

PRODUCT CATALOG

DESIGNED FOR YOUR SUCCESS



VIA Labs, Inc.

2025/5

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ABOUT VIA LABS, INC.

VIA Labs, Inc. (VLI), a subsidiary of VIA Technologies, is a leading supplier of USB-related controllers. In the 2025 product catalog, **VLI** expanded its product portfolio by adding a new DisplayPort MST Hub. By expanding beyond single DisplayPort to HDMI Converters, **VLI** has further strengthened its existing USB4®, SuperSpeed USB, and USB Type-C® product lines. **VLI's** products suit various applications, from host systems to peripheral devices. With the introduction of certified USB4 and DisplayPort controllers, **VLI** now offers total in-house connectivity solutions for Data, Power, and Video functions.

With a strong track record of bringing new USB technologies and concepts to market, and through participation in standards development and compliance testing, **VLI** has demonstrated technology and industry leadership. In 2025, **VLI** will focus extensively on design processes and quality improvements while also working to optimize our current product offerings. **VLI** solutions deliver exceptional value and have been designed to work seamlessly to create a unified platform.

威鋒電子 (VIA Labs, Inc., VLI) 為威盛集團之子公司，身為USB行業領導廠商，致力於USB相關晶片之技術發展。在2025年產品型錄中，威鋒擴展了產品陣容，增加DisplayPort MST Hub，突破了過去僅提供單一 DisplayPort轉 HDMI Converters的侷限，也進一步強化既有的 USB4®、SuperSpeed USB 及 USB Type-C® 產品線。威鋒產品可廣泛應用於主機端和周邊裝置等，憑藉具備認證的USB4和DisplayPort產品，打造完整自有晶片方案，完美串連資料、電源、影像三項功能。

威鋒電子在推動新穎的USB技術與概念上表現亮眼，並積極參與標準制定與相容性測試，展現其在技術與業界的領導地位。在2025年，威鋒專注於設計流程的優化與產品品質的全面提升，同時持續強化現有產品線。威鋒提供的解決方案不僅具備高度價值，更能在單一平台中完美協用、無縫整合。

VL716



VL716 Evaluation Board

The World's First Single-Chip Native USB-C to SATA Bridge to Achieve USB-IF Certification

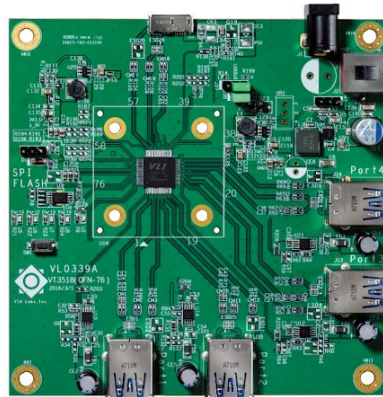
VL811+



VL811+ Evaluation Board

The World's First USB3 Hub to Achieve USB-IF Certification

VL820



VL820 Evaluation Board

The World's First USB-IF Certified SuperSpeed USB 10Gbps Hub

VP302
(15W, 18W, 27W)



VP302 Evaluation Board (15W, 18W, 27W)

The World's First USB-IF Certified PD 3.0 with PPS Power Brick

VL832

FCCSP 10x10mm



USB4 End Point Device

Integrated SuperSpeed USB 10Gbps Hub
 Integrated USB Billboard
 Supports HID Buttons
 HW Support for Digitally Signed Firmware (256-bit ECDSA)
 DisplayPort 1.4 Support
 * 4-Lane HBR3@USB4 Tunneled Mode
 * 2-Lane + USB / 4-Lane UHBR10@10Gbps DP Alt-Mode
 Second I2C slave support for IOT application
 Earned USB4 Device Certification TID# 10033
 Support PortSense™

VL600

QFN60 7x7mm



USB-C DP Alt Mode to HDMI 2.0b Protocol Converter

DP 1.4 to HDMI 2.0 Protocol Converter
 Integrated 1-Port USB PD 3.0 Supporting DP Alt Mode & USB Billboard
 Built-in DSC V1.2a Decoder for Triple Bandwidth HDCP 2.3 and HDCP 1.4 Repeaters with On-chip Keys

