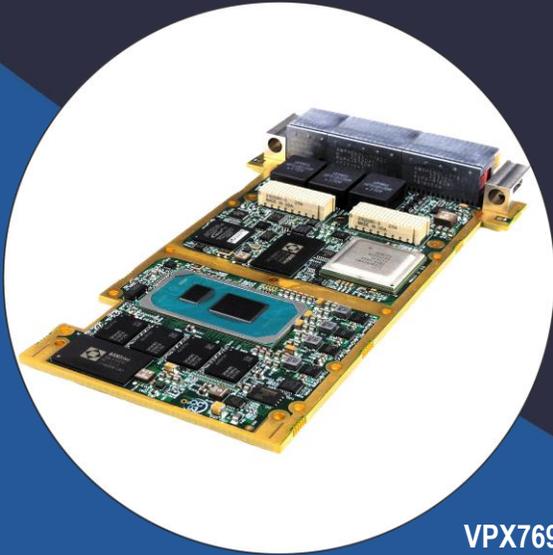


VPX769

Intel Tiger Lake i7-1185GRE in 3U-VPX with XMC slot



VPX769

Key Features

- Based on Intel 11th Generation Core i7
- VPX 3U based on Intel i7-1185GRE
- 32 GB DDR4 with ECC
- Triple 10GBASE-KR and Triple 1GBASE-T to rear
- 2x SFI to rear
- 2x 64GB storage for user application
- Dual USB3.2
- ANSI/VITA 42.3 (XMC PCI Express)
- XMC slot per VITA 42
 - J16 I/O per VITA46.9
- Serial Over LAN (SOL)
- Conduction Cooled option available
- Health Management through dedicated Processor

Benefits

- High single-threaded performance for compute-plane applications
- Embedded data path acceleration for network processing
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company

OpenVPX™



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VPX769

The VPX769 is based on Intel Tiger Lake i7-1185GRE in 3U VPX form factor. The module has triple 10GbE as 10G-BaseKR, triple GbE as 1000Base-T, dual USB3.2, 2x SFI, single RS-232, single RS-422 and dual GPIO to rear. The VPX769 comes with 32GB of DDR4 memory with ECC, and dual 64GB of SATA SSD for user storage. Further, an HDMI port is routed to the P2.

The module has a single XMC slot per ANSI/VITA 42.3 (XMC PCI Express) and routes the user I/O of XMC J16 as VITA 46.9 X8d+X12d to P2.

The module provides Serial Over LAN (SOL) to access the module serial port over IP.

