InterPort™ MSP software module

The InterPort™ MAC Status Protocol (MSP) Software Module is a portable implementation of all management and control plane components of IEEE 802.1aj – Clause 23. IEEE 802.1aj specifies the function of a Two Port MAC Relay (TPMR) and the protocols and procedures to support its operation. MSP defines media independent propagation of MAC status between TPMRs and attached stations.

MSP ensures that changes in the connectivity result in changes in the MAC operational status. MSP provides rapid notification of connectivity failures and prompts the necessary initial protocol behaviour to ensure that new connectivity has not caused an instantaneous data loop. The standard compliant, pre-tested and field proven InterPort MSP software module enables networking equipment providers to rapidly and cost-effectively offer carrier-grade features on their Carrier Ethernet, broadband access and wireless product lines.

features

The Kuatro InterPort MSP Software Module includes a complete set of Application Programming Interfaces (APIs) to implement control plane components as defined by the IEEE 802.1aj-2009 standard. The MSP module provides easy integration with other OAM modules, such as. Ethernet Service OAM and Link OAM, as well as with PBB/PBB-TE edge implementations.

<table>
<thead>
<tr>
<th>Feature</th>
<th>InterPort™ MSP Software</th>
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<tbody>
<tr>
<td>Separate MAC status from Link Status and report independently</td>
<td>Yes</td>
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<tr>
<td>MAC operational status notification and propagation</td>
<td>Yes</td>
</tr>
<tr>
<td>Link status notification and propagation</td>
<td>Yes</td>
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<tr>
<td>Support fr Provide Backbone connectivity</td>
<td>Yes</td>
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<tr>
<td>Complete Performance Parameters reported to the management</td>
<td>Yes</td>
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<tr>
<td>MSTP BPDU Migration check</td>
<td>Yes</td>
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benefits

> Up to 50% time to market reduction
> 25 to 35% savings in development costs
> Pre-tested software modules minimize project risks
> Integrated solution delivery by Kuatro’s R&D design services
> Portable to any OS and hardware platform
> Accelerates failure recovery
architecture

InterPort MSP software module has well defined interfaces including OS abstraction APIs, Hardware Abstraction Layer (HAL) callbacks and APIs to management and control layer software. These APIs enable portability to various platforms using different operating systems and different data plane designs whether FPGA, network processor, Ethernet silicon or virtual platform based.

supported standards

> Two Port MAC Relay MSP protocol (IEEE 802.1aj - 2009, Clause 23)

deliverables

> Source code in C
> Programmer’s Reference Guide
> Porting Guide and Release Notes