VL605

QFN68 8x8mm



USB-C to HDMI 2.1 Protocol Converter

DP 2.1 HBR3 to HDMI 2.1 Protocol Converter
 Integrated 2-Port USB PD 3.1 EPR Controller
 Supports DP Alt Mode & USB4 DP Tunneling w/i Charge Through
 Secure FW Update
 DP 2.1 Source-controlled Mode/
 Autonomous Mode
 Adaptive-Sync and AMD Freesync to VRR Conversion

VL610

QFN100 10x10mm

DP 2.1 HBR3 to HDMI 2.1 MST Hub

DP 2.1 HBR3 RX
 Three Video Outputs: 1x HDMI 2.1 FRL TX;
 1x DP++ TX; 1x Configurable HDMI 2.1/DP++ TX
 Max Resolutions: 1x8K60, 2x4K120/144, or 3x4K60
 USB Billboard or I2C FW Update
 Secure FW Update
 DP 2.1 Source-controlled Mode/
 Autonomous Mode

VP226

DFN10 3x3mm



USB-C DFP CC Controller

Selectable USB-C Current Setting
 VCONN Switch with OCP
 Orientation Indication

VL320

QFN20 4x4mm



PD Sink Controller

Supports USB-C & USB PD 3.0
 Supports Qualcomm® Quick Charge™ 2.0 Sink
 Operating Voltage from 4V to 24V
 Supports External NTC for Thermal Protection

⚡ Supports USB PD

🔌 Supports USB-C ®

VL102

QFN48 6x6mm

**DisplayPort Alternate Mode and PD 3.0 Controller**

One USB-C UFP and One USB-C DRP DFP
 Supports Fast Role Swap
 Supports QC-to-PD Charge Through
 Crystal-less and Can Share SPI Flash with VLI Hub Controller

VL103

QFN32 5x5mm

QFN48 6x6mm

**DisplayPort Alternate Mode with Auto-Standby and PD 3.0 Controller**

Auto-Standby for Ultra Low Idle Power
 One USB-C UFP and One USB-C DRP DFP
 Supports QC-to-PD Charge Through
 Crystal-less and Can Share SPI Flash with VLI Hub Controller
 Pin-Compatible with VL100-Q3 & VL102-Q4

VL105 / VL105H

QFN60 7x7mm

QFN48 6x6mm

**DisplayPort Alternate Mode with Interchangeable DFPs and PD 3.0 Controller**

One USB-C UFP and Two USB-C DRP DFPs
 Interchangeable USB-C DFPs
 * VL105 Supports QC-to-PD Charge Through
 * VL105H Supports Huawei SCP/FCP-to-PD Charge Through

VL107

QFN48 6x6mm

**DisplayPort Alternate Mode with Secure FW Update Console and PD 3.1 Controller**

One USB-C UFP and One USB-C DRP DFP
 Built-in ECDSA256 / SHA256 for Secure FW Update
 Secure FW Update 3rd Party Controllers by I2C or SPI I/F
 Supports USB PD 3.1 Extended Power Range

VL108

QFN60 7x7mm

QFN48 6x6mm

**DisplayPort Alternate Mode and 3-Port PD 3.1 Controller**

One USB-C UFP and Two USB-C DRP DFPs
 Interchangeable USB-C DFPs
 Supports USB PD 3.1 Extended Power Range
 Supports D+/D- Adapter to USB PD
 17 GPIOs and I2C FW Update

VL109 / VL109S 3-Port USB PD 3.2 Controller for Docking

QFN60 7x7mm

QFN48 6x6mm



One USB-C UFP and Two USB-C DRP DFPs
 Supports USB PD 3.2 Extended Power Range
 8-CH ADC or GPIOs
 20 GPIOs and I2C FW Update
 VL109S for Self-powered APPs

