

# MFD1000

Multi - Function Display



The MFD1000 interface controller for TFT LCD panel display solutions

Input : CGA / EGA / VGA / SVGA / XGA / WXGA / UXGA / SXGA & More..

Output : 24-bit TTL / 8/10-bit single/dual LVDS for TFT LCD panel

This MFD1000 scaler board generates all the necessary control signals and the panel data to drive TFT-LCD panels. It performs image scaling on 24-bit RGB or YUV data stream and feeds the scaled pixels to LCD panel. It accepts standard analog signal from any CGA / EGA / VGA / SVGA/XGA/SXGA video controller. It also accepts NTSC/PAL/SECAM video sources through a composite Video or S-Video connector. OSD (On Screen Display) logic is embedded. The user interface includes Auto-Adjust, Phase, Brightness, Contrast, Horizontal and Vertical Position adjustment etc. An auto adjustment function provides automatic frequency, phase, H&V position, and white balance tuning. Besides, it support SD TV function.

CVBS

YPbPr

D-Sub

Stereo  
Audio

RGB

Amplifier  
2W+2W

S-video

SDTV



## Feature

- . Support CVBS / RGB / S-Video / YPbPr / D-Sub signal.
- . 24-bit TTL or 8/10-bit single/dual LVDS video output
- . NTSC/PAL/SECAM Auto-switching control.
- . Build-in YUV to RGB color space converter.
- . High speed video ADCs up to 162 MHZ
- . Digital AGC available in several working modes
- . Support various panel from CGA to SXGA.
- . Aspect ration conversion: 16 : 9 / 14 : 9 / 4 : 3
- . Video Enhance / Automatic mode detection.
- . Support horizontal/ vertical scaling
- . Auto adjustment for frequency, phase, H/V position, and white balance
- . Support SD TV function
- . Support SPI & SPI dual flash interfaces
- . Low EMI and power saving features
- . PWM back light intensity control
- . High-Quality Audio Processing
- . Build-in stereo audio device.
- . Support treble ,bass, volume, balance, mute, virtual surround adjustments
- . Flexible firmware design to meet any custom design request.
- . On-Screen Display Control.
- . Operating Temperature : 0 ~ + 50°C
- . Storage Temperature : -20 ~ + 60°C



**PROGAME ELECTRONIC CORP.**

TEL: +886-3-3594297(REP.) FAX: +886-3-3209343 [www.progame.com.tw](http://www.progame.com.tw)

Engineer Department/E-mail: [engin.dept@progame.com.tw](mailto:engin.dept@progame.com.tw)

The Sales Department/E-mail: [dcm@progame.com.tw](mailto:dcm@progame.com.tw)/[dch@progame.com.tw](mailto:dch@progame.com.tw)

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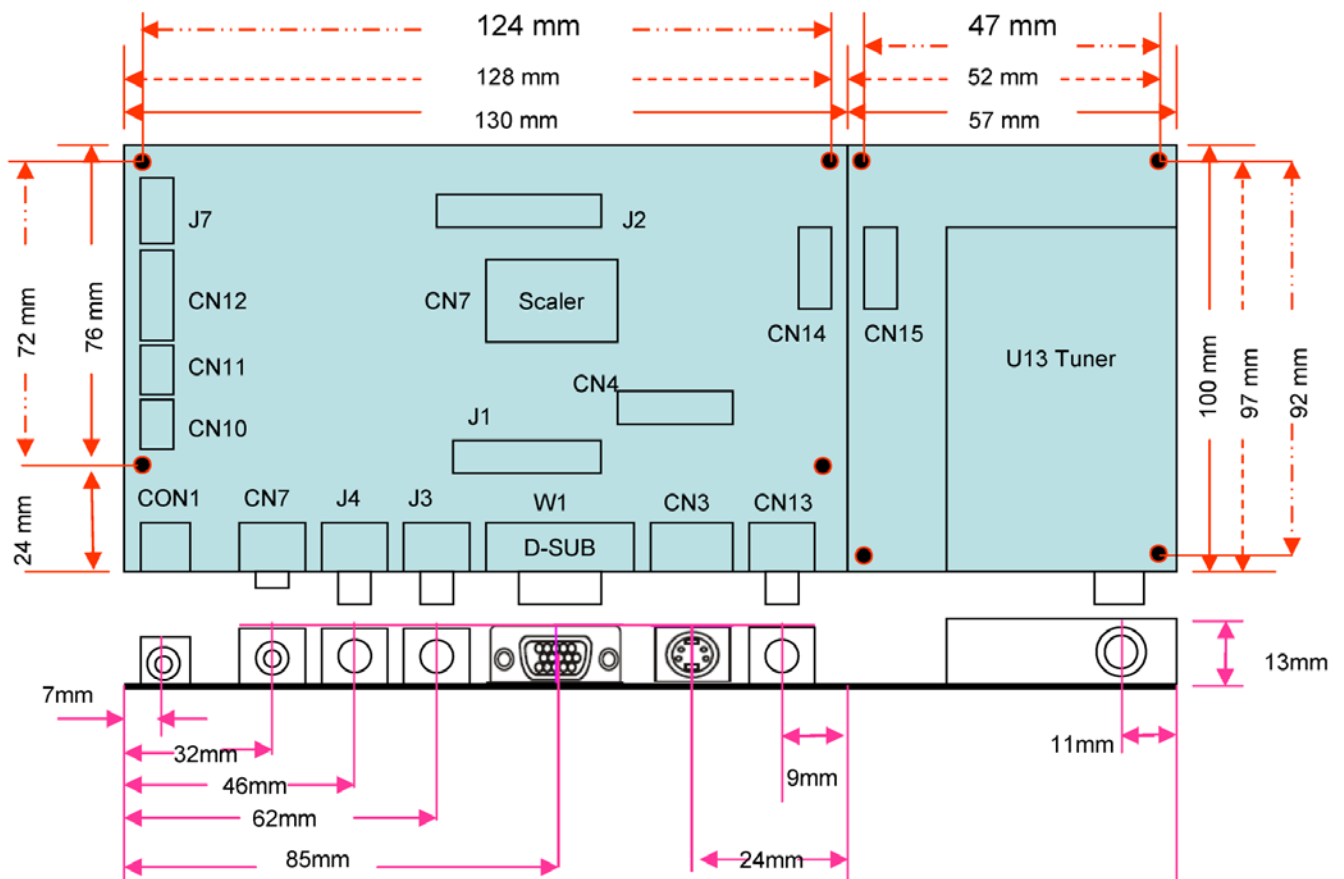


## Scaler Board Accessory

1	Panel Signal Cable & Connector Kit	5	IR Kit
2	Back light Inverter & Cable kit	6	AC/DC 12V Adapter
3	Audio Function ( Option )	7	Speaker ( Option )
4	Video Function ( Option )	8	Tuner Board ( Option)

## Scaler Board Drawing

J7	Inverter connector output	CN13	CVBS video connector
CN12	OSD controller connector	J1	RGB connector
CN11	IR connector	CN4	YPbPr connector
CN10	Speaker connector	U6	Scaler
CON1	Power Jack	J2	LVDS connector
CN7	Phone Jack	CN14	Tuner Board connector
J4	Line in - L	CN15	Tuner Board connector
J3	Line in - R	U13	Tuner
W1	D-SUB		
CN3	S-Video		



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Engineer Department/E-mail: [engin.dept@progame.com.tw](mailto:engin.dept@progame.com.tw)

The Sales Department/E-mail: [dcm@progame.com.tw](mailto:dcm@progame.com.tw) / [dch@progame.com.tw](mailto:dch@progame.com.tw)