

DisplayLink DL-5000 Series Product Brief

4K/UHD/2K/HD Single and Multi-head USB Docks

From the world leader in USB graphics, Synaptics introduces the DisplayLink DL-5000 series, an SoC family created to extend the DisplayLink USB graphics adapters to 4K Ultra-High Definition monitors and displays. The DL-5000 series allow OEMs to offer support for ultra-high resolution 4K/UHD display technology. Based on the industry-leading DL3 codec the DL-5000 series offer the same benefits of low latency and high quality graphics, now for 4K.

Ideal for end customers wanting a 4K solution for conference room displays, digital signage, or to enable an existing PC or Mac computers to support the latest 4K monitors; all from a single USB connection.

Product Applications

USB3 to 4K Graphics

- Desktop productivity
- Conference rooms

USB3 Universal Docks

- 1x 4K display or 1-2x 2K display or 1-2x HD display with 4K/UHD dock with built-in Gigabit Ethernet and audio from a single USB connection

Benefits

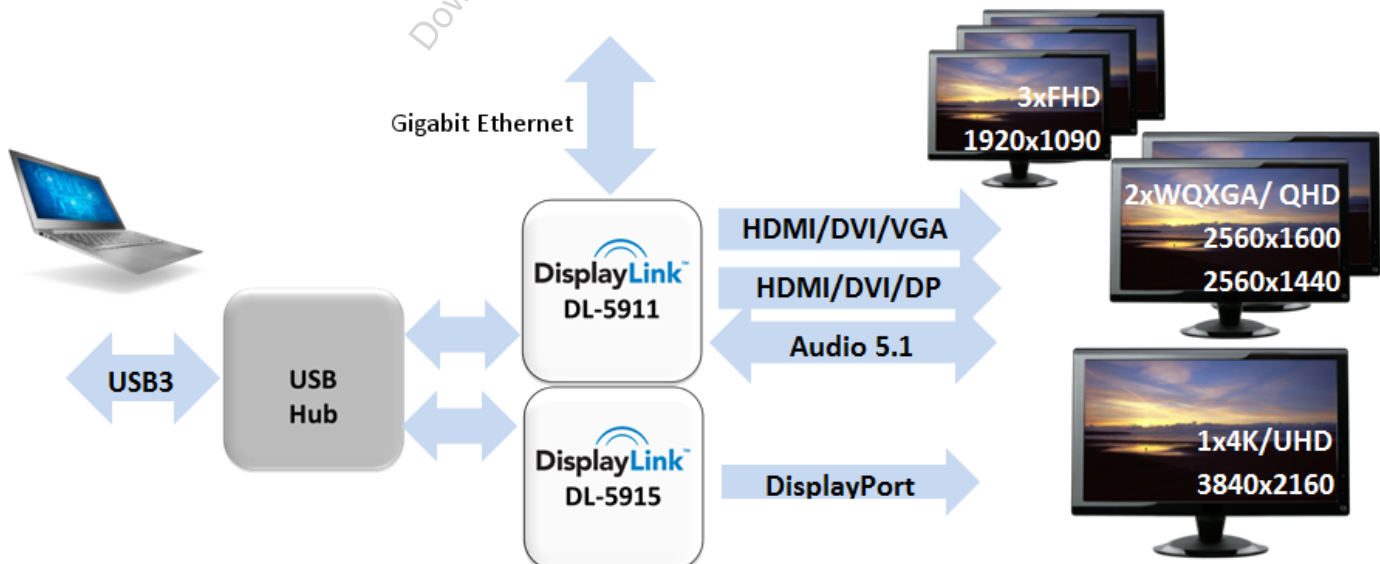
- Compatible with new USB Type-C or legacy USB connectors
- High quality with low latency
- 100% compatible with existing DL universal docking
- Can be used with other DisplayLink products to enable up to 6 USB displays
- USB bus power (no external power supply needed)

Features

- Up to 3840x2160p30 output
- Backward compatible with QHD and HD monitors
- DisplayPort 1.1a interface
- HDCP 1.x for protected video playback
- Integrated DisplayPort Audio



Gigabit Ethernet



DisplayLink DL-5000 Series Product Brief

4K/UHD/2K/HD Single and Multi-head USB Docks

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
- Uncompromised UHD video quality
- Compatible with HDCP 2.0 encryption

Product Feature	DL-3500	DL-3700	DL-3900	DL-3950	DL-5500	DL-5700	DL-5900	DL-5910
Configuration*	0:1:1	0:1:1	0:1:2	0:2:2	1:1:1	1:1:1	1:1:2	1:1:3
3840x2160p30	—	—	—	—	1x	1x	1x	1x
2560x1600/1440	1x	1x	1x	2x	1x	1x	1x	2x
2048x1152p60	1x	1x	2x	2x	1x	1x	2x	3x
1920x1080p60	1x	1x	2x	2x	1x	1x	2x	3x
Dual Head	—	—	✓	✓	—	—	✓	✓
Single Head	✓	✓	—	—	✓	✓	—	—
DP (external)	✓	✓	✓	✓	✓	✓	✓	✓
HDMI	✓	✓	✓	✓	—	✓	✓	✓
DVI	✓	✓	✓	✓	—	✓	✓	✓
VGA	✓	✓	✓	✓	—	✓	✓	✓
Gigabit Ethernet	✓	✓	✓	✓	—	✓	✓	✓
Audio 5.1	✓	✓	✓	✓	✓	✓	✓	✓

* Configuration 4K:2K:1K head count

Packaging

- 17 mm x 17 mm
- 400 BGA, RoHS and industry Green conformance
- 0.8 mm ball pitch

Reference Designs

Synaptics supplies a full set of schematics and PCB layout information along with firmware and OS drivers to complete a USB3 to 4K/UHD Adapter.

Trademarks

Synaptics and the Synaptics logo are trademarks or registered trademarks of Synaptics Incorporated or its affiliates in the United States and/or other countries.

All other marks are the property of their respective owners.

Notice

Use of the materials may require a license of intellectual property from a third party or from Synaptics. This document conveys no express or implied licenses to any intellectual property rights belonging to Synaptics or any other party.

Supported Platforms

Microsoft Windows[®]

- Windows 10 /Windows 8.1
- Windows 7
- Legacy Windows XP – Vista

Apple[®] Mac[®] OS[®]

- OSX 10.8 onwards
- Google Android[™]
- V5.0 Lollipop onwards

Linux

- Ubuntu 14.10 onwards

