

VT085

Advanced Secure Keyboard, Video and Mouse (KVM) Transmitter



VT085

Key Features

- VT085 in conjunction with the VT086 forms a complete secure remote KVM over fiber (VT085 is the transmitter side)
- USB 2.0 encoded over Fiber with USB white listing for secure USB devices
- DP++, DP (Display Port) or HDMI over Fiber
- Capable of video overlay at the output
- Lossless video encoding/decode
- Utilizing LC style Fiber (single TX/RX)
- Glass to glass latency of less than 20ms
- Rugged I/O connectors
- Encrypted package over Fiber for secure communication between the receiver and transmitter
- Serial port for configuration and management
- Secure Key capable

Benefits

- VadaTech 3rd Generation KVM
- Compact size with low (15W) power consumption
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader



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VT085, when used in conjunction with a VT086, forms a complete KVM extension over a secure LC Fiber link. Data is encoded using a proprietary algorithm which, together with the use of fiber, combats interception of sensitive data.

The VT085 encodes the USB2.0 as well as dual DP++, Display Port (DP) or HDMI and transmits the data over LC fiber. The video can be up to 4K resolution on each of the two video inputs. The output (VT086 side) has video overlay capability with the overlay images being programmable and controlled over Ethernet by the user. Video encode/decode is lossless. The VT085 configuration and management are available via serial port.

The VT085/VT086 encoding/decoding and data processing is done in hardware for a very low latency protocol. The glass to glass latency is less than 20ms.

The module supports white listing of attached USB devices. The host USB can only numerate approved devices, preventing unauthorized access. It can also store a secure key to ensure the unit cannot be compromised.

The module utilizes ruggedize I/O connectors for harsh environments.

The VT085 is orderable with a fanless enclosure or optionally as a board-level product without enclosure. This allows customers to fully integrate the unit into their own user console.



