

DisplayLink DL-4100 Series Product Brief

Low Power USB 3.2 Display SoCs

From the world leader in virtual graphics, Synaptics introduces the DisplayLink DL-4100 family: an SoC solution created specifically for USB displays. These SoCs enable a new category of displays that connect power and data over USB, the most universally deployed connection globally. The DL-4100 family features embedded video frame memory to enable simple 2-layer PCB designs with the lowest overall bill of materials and power. Power over USB removes the need for a mains cable, while zero power standby and 435mW monitor sleep ensure minimal power consumption for EnergyStar and ErP compliant designs.

The DL-4100 series is suitable for both LVDS and eDP panels. The low BOM cost and low-power design make these SoCs ideal for both USB monitors, and touch screen control panels and embedded designs. Because only a simple driver is required, the DL-4100 series SoCs work over any USB interface, including USB-C, Standard-A and Micro-A, and are compatible with Windows, MacOS, Chrome OS, Ubuntu and Android.

Applications

- USB bus-powered, slim profile monitors
- Energy efficient portable displays and mini-monitors
- Touch screen control panels
- Information radiators
- Interactive kiosk displays
- Soft video conferencing controllers
- Low power displays for embedded designs



DisplayLink Certified Plug and Display

DisplayLink Certified products are thoroughly tested in our labs to guarantee interoperability with the vast DisplayLink graphics ecosystem. Regular software updates ensure a lifetime of performance enhancements.



Look for the DisplayLink Certified Plug and Display mark.

DisplayLink Compression – DL3

- Ultra-low latency
- Clear and crisp text and graphics
- Link aware – adapts automatically to bandwidth constraints
- Compression tuned for video content and high-quality graphics

Product Feature	DL-4110	DL-4115	DL-4120
Maximum resolution	1366x768 (720p)	1400X1050 (900p)	1920x1080 (1080p)
DL3 video-tuned compression	✓	✓	✓
LVDS compatible	✓	✓	✓
eDP compatible	✓	✓	✓
USB 3.2 Gen 1 input	✓	✓	✓
USB Standard-A and USB-C input	✓	✓	✓
Support for USB touch screen integration	✓	✓	✓
No external DDR required	✓	✓	✓

Packaging

- 20 mm x 20
- 0.5 mm ball pitch
- 144 TQFP and RoHS compliant

Reference Designs

Synaptics supplies a full set of schematics, PCB layout, firmware, and OS drivers to complete a bus-powered or mainspowered monitor design. Reference Design demonstrates support for eDP panels through LVDS to eDP conversion.

Ease of Deployment

DisplayLink drivers are available to deploy via Windows Update and are built into Chrome OS. Drivers are available from the Google Play Store for Android, and from DisplayLink directly for MacOS and Ubuntu.

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Supported Platforms

- Windows[®] 10/Windows 7
- MacOS
- Android
- Chrome OS
- Ubuntu

