SAAB

RVC

VEHICLE ELECTRONICS

Rugged Vehicle Computer

The Rugged Vehicle Computer, RVC, is a high performance computer unit developed for use in harsh environments. The unit is based on the latest RVC platform from SAAB and includes a 7th Generation Intel® Core™ / Xeon® - Single board computer platform. It is equipped with PC-compatible interface ports such as DVI-D, Ethernet, USB etc. The RVC is designed to comply with contemporary standards such as DEF STAN 23-09 GVA and STANAG 4754 NGVA.

Front View

Rear View

Main design features

- PC-compatible external interfaces
- MIL-C-38999 connectors
- All interface ports are filtered/transient protected
- Climatically sealed housing, IP65
- Easy maintenance, few parts
- Low power design
- Prepared for future functionality
- Customized surface treatment/colour and connector treatment

Dimensions

Height	74 mm
Width	308 mm
Depth	207 mm
Weight	5 kg (approx.)

Mechanical interface

- The RVC is assumed to be fixed mounted in the vehicle. External damping devices etc. are not required.

Configuration

- Intel® 7th Generation Xeon® E3 v6 family
  - Xeon E3-1505L v6 4x2.2(3.0) GHz
  - Intel® HD Graphics P630
- Trusted Platform Module TPM 2.0
- SDRAM16GB DDR4-2400 (ECC)
- 2.5" SSD; SLC, industrial grade, 32 GB, power protection
- Power input according to MIL-STD-1275
- 1 x Combined power/USB/DVI-D output to RVD
- 3 x USB 2.0 ports
- 2 x CAN 2.0B ports
- 1 x Ethernet port, 10/100/1000Base-TX
- 4 x RS232/RS422 ports
- Internal status supervisory and log
- Prepared for Windows® 10 or Linux
- Color: White RAL1013
- Power consumption: nom. 30 W, max 45W

Environmental

- Comply to MIL-STD-810 and MIL-STD-461. Sealed housing, IP65.
- Operating temperature: -40°C to +60°C
- Storage temperature: -46°C to +71°C

Options

- DiVA Core for sharing computer graphics over Ethernet using SAAB VDS or DEF STAN 00-82.
- Up to 4 x analog video inputs NTSC, PAL or RS170
- VGA output
- Audio I/O
- Extra LAN
- Up to 4 x CAN 2.0B ports
- Power input according to DEF STAN 61-5 Part 6 Issue 6
- GPS-module
- Preinstalled OS
- SAAB API for reading status and log
- RTC, on vehicle power
- RTC battery
- Up to 4 x CAN 2.0B ports on extension board with extra low latency
- 2 x MIL-STD-1553B ports
- 2.5" SSD; SLC, industrial grade, 32-256GB, power protection
- 2.5" SSD; MLC, industrial grade, 1 TB
- SDRAM 32GB
- Customized colors on request.

External connectors

According to MIL-C-38999

- **X1** 2 x Power inputs, dual redundant inputs. Power switch
- **X2** RVD-Port with DVI, USB and Power Out
- **X3** Optional VDS LAN and ID-pins

- **X4** Optional Video in, Audio. VGA out
- **X5** LAN, ID-pins
- **X6** 2 x CAN, Optional extra LAN, optional 2 x extra CAN
- **X7** 3 x USB 2.0
- **X8** 4 x RS232/RS422

Specifications subject to change without notice