Supports USB PD

Supports USB-C ®

VL153

DFN10 3x3mm



Electronic Marker

Supports USB PD 3.1 & USB4 SOP¹ Endpoint
 Supports Thunderbolt Passive Cable VDO
 Supports VCONN Power 2.7~5.5V
 CC, VCONN1 and VCONN2 Pin Short to Vbus Protection

VL162/VL162S

QFN28 3.5x4.5mm



USB Data Switch with CC Logic

USB 3.2 2:4 USB-C Data Switch
 (VL162S is for Self-Powered, DFP Only)
 UFP Mode Features USB-C Current Detection
 DFP Mode Features Settable USB-C Current
 VCONN Switch with OCP
 Enhances Insertion Loss to 1.4dB@10G

VL163

QFN28 3.5x4.5mm



USB Data Switch

USB 3.2 2:4 USB-C Data Switch
 Low Insertion Loss: 1.4dB@10G

⚡ Supports USB PD

🔌 Supports USB-C[®]

VL171/VL172

QFN28 3.5x4.5mm



Crossbar Switch

4:6 Crossbar Switch
 (VL172 adds Pin Assignment E)
 SBU Supports for DP Alternate Modes
 Supports USB 3.2 & DP 1.4
 Low Insertion Loss: 1.8dB@10G
 Pin-Compatible with HD3SS460

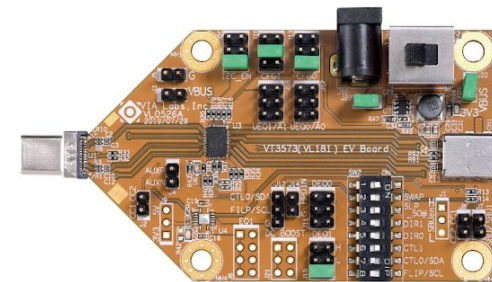
VL181

QFN40 4x6mm



Re-driver

4 Channels Bi-Directional Linear Re-driver
 Supports Data Rates up to 10Gbps
 GPIO and I2C Control for Channel Direction and EQ
 Integrated Termination Networks



VL181

VL805 (4-Port)

QFN68 8x8mm

VL806 (2-Port)

QFN48 7x7mm

USB Host

xHCI 1.0

Supports UASP & USB Debug Capability
Windows Inbox Driver Support

VL122

QFN28 5x5mm (4-Port)

QFN24 4x4mm (2-Port)



USB2 480Mbps Hub

Single Transaction Translator (STT)
Integrated 5V to 3.3V regulator
Management the configuration through EEPROM
Low Power Design

VL211 (1+3Port)

QFN48 6x6mm



SuperSpeed USB 5Gbps Hub with USB PD Support (1x 5Gbps, 3x USB 2.0)

Supports USB-C & USB PD, Up to 5-Ports via TCPCI
Supports Multi-Port Charger & DP Alt-Mode
Optimized for Small Form Factor
Integrated USB Billboard
Supports HID Buttons
Integrated DC-DC
Management Interface & Smart Charging
Pin-Compatible with VL210

VL817

QFN76 9x9mm (4-Port)

QFN56 7x7mm (2-Port)

SuperSpeed USB 5Gbps Hub

Integrated USB Billboard
Supports HID Buttons
Integrated DC-DC
Management Interface & Smart Charging
Support PortSense™ (VL817D0)

VL822

QFN88 10*10mm (4-Port)

QFN76 9*9mm (4-Port)

QFN56 7*7mm (2-Port)



SuperSpeed USB 10Gbps Hub with USB PD Support

Supports USB-C & USB PD, Up to 5-Ports via TCPCI
Supports Multi-Port Charger & DP Alt-Mode
Integrated USB Billboard
Supports HID Buttons
Management Interface & Smart Charging
Integrated Mux for UFP & 2x DFP (QFN88)
Support PortSense™ (VL822C0)

VL823

QFN88 10*10mm (4-Port)

QFN76 9*9mm (4-Port)



SuperSpeed USB 10Gbps Hub with USB-C Support

Native USB-C DFP w/ Mux + CC Logic
* 2x for QFN88, 1x for QFN76
Integrated USB Billboard
Supports HID Buttons
Management Interface & Smart Charging
Low Power Design
Support PortSense™

