USB Controller Board with optional 4-/5-Wire Touch Controller

- LED-Driver
- LCD-TFT BIAS Power Supply

d.screen USB 2.0 is a best-price innovative board solution for high volume projects of USB 2.0 connected displays based on DisplayLink’s DL1x5 device family. It is designed to act as a direct interface between USB 2.0 and LCD TFT displays from VGA up to Full-HD / WUXGA / QWXGA. A highly efficient power-management makes the d.screen USB 2.0 the perfect solution for portable multifunctional monitors. In addition it supports low-cost LCD-TFT panels which requires LCD-BIAS voltages.

d.screen USB 2.0 is a member of the device product family. As any device of this series 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
- USB-Interface
- Supports Resolutions from VGA up to FHD/WUXGA/QWXGA
- Optional LCD TFT BIAS*) Power Supply
- Optional LED-Driver
- On-board USB 2.0 Highspeed Hub
- Optional On-board 4-/5-Wire touch-controller

*) LCD BIAS Generation and VCOM Buffer
The d.screen-USB-2.0 offers a very compact and small on-board power supply solution that provides all three voltages required by thin film transistor (TFT) LCD displays. This enables most cost effective designs which are based on low-cost LCD-TFT-Displays available from the consumer market.

DisplayLink® Technology - DL125/165/195

- Connect a PC with USB 2.0 port directly to any LCD TFT panel
- Lossless compression protocol
- DisplayLink DL2+ adaptive compression scheme ensures a highly interactive, ultra low latency user experience and allows smooth window and cursor movement as well as support for fullscreen video playback
- Dual DisplayLink DL2+ Decompression engines with DL165/195
- Fully Microsoft WHQL compliant
- Supports Windows
- Supports Apple Mac OS and Linux
- Mirror mode or extended desktop
- Supports resolutions up to Full-HD / WUXGA / QWXGA
- Optional Linux support
- Up to 6 Displays are supported either Hub or „daisy-chain“ connected
- Supports screen rotations of 90°, 180°, 270°, 360°

Supported Panel Resolutions (LVDS / TTL)

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<tr>
<th></th>
<th>DL-195</th>
<th>DL-165</th>
<th>DL-125</th>
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<tbody>
<tr>
<td>Maximum Resolution</td>
<td>1920 x 1200</td>
<td>1600 x 1200</td>
<td>1280 x 1024</td>
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<tr>
<td>2048 x 1152</td>
<td></td>
<td>1920 x 1080</td>
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<tr>
<td>1440 x 900</td>
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Touch Controller - optional
- Resistive Technology 4/5-Wire (auto-detection)

Input Voltage
- 5/12V (Backlight voltage = Input Voltage)

Environmental
- Operating Temperature: 0°C to 50°C
- Relative Humidity: 5%-85%, non condensing