

# DARC™ VX108

---



## DARC™ VX108 VPX-BASED RUGGED COMPUTER

- ▶ Rugged extended temperature, IP66 sealed system
- ▶ Small form factor 272 mm x 201 mm x 120 mm
- ▶ Xeon® D Octo Core 64-bit SoC with 16 GB soldered DDR4 with ECC
- ▶ 2x 10 GbE LAN ports for high bandwidth operations
- ▶ XMC Expansion slot and M.2 socket

POSSIBILITIES START HERE



## ▶ PRODUCT OVERVIEW

The Kontron DARC™ VX108 is a very high performance embedded computing platform based on VPX technology designed for tough SWaP constrained missions.

The combination of its sealed IP66 compact enclosure and power-to-performance optimization make the Kontron DARC™ VX108 ideally suited for typical military applications requiring high performance, reduced size-weight-power in an environmentally ruggedized platform like CSIR (Command/Control, Electronic warfare, Electro-Optical Infrared Sensor Processing) or Vetronics (Vehicle Management, Crew Controls and Displays, Mission computing, Video processing, image fusion, 360° awareness, Tracking).

Based on Intel's® Xeon-D® Octo Core™ server class processor, the DARC™ VX108 combines dense processing and I/O connectivity.

Its two 10 GbE ports make the DARC™ VX108 ideal for radars or any other applications requiring high bandwidth to handle and transmit large amount of data.

Networked video streaming and processing, such as image fusion, are also possible through optional GPU hardware acceleration for real-time situational awareness.

Multiple expansion slots allow customization of the platform interfaces, making the Kontron DARC™ VX108 configurable for various customer needs.

## ▶ TECHNICAL INFORMATION

PROCESSOR		Intel® Xeon® D Octo Core™
MEMORY	System Memory	Soldered onboard 16 GB DDR4 memory with ECC
MASS STORAGE		One M.2 socket for SATA III M.2 2242 SSD
SYSTEM I/Os	Power	1x DC-Input
	Ethernet	2 x Optical 10 Gigabit Ethernet + 2x Gigabit Ethernet (10/100/1000Mb/s) ports
POWER SUPPLY		Integrated +28 VDC input (+18 VDC to +36 VDC) power supply and EMI filtering
EXTENSIONS		1x M.2 socket H4.2 for 2242-D5-M or 2260-D5-M or 2280-D5-M modules 1x M.2 socket H4.2 for 2242-D4-M connected to SoC interface SATA 1x XMC slot
DIMENSIONS		(WxDxH) Approx 272 mm (+27 mm with ears) x 201 mm (+24 mm with connectors) x 120 mm
WEIGHT		Less than 7 kg (depending on configuration)
OPERATING SYSTEM		Linux 64 bits. Contact Kontron for other OS.
OPTIONS		Isolated Dual CAN Graphics: AMD GPGPU via XMC (with DVI Dual links option) Industrial Grade SSD (MLC, iMLC or SLC) Conformal coating of internal components
	Discrete I/Os	Reset, Power Enable, 4x GPI (In) and 4x GPO (Out) 9-32 VDC
	Serial ports	2x RS232, 2x RS422/485
	USB	2x USB 3.0 + 2x USB 2.0
	Display	1 x HDMI
OPERATING TEMPERATURE		-40°C to +71°C (depending on configuration)
INGRESS PROTECTION		IP66 with military D38999 circular locking connectors
SHOCK		40 g, 11 ms (4 shocks / axis)
VIBRATION		Ground Vehicles (2h / axis)
EMI/EMC/RFI		MIL-STD-461, MIL-STD-1275
HUMIDITY		0%-95% relative humidity
STANDARDS		MIL-STD-810, MIL-STD-461, MIL-STD-1275, STANAG 2895 CE

## ▶ ORDERING INFORMATION

ARTICLE	DESCRIPTION
DARC-VX108-A	Fanless Defense Computer, Wide Range +18 VDC to +36 VDC power supply, Intel® Xeon® D Octo Core™ D-1539, 16 GB DDR4 with ECC, 2x 10 Gigabit Ethernet, 1x Gigabit Ethernet, 1x 10/100/1000 Ethernet.

## ▶ CORPORATE OFFICES

### FRANCE

150 rue Marcelin Berthelot  
ZI de Toulon-Est - BP 244  
83078 TOULON CEDEX 9  
Tel.: + 33 4 98 16 34 00  
Fax: + 33 4 98 16 34 01  
sales.KFR@kontron.com

### GLOBAL HEADQUARTERS

Lise-Meitner-Str. 3-5  
86156 Augsburg  
Germany  
Tel.: + 49 821 4086 0  
Fax: + 49 821 4086 111  
info@kontron.com

### NORTH AMERICA

9477 Waples Street, Suite 150  
San Diego, CA 92121  
USA  
Tel.: + 1 888 294 4558  
Fax: + 1 858 677 0898  
info@us.kontron.com

### ASIA PACIFIC

1-2F, 10 Building, N° 8 Liangshuihe 2<sup>nd</sup> Str.,  
Economic & Technol. Development Zone,  
Beijing, 100176, P.R.China  
Tel.: +86 10 63751188  
Fax: +86 10 83682438  
info@kontron.cn