Figure 1: VT085

Block Diagram

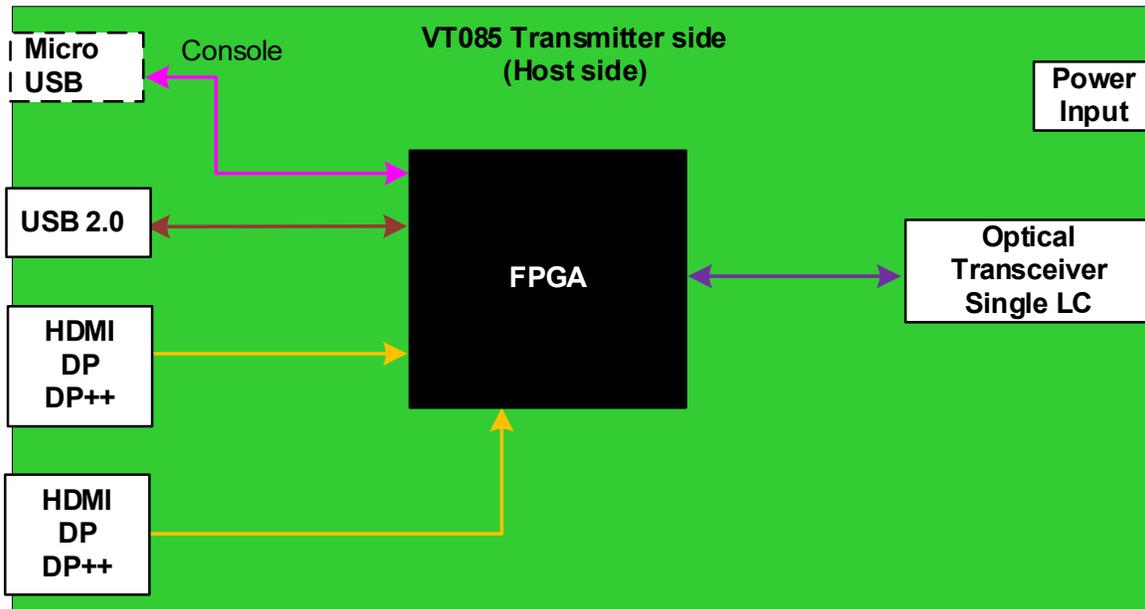


Figure 2: VT085 Functional Block Diagram



Figure 3: Conduction cool deployment example

VT085/VT086 Connectivity

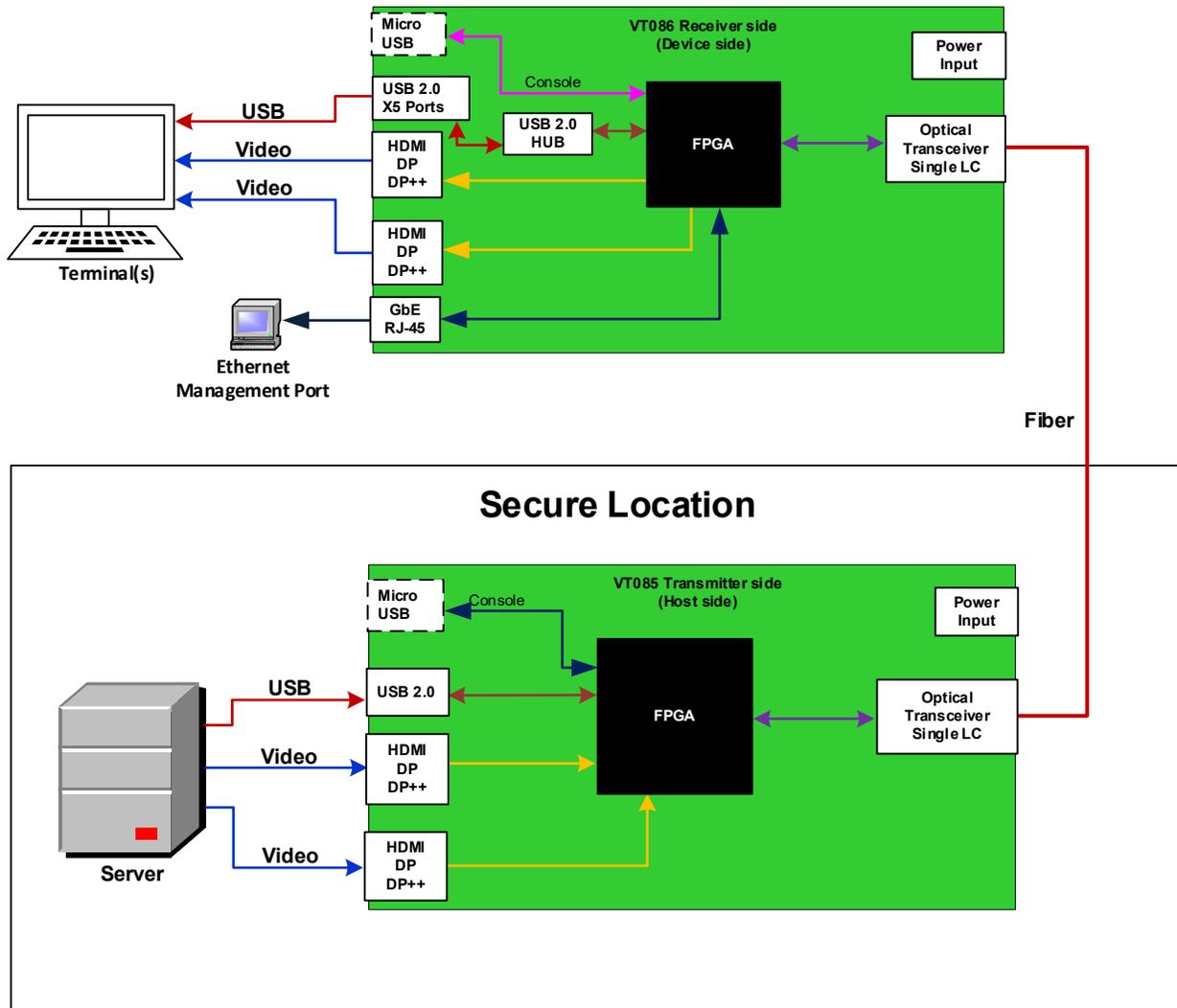


Figure 4: VT085/VT086 Connectivity Block Diagram

Specifications

Architecture	
Physical	Dimensions Width: 5.89" (149.6 mm) bare module without the enclosure Depth 4.43" (112.5 mm) bare module without enclosure
Type	KVM KVM over Fiber (Transmitter side)
Standards	
Module Management	IPMI IPMI v2.0 and PICMG 3.0 and VITA
Configuration	
Power	VT085 15W
Environmental	Temperature See Ordering Options Storage Temperature: -40° to +90°C
	Vibration Operating 9.8 m/s ² (1G), 5 to 500 Hz on each axis
	Shock Operating 30G each axis
	Relative Humidity 5 to 95% non-condensing
Others	Mechanical Conduction cool with enclosure
Other	
MTBF	MIL Hand book 217-F@ TBD hrs
Certifications	Designed to meet FCC, CE and UL certifications, where applicable
Standards	VadaTech is certified to both the ISO9001:2015 and AS9100D standards
Warranty	Two (2) years, see VadaTech Terms and Conditions

INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of OpenVPX, ATCA and MTCA products including chassis platforms, shelf managers, AMC modules, Switch and Payload Boards, Rear Transition Modules (RTMs), Power Modules, and more. The company also offers integration services as well as pre-configured Application-Ready Platforms. Please contact VadaTech Sales for more information.

Ordering Options

VT085 – ABC-000-0HJ

A = Video Input* 0 = DP++ 1 = DP** 2 = HDMI**		
B = Enclosure 0 = No Enclosure 1 = Enclosure with Fan 2 = Enclosure Fan less		H = Temperature Range 1 = Commercial (-5° to 55°C) 2 = Industrial (-20° to 65°C) 3 = Extended (-40° to 75°C)
C = Input Power Adaptor 0 = No Input Power Adaptor 1 = +5V AC Adaptor		J = Conformal Coating 0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

Notes:

*Both Video Inputs must be identical.

**Minimum order qty required.

Related Products

ATC128



- Dual socket 24-core Intel® Xeon® Platinum Processors - Scalable Performance (SP)
- Multiple SKU support (i.e. 8256, 8253, 6238T, 6230T, 5220T, 5218T, 4209T, etc.)
- Twelve banks of DDR4 for up to 384 GB with ECC per socket (total of 768 GB)

ATC342



- AdvancedTCA Video Mixer (Windowing)
- External Input: 4 Analog and 1 DVI-I (Analog or 24-bit Digital)
- External Output: Analog daisy-chain and 1 DVI-I (Analog and 24-bit Digital)

VT835



- 19" rack mount 3U ATCA Hybrid AMC Chassis
- 1x ATCA slot, 8 mid-size AMC slots and 2x ATCA RTM slots
- 40G or 10G fabric across the backplane

Contact

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