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**Data Sheet**

August 15, 2026

CURTISS-WRIGHT / SYSTRAN

# Curtiss-Wright / Systran SL100 33 MHz FibreXtreme Serial FPDP CMC Module

Curtiss-Wright SL100 FibreXtreme Serial FPDP Interface The Curtiss-Wright SL100 FibreXtreme Serial FPDP family provides low-latency point-to-point or broadcast data links based on a Fibre Channel style 8B/10B serial transport optimized for throughput. OEM hardware references cite end-to-end throughput of 105 MB/s with or without frame checksums for SL100X class links, 1.0625 Gbps serial rate class, 1 MB receive FIFO and 2 KB transmit FIFO on referenced CMC/carrier designs, and media options including long-wave laser, short-wave laser, and HSSDC2 copper. The Curtiss-Wright SL100 FibreXtreme Serial FPDP family provides low-latency point-to-point or broadcast data links based on a Fibre Channel style 8B/10B serial transport optimized for throughput. OEM hardware references cite end-to-end throughput of 105 MB/s with or without frame checksums for SL100X class links, 1.0625 Gbps serial rate class, 1 MB receive FIFO and 2 KB transmit FIFO on referenced CMC/carrier designs, and media options including long-wave laser, short-wave laser, and HSSDC2 copper. Sensor-to-processor streaming, DSP interconnect, FPDP extension over fiber or copper, and low-latency data fabric links in embedded and instrumentation systems.



MODEL

**Curtiss-Wright /  
Systran SL100**

CALIBRATION

**Available on  
request**

CONDITION

**Used**

STATUS

**In stock**

RFQ / SKU

**SL100**

LISTING

[https://aumictechlabs.c  
om/products/sl100-2/](https://aumictechlabs.com/products/sl100-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

**This unit**

The Curtiss-Wright/Systran SL100 is a Serial FPDP CMC (Common Mezzanine Card) module engineered for high-speed data acquisition and transfer in signal processing, radar, sonar, medical imaging, and video production systems. Built on the ANSI/VITA 17.1-2003 sFPDP standard, it delivers sustained data rates up to 494 MB/s per channel with serial link speeds reaching 5.0 Gb/s, while minimizing CPU overhead and non-deterministic latencies critical to real-time applications.

**Technical Specifications**

- Serial Data Rates:** 1.0625 Gb/s, 2.5 Gb/s, and 5.0 Gb/s (model dependent)
- Sustained Throughput:** Up to 494 MB/s per channel; earlier configurations support 247 MB/s
- Transmission Distance:** Extends Serial FPDP connections to 50 km
- On-board Memory:** 256 MB DDR2 SDRAM (PCIe variants); 512 MB DDR2 (XMC variants)
- DMA Engine:** Single transaction capacity to 64 MB
- Data Channels:** 1, 2, or 4 full-speed channels; up to 4 independent data streams to host
- Data Framing:** Hardware-based insertion into fixed frames with optional flow control

**Key Features**

- Direct Memory Access engine** optimized for maximum throughput without processor intervention
- Register byte-swapping capability** for system flexibility
- Front and rear I/O options**
- Hardware-accelerated protocol processing** minimizes CPU overhead

**Typical Applications**

- Digital signal processing (DSP) systems
- Radar and sonar signal conditioning
- Medical imaging data transport
- High-bandwidth video production systems
- Sensor-to-processor links requiring deterministic latency

**Compatibility & Integration**

Available in PCIe and XMC form factors. PCIe variants interface with x16 and x32 slots. XMC provides x8 mezzanine connectivity. The CMC design enables integration with standard carrier boards across industrial, laboratory, and military platforms.

## SL100 Characteristics / Specifications

| PARAMETER              | VALUE                                                      |
|------------------------|------------------------------------------------------------|
| Model                  | SL100                                                      |
| Instrument Type        | FibreXtreme Serial FPDP interface                          |
| Protocol Class         | Serial FPDP ANSI/VITA 17.1-2003 family                     |
| Encoding               | 8B/10B                                                     |
| Throughput End To End  | 105 MB/s with or without frame checksums                   |
| Serial Link Rate Class | 1.0625 Gbps                                                |
| Receive Fifo           | 1 MB                                                       |
| Transmit Fifo          | 2 KB                                                       |
| Topology               | point-to-point or broadcast                                |
| Loop Mode              | loop with out-of-band arbitration or point-to-point        |
| Status Led             | link stability reporting                                   |
| Watchdog               | failover watchdog timer                                    |
| Media Options          | long wavelength laser short wavelength laser HSSDC2 copper |
| Interrupt Events       | link failure transaction completion buffer space request   |
| Card Formats Family    | PCI PMC CMC VME carrier variants                           |
| Dma                    | on-board DMA engine class                                  |
| Latency Focus          | minimal protocol overhead versus layered networks          |
| Related Sibling        | SL240 at 247 MB/s class                                    |
| Checksum Modes         | with or without frame checksums                            |
| Protocol Standard      | ANSI VITA 17.1 Serial FPDP                                 |
| Encoding Method        | 8B/10B                                                     |
| Topology Modes         | point-to-point or broadcast                                |
| Dma Engine             | on-board DMA class                                         |
| Media Classes          | fiber laser and HSSDC2 copper                              |

# SL100 Specifications

| PARAMETER                                           | VALUE                                         |
|-----------------------------------------------------|-----------------------------------------------|
| Key Features                                        | Serial FPDP ANSI VITA 17.1 class protocol     |
| One megabyte receive FIFO class on referenced cards | Long wave short wave and HSSDC2 media options |
| Technical Specifications                            | Model: SL100                                  |

# 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         |                                                            |
|------------------------|------------------------------------------------------------|
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#### Notes

From Curtiss-Wright Systran FibreXtreme SL100X/SL240X hardware reference summaries. Exact form-factor SKU limits vary by PCI PMC CMC and multi-channel derivatives.

### Available from Aumictech

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

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

#### Aumictech

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NIST-traceable calibration · SAM registered ·  
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.