InterPort™ E-LMI software module

The InterPort™ Ethernet Local Management Interface (E-LMI) software module is a portable implementation of all management and control plane components of MEF 16. MEF 16 specifies protocol procedures which are used for enabling the customer edge device to request and receive UNI and EVC status and service attributes information from the metro Ethernet network so that it can configure itself to access metro Ethernet services.

E-LMI is a protocol between the customer edge device (UNI-C) and the provider edge device (UNI-N). It notifies the customer edge device of connectivity status and configuration parameters of Ethernet services available on the port between the customer edge device and the provider edge device. E-LMI ensures that customer equipment with E-LMI enabled can learn the CE-VLAN/EVC map as well as other EVC properties such as the ingress bandwidth profile and the class of service. Kuatro’s E-LMI Software module supports both UNI-C and UNI-N sides of the protocol.

The standards compliant, pre-tested and field proven InterPort E-LMI software module enables networking equipment providers to rapidly and cost-effectively offer carrier-grade features on their next-generation Ethernet, broadband access and wireless product lines.

**features**

The Kuatro InterPort E-LMI Software Module includes a complete set of Application Programming Interfaces (APIs) to implement control plane components as defined by the MEF 16 standard. The module also supports MEF 22.1 requirements and is compliant with MEF 24 ATS. The E-LMI module provides easy integration with other OAM modules, such as Ethernet Service OAM and Link OAM.

<table>
<thead>
<tr>
<th>Feature</th>
<th>InterPort™ E-LMI Software</th>
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<tbody>
<tr>
<td>Full featured implementation of Metro Ethernet Forum E-LMI specification (MEF 16)</td>
<td>Yes</td>
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<tr>
<td>Auto configuration of Metro Ethernet services (UNI, EVC, etc.) for customer edge device</td>
<td>Yes</td>
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<tr>
<td>CE (UNI-C) operation mode</td>
<td>Yes</td>
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<tr>
<td>PE (UNI-N) operation mode</td>
<td>Yes</td>
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<tr>
<td>Dynamic notification of EVC attribute changes</td>
<td>Yes</td>
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<td>MIB attributes based Managed objects</td>
<td>Yes</td>
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</table>

**benefits**

> Up to 60% time to market reduction
> 35% to 45% 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
InterPort E-LMI software module has well defined interfaces including OS abstraction APIs, Hardware Abstraction Layer (HAL) callbacks and APIs to management and other 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 virtualized platform based.

architecture

supported standards

> Ethernet Local Management Interface (E-LMI, MEF 16)
> Mobile Backhaul Phase 2 Implementation Agreement (MEF 22.1)
> Compliant with MEF 24 E-LMI Abstract Test Suite

deliverables

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