

Owl Talon One

Data Diode Card

Single card, protocol filtering one-way transfer

Key Features

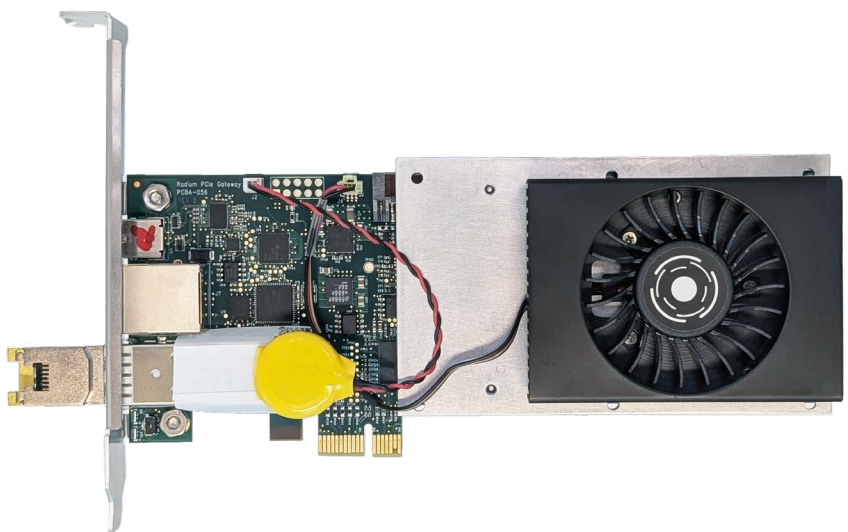
- Single PCIe card – includes SOM
- Up to 1 Gbps max throughput
- Compatible with Owl Talon™ software platform
- Meets Protocol Filtering Diode (PFD) standards
- 1x PCIe form factor
- Reduces SWaP requirements in compact or restricted environments
- Hardware-agnostic solution designed to be compatible with COTS hardware
- U.S. Government evaluated and listed XDE Radium Protocol Filtering Diode (PFD)

Low SWaP, All-in-One Diode

The Owl Talon One (OTO) Data Diode Card is a dynamic breakthrough in low-SWaP, FPGA-based one-way transfer at up to 1 Gbps. A single OTO card performs the work of two separate cards, enabling organizations to leverage smaller form factor hardware, with exponential SWaP benefits at scale.

The OTO card incorporates a revolutionary system-on-module architecture and leverages Owl's XDE Radium core diode technology. XDE Radium is a miniature FPGA-based diode technology, which has been evaluated, approved and listed by the U.S. Government to meet Protocol Filtering Diode (PFD) requirements.

The OTO card is currently offered as the diode component of the newest line of Owl Talon One™ solutions. These solutions feature the Owl Talon software platform, the Owl Talon One data diode card, and a COTS compute platform. This architecture provides you with the flexibility to choose the right hardware platform for your specific needs, ensuring the best balance of cost and performance.



Technical Specifications

- Throughput up to 1Gbps
- Default: Copper SFP
- Optional: 1x Fiber Optic Multi-Mode/Single Mode SFP

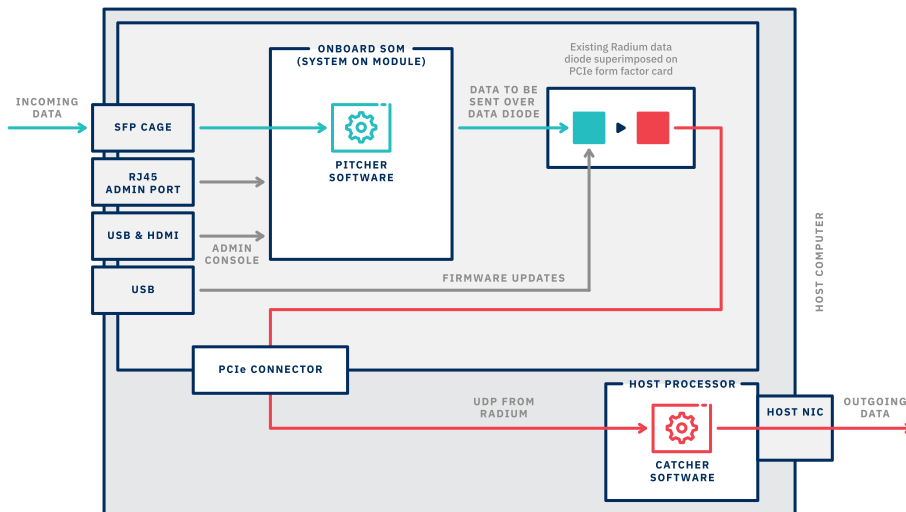
Platform Compatibility

- OnLogic HX600
- OnLogic MK100
- More platforms coming in future

Protocol Filtering Diode (PFD)

Owl Talon One Data Diode Card provides a complete protocol break between Layers 1-4, meaning that no routable information is passed between source and destination networks.

Architectural diagram:



How it Works

The OTO's revolutionary architecture leverages Owl's XDE Radium FPGA-based diode technology in a system-on-module (SOM) mounted on a single PCIe card. This unique configuration enables the use of a single data diode card to do the work of two, effectively cutting component and compute size, weight, and power (SWaP) requirements in half.

One-Way in a Two-Way World

The Owl Talon One Data Diode Card provides a secure one-way transfer while maintaining simultaneous, two-way communications with both the source network and the destination network to avoid disruption. This is accomplished through proxies that run on each side of Owl data diodes.



Owl Cyber Defense Solutions, LLC, headquartered in Columbia, MD, leads the industry in data diode and cross-domain network cybersecurity solutions for faster, safer and smarter decision making. We create solutions tailored for high-risk sectors including the military, government and critical infrastructure. Our advanced technologies enable secure, near-instantaneous collaboration, bridging network barriers to protect critical missions. With a focus on scalability and interoperability, Owl ensures that organizations can maintain secure, reliable, and compliant communication channels against evolving cyber threats.

Visit www.owlcyberdefense.com or contact us at info@owlcyberdefense.com for more details.

