150 mm (W) x 17 mm (H)
- The 2 watt x 2 ch. @ 8 ohms audio capability with volume and mute control through either OSD or remote controller.
- TV tuner : NTSC, PAL and SECAM



Flora Supportable Panel List

Flora boards are available with standard BIOS and cables to support the TFT-LCD models listed below. Designed to allow these panels to be up and running almost immediately, the Flora BIOS solutions can also be customized to precisely meet graphic requirements.

Manufacturer	Size	Part Number	Resolution	Brightness	CCFL	Viewing Angle
MITSUBISHI	10.4	AA104SG01	SVGA	400	2	70/70/60/50
AUO	10.4	B104SN02	SVGA	350	1	40/60/60/60
SHARP	10.4	LQ104S1DGXX	SVGA	350	2	70/70/40/70
NEC	10.4	NL8060AC26-11	SVGA	190	2	45/45/20/45
NEC	10.4	NL8060BC26-17	SVGA	280	2	50/50/35/45
OPTREX	10.4	T-51410D104-FW-P-AA	SVGA	140	1	45/45/15/40
OPTREX	10.4	T-51410D104FW-P-AB	SVGA	550	2	45/45/15/40
LG	10.4	LB104V03-A1	VGA	400	2	60/60/40/50
SHARP	10.4	LQ104V1DGXX	VGA	350	2	70/70/40/70
SHARP	10.4	LQ10D367	VGA	200	1	70/70/40/70
NEC	10.4	NL6448BC33-31	VGA	350	2	50/50/40/45
NEC	10.4	NL6448BC33-46	VGA	350	2	70/70/45/55
SHARP	12.1	LQ121S1DGXX	SVGA	300	2	60/60/45/50
SHARP	12.1	LQ121S1LG41 S	VGA	370	2	70/70/50/60
TOSHIBA	12.1	LTD121C30S	SVGA	350	2	60/60/70/70
NEC	12.1	NL8060BC31-17	SVGA	350	2	55/55/40/50
OPTREX	12.1	T-51512D121J-FW-A-AB	SVGA	350	2	60/60/50/40
OPTREX	12.1	T-51756D121J-FW-A-AA	XGA	300	2	60/60/50/40
LG	15.0	LM150X08	XGA	250	2	65/65/45/55
SHARP	15.0	LQ150X1LGN2	XGA	260	2	70/70/40/70
SHARP	15.0	LQ150X1LW71	XGA	250	4	85/85/85/85
SEC	15.0	LTM150XH-L01	XGA	250	4	70/70/55/60
SEC	15.0	LTM150XO-L01	XGA	250	2	65/65/50/60
TOSHIBA	15.0	LTM15C458T	XGA	350	4	70/70/80/80
NEC	15.0	NL10276AC30-02	XGA	180	4	85/85/85/85
NEC	15.0	NL10276AC30-04	XGA	200	2	55/55/45/45
NEC	15.0	NL10276AC30-07	XGA	400	8	85/85/85/85
NEC	15.0	NL10276BC30-10	XGA	250	2	60/60/40/60
LG	15.4	LP154W01	WXGA	185	1	60/60/40/50
HYDIS	17.0	HT17E12-100	SXGA	250	4	65/65/40/65
LG	17.0	LM170E01	SXGA	250	4	70/70/60/60
SEC	17.0	LTM170E6-LXX	SXGA	250	4	89/89/89/89
SEC	17.0	LTM170E8-LXX	SXGA	250	4	89/89/89/89
SEC	17.0	LTM170EU-LXX	SXGA	300	4	75/75/75/60
SEC	17.0	LTM170EX-LOX	SXGA	270	4	75/75/75/60
LG	18.1	LM181E06	SXGA	250	6	80/80/80/80
SHARP	18.1	LQ181E1LW31	SXGA	235	4	70/70/70/70
NEC	18.1	NL128102AC28-07	SXGA	200	12	85/85/85/85
FUJITSU	19.0	FLC48SXC8V-10	SXGA	300	4	85/85/85/85
FUJITSU	19.0	FLC48SXC8V-11AA	SXGA	300	4	85/85/85/85
LG	19.0	LM190E01	SXGA	250	4	88/88/88/88
LG	19.0	LM190E02	SXGA	250	4	88/88/88/88
SEC	19.0	LTM190E1-LOX	SXGA	250	4	85/85/85/85
SEC	19.0	LTM190E4-LOX	SXGA	250	4	89/89/89/89
CMO	19.0	M190E3-L01	SXGA	250	4	85/85/85/85
AUO	19.0	M190EN02/04	SXGA	350	4	65/65/65/65
NEC	19.0	NL128102BC29-01	SXGA	300	6	85/85/85/85
NEC	20.1	1 NL128102AC31-02	SXGA	250	12	85/85/85/85
LG	20.1	LC201V2	VGA	450	6	85/85/85/85
CMO	20.1	V201V1-T01	VGA	500	6	80/80/70/70
SEC	22.0	LTA220W1-LOX	WXGA	450	8	85/85/85/85
LG	23.0	LC230W01-A2	WXGA	450	12	88/88/88/88
SEC	23.0	LTA230W1-LOX	WXGA	500	12	85/85/85/85
LG	26.0	LC260W01	WXGA	450	14	88/88/88/88
SEC	26.0	LTA260W1-LOX	WXGA	450	16	85/85/85/85
SEC	26.0	LTA260W2-LOX	WXGA	500	8	85/85/85/85

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