Intrepid’s RAD-Epsilon is a rugged 9-port Gigabit managed switch with Nvidia Jetson Nano Integration designed specifically for bench/vehicle network and Autonomous development. In addition to its Ethernet functionality, it integrates many of the key CAN, LIN, and scripting features found in our vehicle networking tools.

**PRODUCT FEATURES:**

- Marvell 88Q6113 Managed Switch designed for Automotive Environment
  - Embedded AVB/TSN protocol stack
  - IEEE 802.1Q tag support with 4096 VLANs
  - Port mirroring
  - Per-port address whitelisting/blacklisting
  - Ingress policing and rate limiting
  - Ternary Content Addressable Memory (TCAM)

- AVB/TSN STANDARDS SUPPORTED
  - 802.1AS – Generalized Precision Timing Protocol (gPTP)
  - 802.1Qav – Forwarding and Queuing for Time-Sensitive Streams (Credit Based Shaping)
  - 802.1Qbv - Enhancements for Scheduled Traffic (Time Aware Shaping)
  - Static Stream Reservation

- Embedded processor for scripting and embedded C applications
- Intrepid Security Module supporting cybersecurity applications
- LEDs for network status and device configuration
- Field-upgradeable flash firmware

<table>
<thead>
<tr>
<th>Form Factor</th>
<th>RAD-Epsilon</th>
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</thead>
<tbody>
<tr>
<td>100/1000BASE-T1 ports</td>
<td>6</td>
</tr>
<tr>
<td>10GBASE-T Ports</td>
<td>2</td>
</tr>
<tr>
<td>1000BASE-T Ports (with PoE)</td>
<td>0</td>
</tr>
<tr>
<td>USB/GigE Bridge</td>
<td>1</td>
</tr>
<tr>
<td>PCIe Gen 3 (2 Lanes)</td>
<td>0</td>
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<tr>
<td>CAN FD Channels w/ programmable termination</td>
<td>2</td>
</tr>
<tr>
<td>LIN Channel</td>
<td>1</td>
</tr>
<tr>
<td>Optional Nvidia Jetson Nano Integration</td>
<td>Yes</td>
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www.aeta-rice.com
AVB/TSN USE CASES:

- AVB compliant bridge supporting static streams
- AVB/TSN network sensitivity analysis (Insert latency or switch hops; Add additional ECU’s for more BE or stream traffic.)

MEDIA CONVERTER

The BASEs are covered! 10GBASE-T, 100/1000BASE-T1, 100/1000BASE-T, and a USB/GigE Bridge. A media converter is as simple as setting up bidirectional port forwarding between any 2 ports. The RAD-Epsilon can be configured for up to two T/T1 media converters without losing the use of the remaining ports of the switch!

GATEWAY APPLICATIONS:

In addition to providing a network interface to your PC, the embedded processor in the RAD-Epsilon can be programmed to run real-time applications such as network gateways. Applications can be programmed in Vehicle Spy’s Function Blocks, C Code, or the Gateway Builder GUI, all of which are easily compiled to run on the embedded processor.

VEHICLE SPY ETHERNET APPLICATIONS:

While RAD-Epsilon does not function as an Automotive Ethernet Active Tap, this does not prevent it from taking advantage of some of Vehicle Spy’s many Ethernet applications.

- AVDECC Controller
- SOME I/P Discovery, Subscription, and RPC
- DoIP
- GUI driven Gateway Builder

DEVICE SPECIFICATIONS

- Power supply: 4.5V – 40V operation
- Temperature range: -40°C to 85°C
- One-year limited warranty
- Fully-isolated USB with Microsoft-certified USB drivers
- Dimensions for RAD-Epsilon: - 8.25” L X 8.375” W X 1.875” H
- Weight for RAD-Epsilon/ Epsilon-T: 3.1 lbs

Distributor: Neomore 5 Rue de la Plaine 78860 Saint-Nom-la-Bretèche FRANCE +33 1 30 64 15 81 www.neomore.com

ORDERING INFORMATION:

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>RAD-Epsilon</td>
<td>9-Port Gigabit Automotive Ethernet Managed Switch (2x 10GBASE-T, 6x 1000BASE-T1, 1xUSB3/GigE)</td>
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</table>

*Specifications subject to change. Please contact Intrepid for the latest information.*