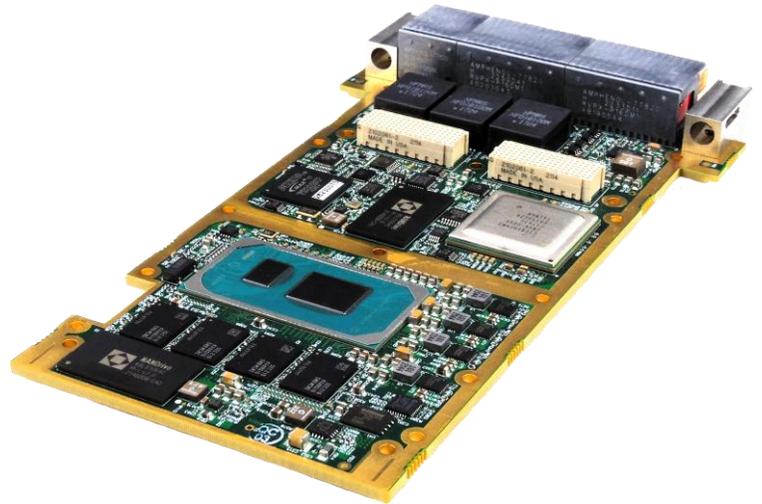


Figure 1: VPX769



Figure 2: VPX769 Front View

Block Diagram

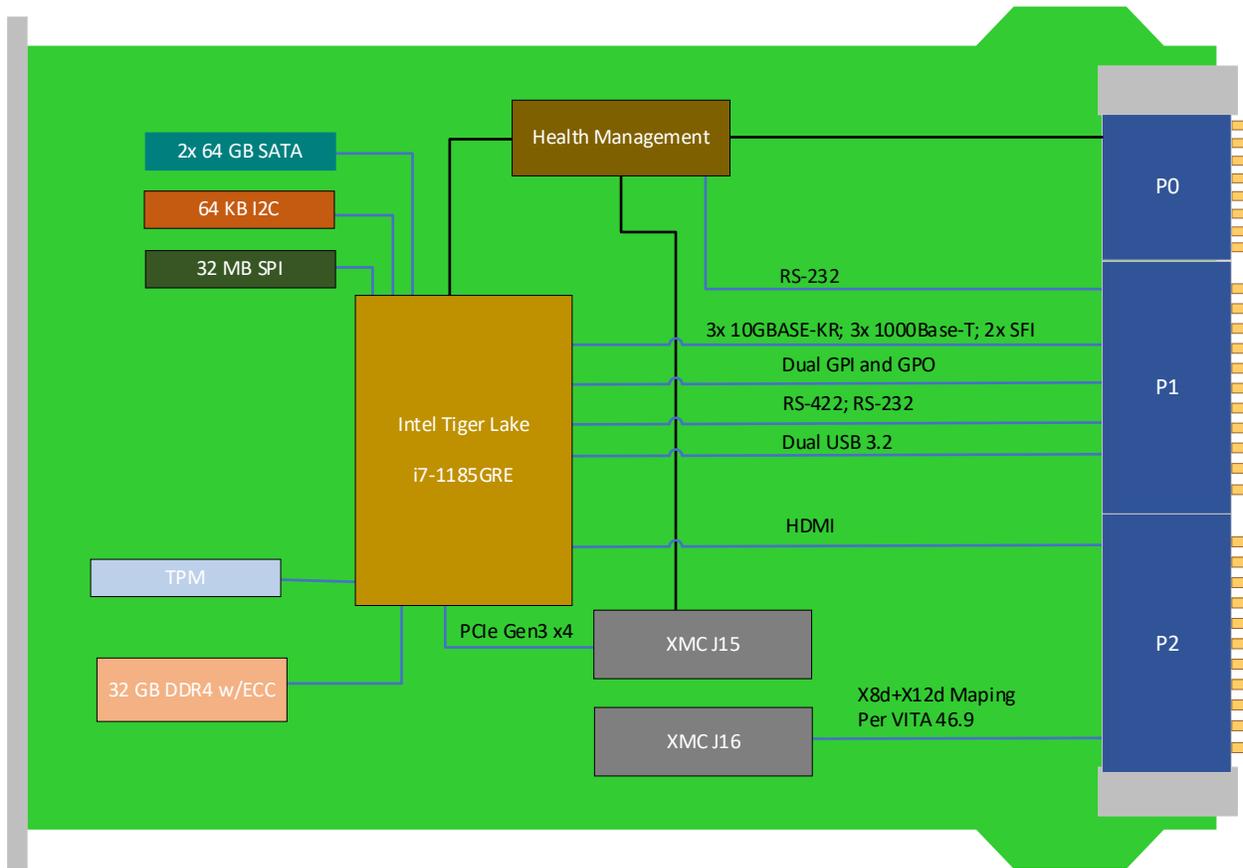


Figure 3: VPX769 Functional Block Diagram

Specifications

Architecture		
Physical	Dimensions	3U VPX in 1" pitch
Type	VPX Processor	Intel i7-1185GRE (quad-core) processors
Standards		
VPX	Type	3U VPX
Module Management	IPMI	IPMI v2.0 with Tier 2 support
Configuration		
Power	VPX769	~ 20W without the XMC
Environmental	Temperature	See Ordering Options Storage Temperature: -40° to +90°C
	Vibration	Operating 9.8 m/s ² (1G), 5 to 500Hz on each axis
	Shock	Operating 325G/2 ms, 160G/1 ms
	Relative Humidity	5 to 95% non-condensing
Rear I/O	P1	RS-422, RS-232, Dual USB 3.0, Triple 1000Base-T, Triple 10GBase-KR, Dual GPIO
	P2	2x SFI
	LEDs	User defined by CPU and Health Management
	P2	X8d+X12d from XMC J16 connector
Software Support	Operating System	Windows, Linux and VxWorks
Other		
MTBF	MIL Hand book 217-F@ TBD hrs	
Certifications	Designed to meet FCC, CE, UL and DO254 DAL-C 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

VPX769 – ABC-000-GHJ

A = CPU 0 = i7-1185GRE 1 = Reserved		G = Applicable Slot Profiles 0 = 5 HP – VITA 48
B = XMC Connectors 0 = VITA 42 1 = VITA 61		H = Environmental See Environmental Specification
C = VPX Connector Type 0 = Standard 50u Gold Rugged 1 = KVPX Connectors		J = Temperature Range and Coating 0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

Environmental Specification

Option H	Air Cooled			Conduction Cooled	
	H = 0	H = 1	H = 2	H = 3	H = 4
Operating Temperature	AC1* (0°C to +55°C)	AC3* (-40°C to +70°C)	CC1* (0°C to +55°C)	CC3* (-40°C to +70°C)	CC4* (-40°C to +85°C)
Storage Temperature	C1* (-40°C to +85°C)	C3* (-50°C to +100°C)	C1* (-40°C to +85°C)	C3* (-50°C to +100°C)	C3* (-50°C to +100°C)
Operating Vibration	V2* (0.04 g2/Hz max)	V2* (0.04 g2/Hz max)	V3* (0.1 g2/Hz max)	V3* (0.1 g2/Hz max)	V3 (0.1 g2/Hz max)
Storage Vibration	OS1* (20g)	OS1* (20g)	OS2* (40g)	OS2* (40g)	OS2* (40g)
Humidity	95% non-condensing	95% non-condensing	95% non-condensing	95% non-condensing	95% non-condensing

Notes: *Nomenclature per ANSI/VITA 47. Contact local sales office for conduction cooled (H = 2, 3, 4).

Related Products

VPX004



- Unified 1 GHz quad-core CPU for, Shelf Manager, and Fabric management
- Automatic fail-over with redundant VPX004
- 1GbE base switch with dual 100/1000/10G uplink

VPX599



- 3U FPGA Dual ADC and Dual DAC per VITA 46
- Xilinx Kintex UltraScale™ XCKU115 FPGA
- Dual ADC 12-bit @ 6.4 GSPS or quad ADC at 3.2 GSPS with TI ADC12DJ3200

VTX870



- Open VPX benchtop development platform
- Dedicated Switch/management slot
- Up to five 3U VPX payload slots

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