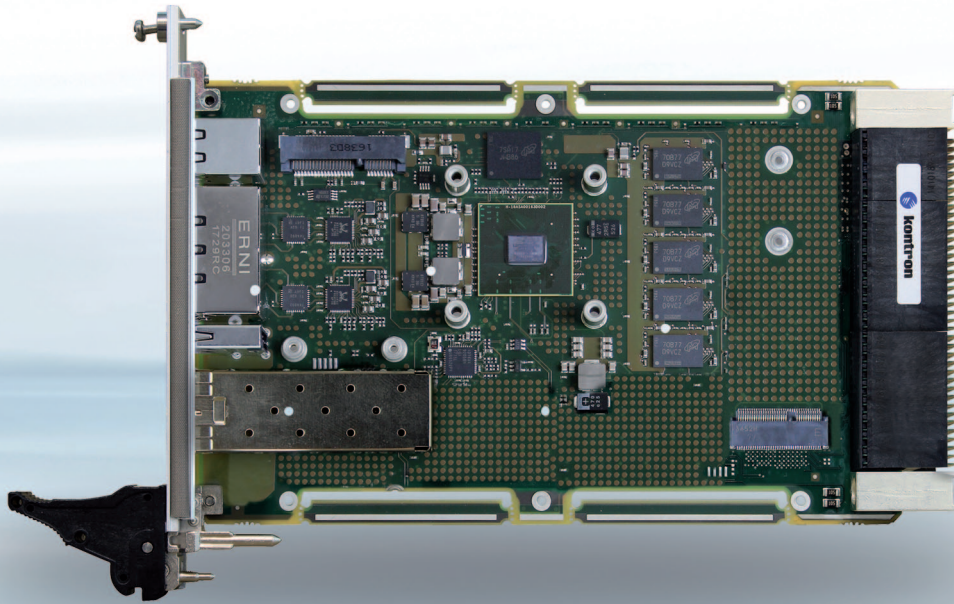


VX3106



LOW POWER NETWORKED BLADE COMPUTER DESIGNED FOR TRANSPORTATION AND SWAP-C DEFENSE APPLICATIONS

- ▶ Quad-Core 1.2 GHz Multicore 64-bit ARM® A72 "Layerscape" Processor
- ▶ High Performance Neon SIMD Co-processor and DP FPU
- ▶ 6 Ethernet Ports, option for 2 Ethernet 10 G BASE-KR
- ▶ High Capacity of Storage: 32 GB eMMC and M.2 SATA III SSD Sockets
- ▶ Low Power, <20 W on single +12 VDC Supply, Natural Convection enabled
- ▶ 10 years Long Term Supply and Support

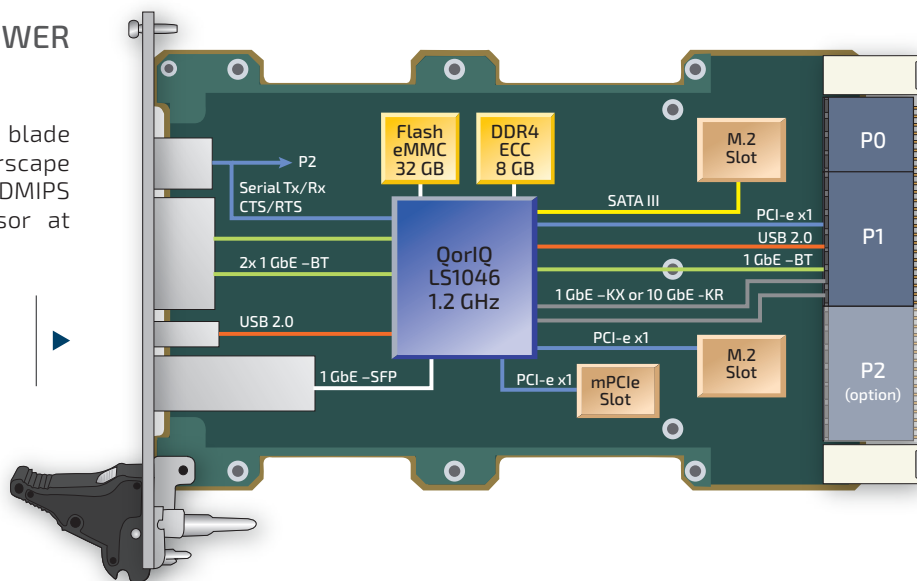
POSSIBILITIES START HERE



VX3106 – 3U VPX LOW POWER CONNECTIVITY ENGINE

The VX3106 is a low-power 3U VPX blade computer featuring the NXP Layerscape LS1046, a high performance 30 k DMIPS quad-core 64-bit ARM A72 processor at 1.2 GHz.

VX3106
BLOCK DIAGRAM



TECHNICAL INFORMATION

FEATURES		
Form Factor	3U VPX, 1" (5HP) 4 HP build version as option	
Processor	Slot profiles: SLT3-PAY-2F2U-14.2.3, SLT3-PAY-1F1F2U-14.2.4, SLT3-PAY-1F1U-14.2.10	
System Memory	One NXP QorIQ Layerscape LS1046A Quad-Core 64-bit ARM® Cortex®-v8 A72	
SPI Flash	1.2 GHz upgradable to 1.8 GHz, 2 MB L2 cache, Neon SIMD Co-processor and DP FPU	
eMMC Flash	8 GB 72-bit DDR4 SDRAM at 1600 MT/s with ECC	
F-RAM	Firmware Boot Device, 2x 128 Mbits	
EEPROM	32GB eMMC MLC flash	
Security	F-RAM 1 Mbit of non-volatile ferroelectric RAM	
FRONT I/O INTERFACES (AIR-COOLED BUILDS):	EEPROM	One serial 256 Kbit EEPROM dedicated to VPD data, One serial 256 Kbit EEPROM dedicated to system data
Ethernet ports	Security	Dual secure elements, TPM and Wibu, which can be enhanced with Kontron SEC-LINE product
USB	Ethernet ports	2 x 1G BASE-T on RJ-45 connectors, 1 x SFP cardcage, copper 1000BASE-T and fiber are supported
Serial	USB	USB 2.0
REAR I/O INTERFACES	Serial	EIA-232 Tx, Rx, RTS, CTS serial line on IEEE1394 connector
PCI-Express	PCI-Express	x1 Gen. 3, second x1 lane as option
Ethernet ports	Ethernet ports	2 x 1 G BASE-KX; dual 10 Gb BASE-KR as a build option, 1 x 1 G BASE-T
USB	USB	Up to 2 depending on build version
GPIO	GPIO	Up to 5 GPIOs
Monitoring port	Monitoring port	SMB on P0 connector
Serial Lines	Serial Lines	2x Tx, Rx EIA-232 on optional P2 connector
M.2	M.2	M.2 on Top: SATA III, M.2 on bottom (5 HP version): PCI-Express x1
mPCIe	mPCIe	PCI-Express x1, USB 2.0 as option
CPU debug Interface	CPU debug Interface	JTAG debug connector for CodeWarrior TAP
Board Temperature	Board Temperature	ADT7461A on-chip thermal sensor and remote thermal diode. Three LM73 thermal sensors.
Firmware	Firmware	U-Boot
Power Supply	Power Supply	+12 VDC only
Power Consumption	Power Consumption	Less than 20 W without mezzanines
Environmental Specification	Environmental Specification	Forced Air Cooled "SA" (0°C to +55°C), Forced Air Cooled "WA" (-20°C to +65°C) Rugged Conduction Cooled "RC" (-40°C to +85°C), Natural Convection cooled: contact Kontron

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