

# Marvell 88SM4140 SATA Port Multiplier

1-to-4 SATA Ports, 3Gb/s SATA, SEMB

## PRODUCT OVERVIEW

The Marvell® 88SM4140 Port Multiplier allows one host 3Gb/s SATA port to communicate with up to four devices, including optionally, one SATA Enclosure Management Bridge (SEMB) port.

SEMB gives the host the ability to check parameters such as temperature, fan speed and LEDs using the same SATA connection that is used for data transfer. SEMB, if used, utilizes the fourth port of the Port Multiplier as its device port.

## BLOCK DIAGRAM

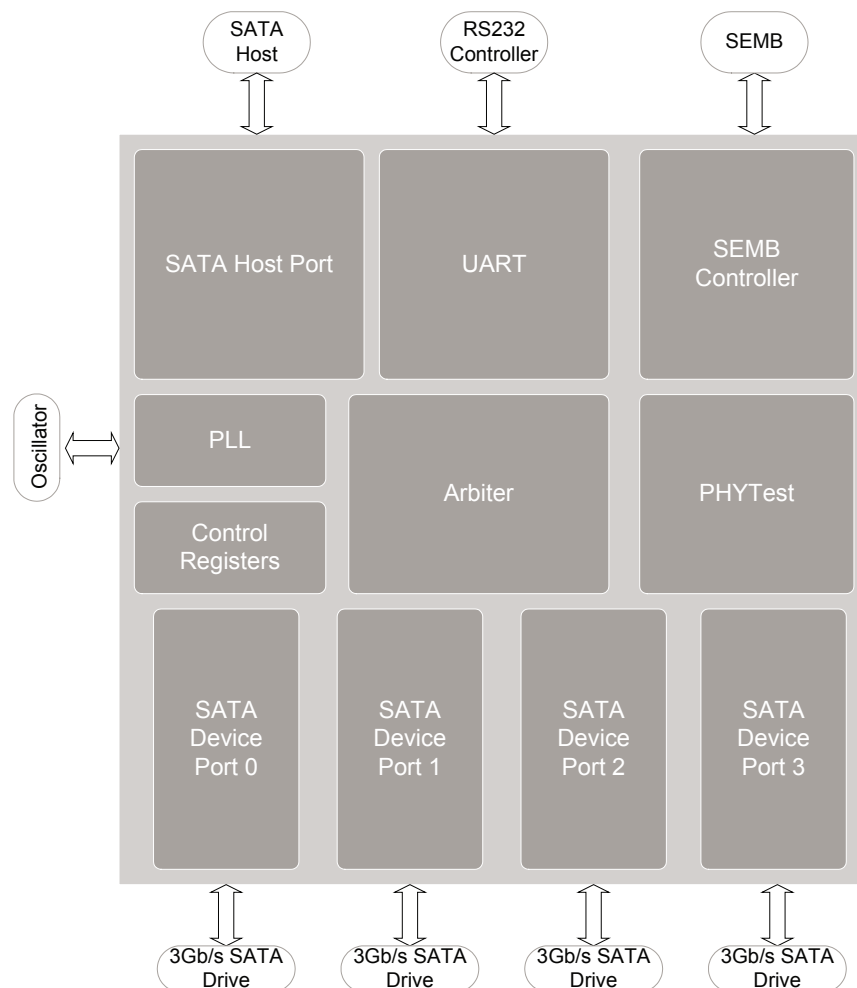


Fig 1. Marvell 88SM4140 SATA Port Multiplier

## BENEFITS AND FEATURES

KEY BENEFITS	KEY FEATURES
<ul style="list-style-type: none"> <li>• Host Port</li> </ul>	<ul style="list-style-type: none"> <li>• 3Gb/s SATA</li> <li>• PHY Test self-test mode</li> <li>• High speed UART for debug assist</li> </ul>
<ul style="list-style-type: none"> <li>• Device Ports</li> </ul>	<ul style="list-style-type: none"> <li>• Up to four 3Gb/s SATA ports (3 if SEMB is enabled)</li> <li>• Spread spectrum clocking for low EMI</li> <li>• PHY Test self-test mode</li> </ul>
<ul style="list-style-type: none"> <li>• SEMB</li> </ul>	<ul style="list-style-type: none"> <li>• Check temperature, fan speed, LEDs</li> <li>• Control fan speed</li> </ul>
<ul style="list-style-type: none"> <li>• Package</li> </ul>	<ul style="list-style-type: none"> <li>• 80 pin LQFP ePad</li> </ul>

## TARGET APPLICATIONS

- Personal computers
- Entry-level servers
- Any host with a SATA port

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