

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 15, 2026

DDC

DDC SCS3740 High-Speed, SWaP Optimized 3U SpaceVPX Single Board Computer

DDC SCS3740 Quad-Core LEON 4FT 3U SpaceVPX Single Board Computer The SCS3740 is Data Device Corporation's SWaP-optimized 3U SpaceVPX single-board computer. OEM SCS3740 product briefs list quad-core LEON 4FT processor at up to 1700 DMIPS and 90 Linpack MFLOPS, 128 MB EDAC SDRAM, 32 GB BCH NAND flash, 4 MB EDAC EEPROM, eight SpaceWire ports to 200 Mbps plus debug port, 5 W typical from 3.3 V only, 550 g mass, and TID greater than 100 krad(Si). Manned and unmanned spacecraft command/control, payload processing, and SpaceVPX control-plane routing with SpaceWire, CAN, and 1553. The SCS3740 is Data Device Corporation's SWaP-optimized 3U SpaceVPX single-board computer. OEM SCS3740 product briefs list quad-core LEON 4FT processor at up to 1700 DMIPS and 90 Linpack MFLOPS, 128 MB EDAC SDRAM, 32 GB BCH NAND flash, 4 MB EDAC EEPROM, eight SpaceWire ports to 200 Mbps plus debug port, 5 W typical from 3.3 V only, 550 g mass, and TID greater than 100 krad(Si). Manned and unmanned spacecraft command/control, payload processing, and SpaceVPX control-plane routing with SpaceWire, CAN, and 1553.



MODEL

DDC SCS3740

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

SCS3740

LISTING

<https://aumictechlabs.com/products/scs3740-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The DDC SCS3740 is a high-speed, SWaP-optimized 3U SpaceVPX single board computer delivering performance in a compact, power-efficient package. Built around the rad-hard GR740 LEON 4FT quad-core processor, it achieves 1700 DMIPS and 90 Linpack MFLOPS while consuming just 5 W typical power. The SCS3740 integrates 128 MB EDAC-corrected SDRAM, 32 GB BCH-corrected NAND Flash, and 4 MB EDAC-corrected EEPROM, eliminating component count and enabling the first off-the-shelf quad-core LEON 4FT 3U SpaceVPX offering.

Technical Specifications

Processor: GR740 rad-hard quad-core LEON 4FT, 1700 DMIPS, 90 Linpack MFLOPS

Memory: 128 MB EDAC SDRAM, 32 GB BCH NAND Flash, 4 MB EDAC EEPROM

SpaceWire Router: Integrated with 8 general purpose ports (up to 200 Mbps each) plus 1 debug port

Serial & Field Buses: 2 UART (RS-422/LVDS configurable), 2 CANbus, 2 I²C, 1 SPI, 1 MIL-STD-1553

Ethernet: 1 port (flight and non-flight options)

GPIO: General purpose input/output pins

Power: 5 W typical, 12 W maximum; 3.3 V input only

Radiation Hardness: TID > 100 krad(Si); SEE rate 1 upset in 150 years (GEO)

Temperature Range: -30°C to +70°C (acceptance), -40°C to +80°C (qualification)

Form Factor: 3U SpaceVPX, ≤550 g

Key Features

- Space-proven design: zero failures across 20+ years of DDC rad-hard flight heritage
- TRL-9 qualified single board computer architecture
- Flight-proven Sp-COTS™ memory products
- Minimal part count for enhanced reliability and reduced thermal load
- Typical Applications: On-board data processing, avionics, payload control, communication gateways, and radiation-hardened computing in GEO and LEO missions.

Compatibility & Integration

Supported by Wind River VxWorks 7.0, RTEMS, and Linux (factory contact). Development kit and board support package included for rapid integration.

SCS3740 Characteristics / Specifications

PARAMETER	VALUE
Model	SCS3740
Instrument Type	3U SpaceVPX single board computer
Processor	GR740 rad-hard quad-core LEON 4FT
Processing Throughput	1700 DMIPS
Linpack Performance	90 MFLOPS
Sdram	128 MB EDAC corrected
Nand Flash	32 GB BCH corrected
Eeprom	4 MB EDAC corrected
Spacewire Ports	8 general purpose up to 200 Mbps each
Spacewire Debug Ports	1
Uart Ports	2 RS-422 or LVDS
Canbus Ports	2
I2c Ports	2
Ethernet Ports	1
Spi Ports	1
Mil Std 15	1 (requires external PHY)
Gpio	numerous GPIO
Form Factor	3U SpaceVPX
Mass	550 g
Input Power Rail	3.3 V only
Power Consumption Typical	5 W
Total Ionizing Dose	greater than 100 krad(Si)
Single Event Effects	1 upset in 150 years GEO
Rtos Support	Wind River VxWorks 7.0, RTEMS, Linux
Manufacturer	Data Device Corporation

SCS3740 Specifications

PARAMETER	VALUE
Applications	Manned and unmanned spacecraft command/control, payload processing, and SpaceVPX control-plane routing with SpaceWire, CAN, and 1553.
Key Features	First off-the-shelf quad-core LEON 4FT 3U SpaceVPX SBC
Integrated SpaceWire router for the control plane	I2C on the SpaceVPX utility plane
Technical Specifications	Model: SCS3740

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
Specifications	
PARAMETER	VALUE
Model	SCS3740
Instrument Type	3U SpaceVPX single board computer
Processor	GR740 rad-hard quad-core LEON 4FT
Processing Throughput	1700 DMIPS
Linpack Performance	90 MFLOPS
Sdram	128 MB EDAC corrected
Nand Flash	32 GB BCH corrected
Eeprom	4 MB EDAC corrected
Spacewire Ports	8 general purpose up to 200 Mbps each
Spacewire Debug Ports	1
Uart Ports	2 RS-422 or LVDS
Canbus Ports	2
I2c Ports	2
Ethernet Ports	1
Spi Ports	1
Mil Std 1553	1 (requires external PHY)
Gpio	numerous GPIO
Form Factor	3U SpaceVPX
Mass	550 g
Input Power Rail	3.3 V only
Power Consumption Typical	5 W
Total Ionizing Dose	greater than 100 krad(Si)
Single Event Effects	1 upset in 150 years GEO
Rtos Support	Wind River VxWorks 7.0, RTEMS, Linux
Manufacturer	Data Device Corporation

Notes

From DDC SCS3740 High-Speed SWaP Optimized 3U SpaceVPX SBC product brief and DDC space-SBC announcements.
1553 requires an external PHY as stated by the OEM.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 15, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.