



The Synaptics® DL-7xxx series is a universal USB smart dock-on-a-chip that drives up to four displays simultaneously from any computer with any operating system. It enables cost-effective smart docks with rich graphics and comes with integrated digital audio, up to 2.5G Ethernet, and an optional IoT connection for remote monitoring and management services. The IoT connection includes the ability to display content on the monitors without a computer attached for features such as splash screen/OSD.

Benefits

- Universal: any OS
- Can drive displays, even without a PC
- Low system cost
- Industry-leading security
- Enables rich graphics experience

Applications

- Universal USB docking stations and monitor docks
- Smart IoT docks and displays
- PCIe video port expansion cards
- Universal graphics adapters



LOW SYSTEM COST



ANY COMPUTER, ANY OS



ENABLES NEW RICH GRAPHICS EXPERIENCES



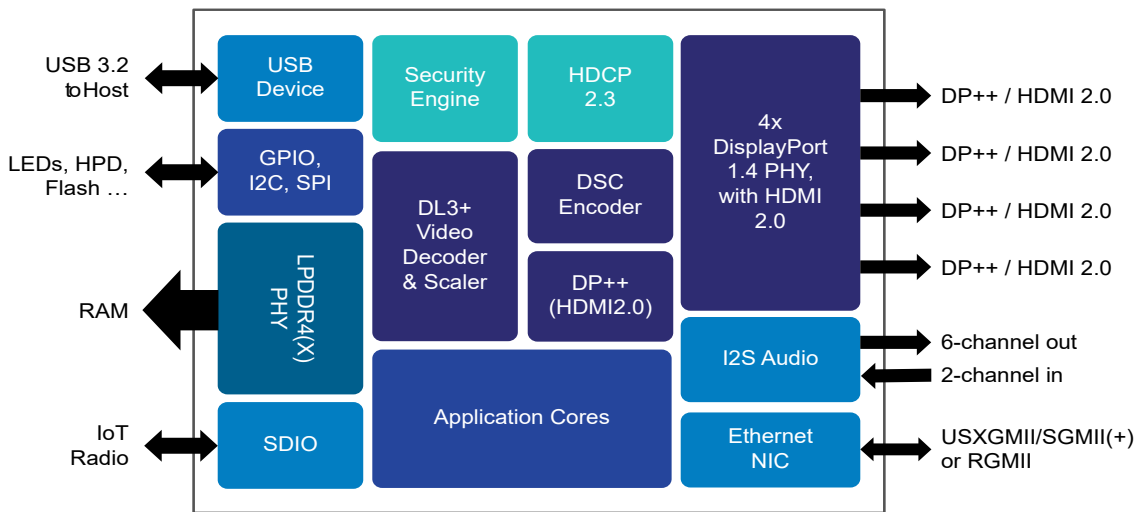
BUILT-IN SECURITY

Features

- OEM and IT personalized branded splash screens
- Smart IoT option: insights, remote management, and messaging. Local on-screen debug details and info splash screens for user self-help
- Enterprise Ethernet: Wake-up on LAN, PXE boot, host-based MAC address/MAPT, VLAN
- 15.5 x 15.5 x 1.320 mm
- DisplayLink Manager app: monitor and dock settings, debug information
- fcCSP 30 x 30 matrix 524L, RoHS, and industry green performance
- 0.5 mm lead pitch, ball pattern supports standard PCB fab rules (no HDI rules required)
- Flexible video resolution within DP1.4 bandwidth, up to:
 - 1x 10k Super UW – 10240 x 2880 @ 60 Hz
 - 2x 8K – 7680 x 4320 @ 60 Hz
 - 4x 4K/UHD – 3840/4096 x 2160 @ 120 Hz
 - 1x 4K @ 144 Hz + 3x 4K @ 120 Hz

Synaptics DL-7xxx

Smart Universal Docking Station SoC



System Block Diagram



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