Supports USB PD

Supports USB-C®

VL711

QFN48 6x6mm
QFN44 5x6mm

SuperSpeed USB 5Gbps SATA Bridge

SuperSpeed USB 5Gbps to SATA III Bridge
Low Power Design
Built-in DC-DC



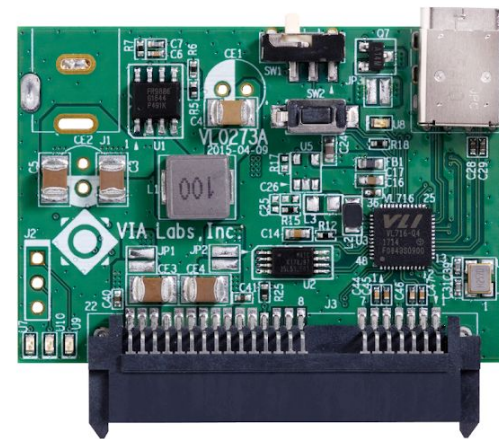
VL711

VL716

QFN48 6x6mm
Ⓢ

SuperSpeed USB 10Gbps SATA Bridge

SuperSpeed USB 10Gbps to SATA III Bridge for USB-C
Integrated CC Logic & Switch Function
Low Power Design
Built-in DC-DC



VL716

VL631

QFN48 6x6mm

USB Audio Controller

Single Chip with USB Audio, Audio Codec & Headphone Amplifier

VL632

QFN56 7x7mm

Integrated Flash & OSC

DAC SNR 100dB, ADC SNR 95dB

Supports Up to 24-bit/192k Hz Resolution

Supports HID Buttons

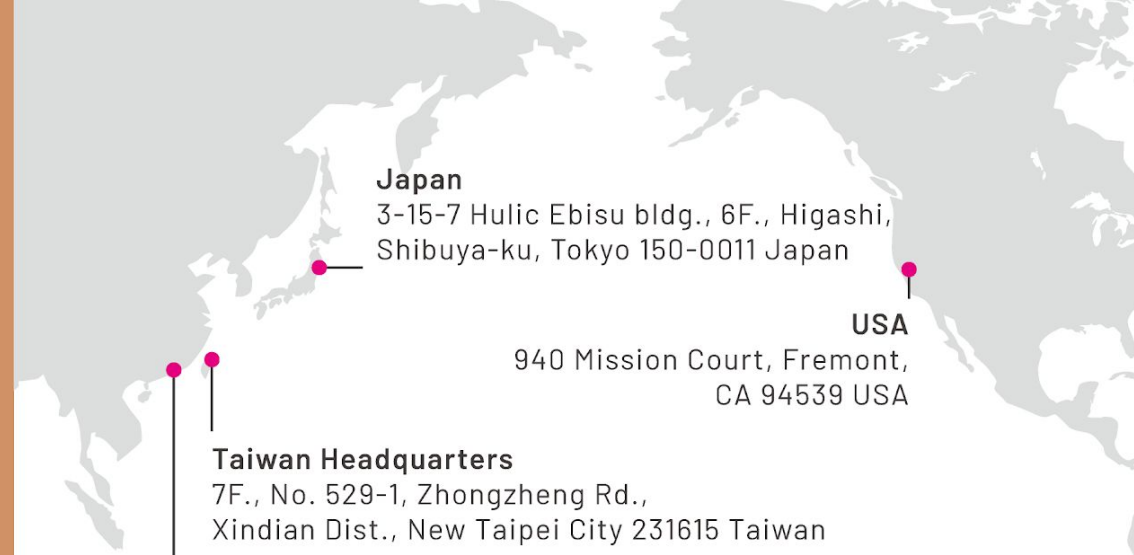
* VL631 Supports 2 Channel Stereo Playback & 2 Channel Recording

* VL632 Supports 2 Channel Stereo Playback & 4 Channel Recording

⚡ Supports USB PD

Ⓢ Supports USB-C Ⓢ

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