

RGB-DVI Scaler Board supporting resolutions up to UXGA / WSXGA+

The d.scale is a scaler board designed to act as a full monitor interface providing high-quality images for LCD TFT panels. It provides an analog and digital video interface, performs image scaling on 24-bit RGB data stream and supports almost any LCD TFT display from VGA up to SXGA & SXGA+ / UXGA & WSXGA+.

The d.scale board is a member of the device family. As any device of this family, which is developed by Display Solution AG, this board was designed to meet the extended requirements of embedded applications. A well-balanced hard-/ software combination affords a feature rich product at a competitive price.

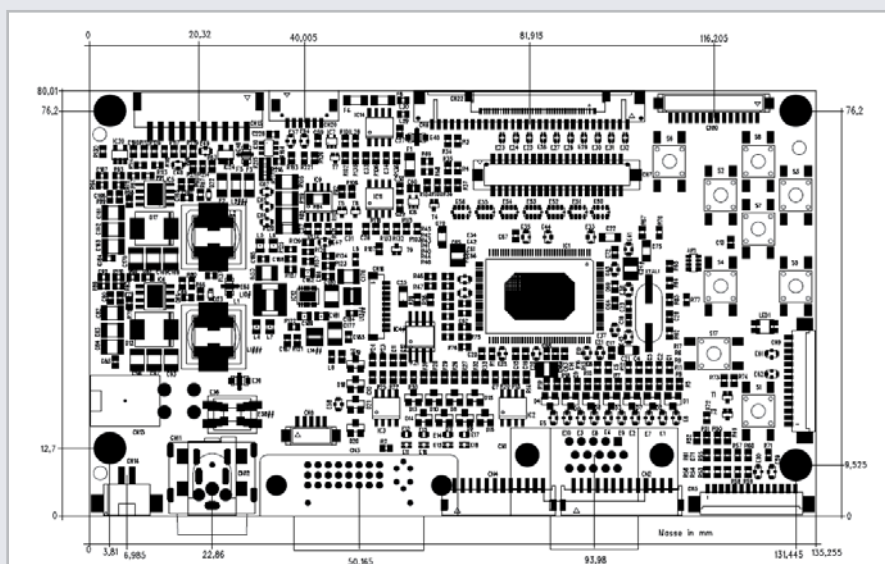
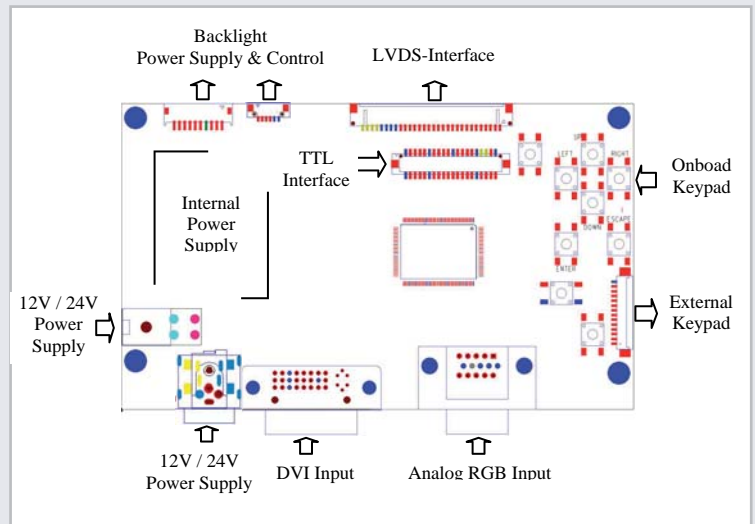


Features

- ✓ DVI® & RGB-analog input
- ✓ 12/24V power supply supports also large displays from a single 24V power supply
- ✓ Output interfaces
 - o LVDS (18-/24-bit, single/dual channel)
 - o TTL (24-bit 3.3V)
- ✓ On screen display (6-button / 4-button optional)
- ✓ Automatic selection of panel supply voltage (3.3V / 5V)
- ✓ Enhanced brightness control range if backlight inverters with small dimming range are used
- ✓ Improved EMI-behaviour - special EMI measures facilitates design-in procedure
- ✓ Extended durability - avoidance of components with short life spans like e.g. electrolytic capacitors
- ✓ Reduced power dissipation by using switching regulators with very high efficiency
- ✓ Optional ultra slimline architecture. Total thickness < 8mm

ST Technology (gm5726 / gm5766)

- ✓ Supports LCD-TFT Displays
 - VGA up to SXGA / SXGA+
 - VGA up to UXGA / WSXGA
- ✓ Faroudja RealColor® color processing:
- ✓ Ultra-Reliable DVI® receiver (165 MHz)
- ✓ Triple-channel (10-bit) ADC (205 MHz) and PLL
- ✓ Instant AutoTM provides automatic image alignment for analog input from PC



Specification

Supported Panel Resolutions (LVDS only)

- 640x480 to 1280x1024 / 1440x900 (Genesis gm5726)
- 640x480 to 1600x1200 / 1680x1050 (Genesis gm5766)

Input Voltage

- 12V-28V (Backlight Voltage = Input Voltage)
- optional 24V only (Panel & Backlight Supply Voltage adjustable)

Environmental

- Operating Temperature: 0°C to 70°C
- Relative Humidity: 5%-85%, non condensing