**Overview**

Marvell® Link Street® 88E6393X device is a single-chip, 11-Port Ethernet Switch with eight integrated 10/100/1000Mbps Ethernet transceivers and 3 high speed SerDes interfaces supporting USXGMII, 10GBASE-R, 5GBASE-R, 2500BASE-X, 1000BASE-X, SGMII.

The 88E6393X provides advanced QoS features with 8 egress queues. The high-performance switch fabric provides line rate switching on all ports simultaneously while providing advanced switch functionality. The device includes TCAM to enable flexible switch policing, including Access Control Lists (ACLs) and Policy Control Lists (PCLs). These new standards overcome the latency and bandwidth limitations of Ethernet to allow for the efficient transmission of real-time content for home, commercial, and industrial applications.

The 88E6393X also supports IEEE 802.1BR port extender protocol, which enables dramatic reduction of the complexity and cost of the Ethernet network.

**Block Diagram**

![Block Diagram](image-url)
## Key Features

<table>
<thead>
<tr>
<th>Features</th>
<th>Benefits</th>
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</thead>
<tbody>
<tr>
<td>11-port Ethernet Switch</td>
<td>Provides a complete Gigabit Ethernet switching solution for SOHO and SMB</td>
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<td>Eight 10/100/1000Mbps PHYs;</td>
<td>8 port switches and routers.</td>
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<td>2 XG SerDes; 1 XG SerDes or</td>
<td>The 10Gbps interfaces provide non-blocking uplink to cascade</td>
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<td>RGMII</td>
<td>to higher port count 16 and 24 port switches.</td>
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<td>TCAM for Deep Packet Inspection</td>
<td>Enables intelligent switching and policing of packets by looking beyond</td>
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<td>L3 Routing</td>
<td>Layer 2 packet information</td>
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<td>IEEE802.1BR Port Extender</td>
<td>Enables new networking structure</td>
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<td>Cut-through</td>
<td>Reduces packet latency</td>
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<td>IEEE 1588v2</td>
<td>Enables high accuracy time synchronization</td>
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<tr>
<td>DoS Prevention</td>
<td>Offers network security function by preventing DoS attack</td>
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## Target Applications

- SMB Switch with L3 Routing support
- 802.1BR Port Extender
- Industrial Switch
- Gateway - Port Aggregation for SoC