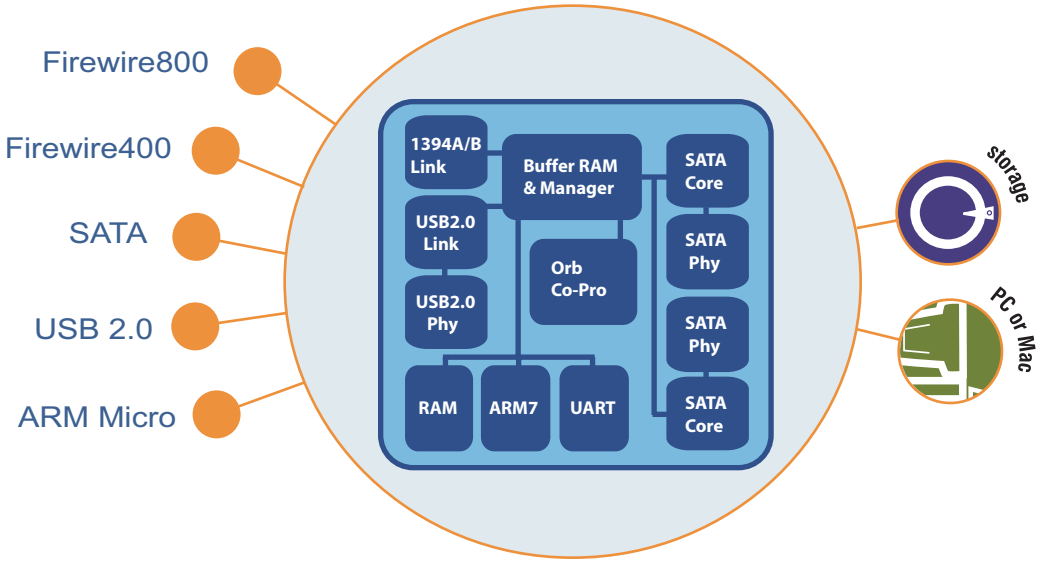
OXUF924DSA/B

FireWire400, FireWire800 & USB2.0 to Dual SATA Bridge



The Oxford OXUF924DSA/B is a high performance solution for bridging between SATA disks and USB2.0, FireWire400, and FireWire800 (DSB only). The chip is used for creating external storage solutions which connect to a PC & Apple Mac via the USB2.0 or FireWire port.
The UF924DSA/B contains a full USB2.0 link/Phy & FireWire link, minimising external components.

Key features

Integrated Dual SATA core & Phys operating at 1.5Ghz with 150Mbytes/s data rates

Dual SATA allows connection of 1 or 2 SATA drives with hardware striping, spanning and mirroring for ultimate performance. Alternatively, one SATA port can be configured as an input enabling eSATA to SATA.

Supports SATA II port multiplier specification

Comes complete with field upgradable firmware that supports USB mass storage protocol, and FireWire SBP2 (supported as standard by Windows and Apple Mac)

Industry renowned ARM7, with plenty of spare MIPs allowing customers to differentiate in product software

Integrated 480Mbps USB2.0 link & Phy

Integrated IEEE1394A and IEEE1394B (for DSB) link

Integral close coupled 8kbyte uP RAM

18Kbyte RAM for USB & FireWire data cache

12 GPIOs allow easy product customisation

176 pin BGA

OXUF924DS

FireWire400, FireWire800 & USB2.0 to Dual SATA Bridge

OXFORD SEMICONDUCTOR

924DS

FireWire400/800
The OXUF924DSA supports FireWire400 while the OXUF924DSB supports both FireWire400 and the latest highest speed FireWire800.

USB2.0
The OXUF924DS supports both Full and High-Speed USB modes. It's high performance FIFO manager together with high speed architecture exceed the throughput capability of today's PCs, ensuring it keeps pace as they continue to increase in speed.

SATA Interface
The SATA interface allows external storage products to follow the current transition of hard disk drives from Parallel ATA to Serial ATA.

RAID
The chip supports several RAID functions.
Striping, allows two SATA disks to appear as a single higher speed disk, by sharing the load between the two disks.
Mirroring, writes the same data to both disks, so that data may be recovered in the event of one drive failing
Spanning, allows two drives to appear as one to the host machine

Embedded ARM processor
The on-chip ARM7TDMI enables product differentiation by giving customers the option to develop custom software features using the development kit. The firmware is field upgradable, allowing products to be updated with the latest software. Software development is carried out in a C/C++ programming environment.

Development tools and custom solutions
For external MAC and PC storage solutions, Oxford Semiconductor offers a selection of reference designs, development code, drivers, and evaluation kits. Comprehensive application notes shorten learning curves and simplify implementation.

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