

VT087

Advanced Secure Keyboard, Video and Mouse (KVM Gen4) Transmitter



VT087

Key Features

- VT087 in conjunction with the VT088 forms a complete secure remote KVM over fiber (VT087 is the transmitter side)
 - VT087/VT088 is next generation of VT085/VT086
- 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 4th 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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VT087

VT087, when used in conjunction with a VT088, 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 VT087/VT088 is our next generation product from the VT085/VT086.

The VT087 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 (VT088 side) has video overlay capability with the overlay images being programmable and controlled over Ethernet by the user. Video encode/decode is lossless. The VT087 configuration and management are available via serial port.

The VT087/VT088 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 VT087 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: VT087



Figure 2: VT087 Front View



Figure 3: VT087 Rear View



Figure 4: VT087 Rear View Alternative

Block Diagram

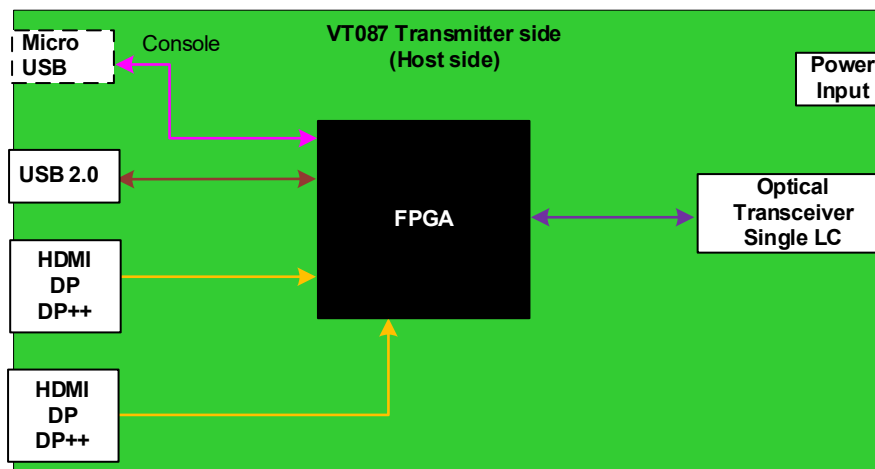


Figure 5: VT087 Functional Block Diagram



Figure 6: Conduction cool deployment example

VT087/VT088 Connectivity

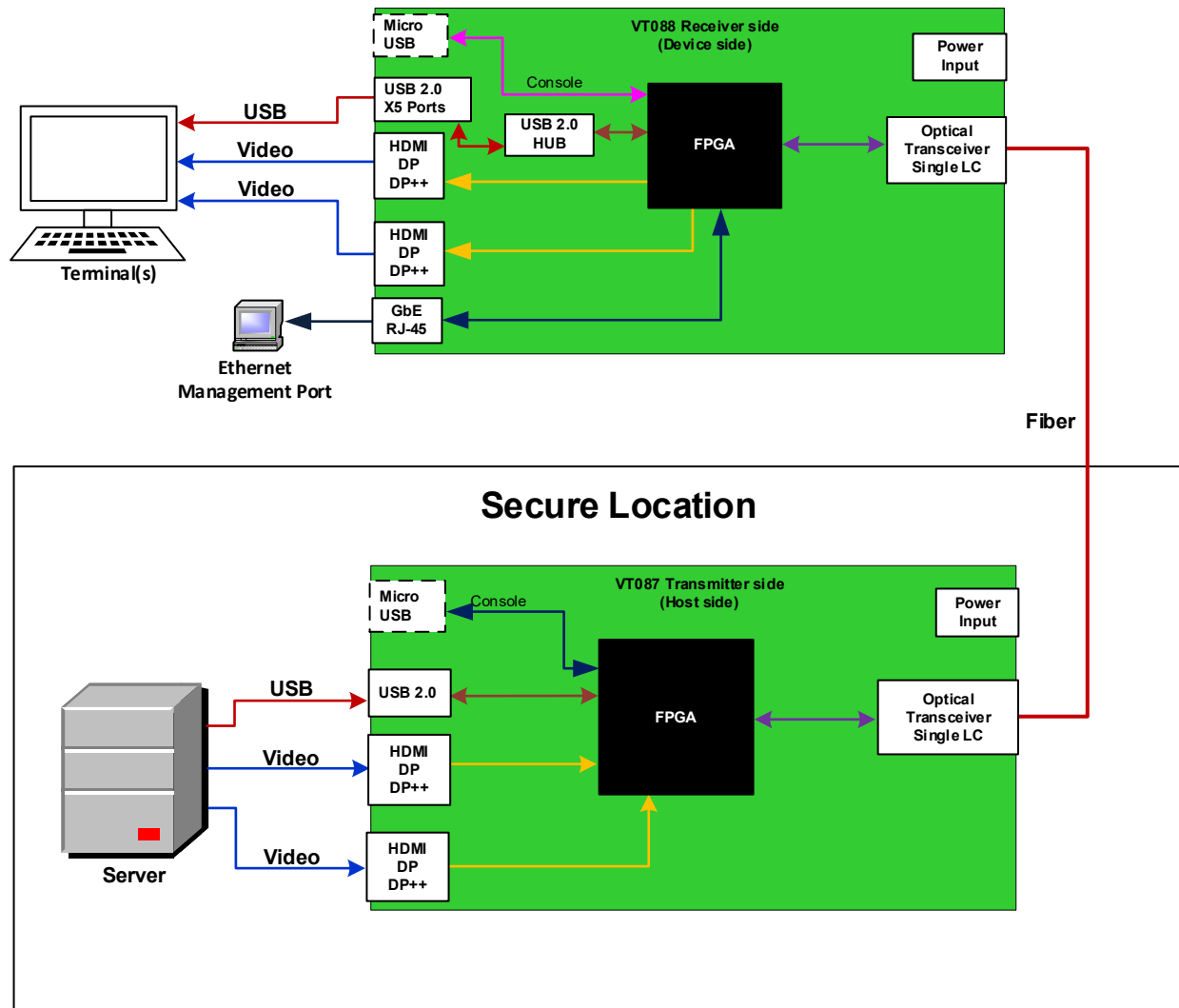


Figure 7: VT087/VT088 Connectivity Block Diagram

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	VT087	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

VT087 – ABC-000-0HJ

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