

# InterPort™ ethernet ring protection module

Kuatro Technologies' InterPort Ethernet Ring Protection Switching (RPS) Software is a portable implementation of ITU-T G.8032/Y.1344-2010 Ethernet Ring Protection Switching protocol and ring protection switching mechanisms for Ethernet transport networks.

Kuatro's InterPort Ethernet RPS module significantly improves network resiliency and enables the deployment of robust and reliable Ethernet. It is a platform independent solution which can be incorporated in a variety of systems including Carrier Ethernet access and aggregation products, mobile backhaul, Ethernet and IP based 3G/4G and WiMAX base stations. The standards compliant and pre-tested InterPort Ethernet RPS 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

InterPort Ethernet RPS implementation monitors the Ethernet layer for discovery and identification of defect conditions and provides protection and recovery switching within 50ms for typical rings. The module also supports high-availability procedures, which allow the module to recover from a crash or switchover to a standby processing unit without traffic disruption. Kuatro's InterPort Ethernet RPS module seamlessly integrates with InterPort Service OAM module or other third party SOAM implementations to provide network health monitoring capabilities.

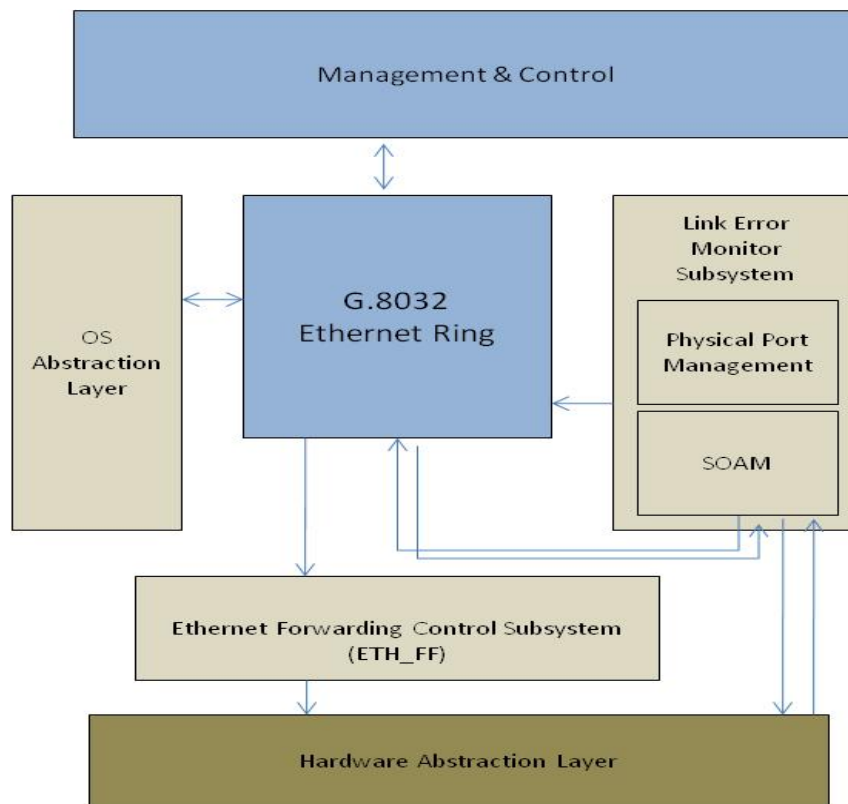
Feature	InterPort™ Ethernet RPS Software
Support ETH layer ring topology	Yes
Support E-Line, E-LAN and E-Tree services including EPL & EVPL	Yes
Support Multiple ERP Instances and VLAN based assignment	Yes
Support Signal Fail (SF) and Signal Degrade (SD) defects	Yes
Support interconnected and multiple rings topologies	Yes
Support manual switchover	Yes
Support revertive and non-revertive operations	Yes
Prevent mis-ordering and duplication of frames	Yes
Prevent the creation of loops in a ring topology	Yes
Interoperability with Service OAM for Link Error Monitoring	Yes
Stateless High Availability	Yes
Stateful High Availability	Yes

## benefits

- > Up to 50% time to market reduction
- > Up 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 various OS and hardware platforms
- > Target Carrier Ethernet and broadband access and mobile backhaul applications

## architecture

InterPort Ethernet RPS has well defined interfaces including OS abstraction APIs, Hardware Abstraction Layer (HAL) callbacks and APIs to management and control layer software. APIs and callbacks are defined using abstract entities towards the path error detection subsystem (typically, SOAM CCM procedures) and towards the Forwarding Control Subsystem. 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.



## supported standards

- > Ethernet Ring Protection Switching (ITU-T G.8032/Y.1344 (2010))
- > ITU-T Y.1731 (2011)

## deliverables

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

kuatro 

### contact us

E: [info@kuatrotech.com](mailto:info@kuatrotech.com)

W: [www.kuatrotech.com](http://www.kuatrotech.com)