

### Network Attached Storage (NAS) SoCs



#### Dual Drive NAS System on a Chip Solutions

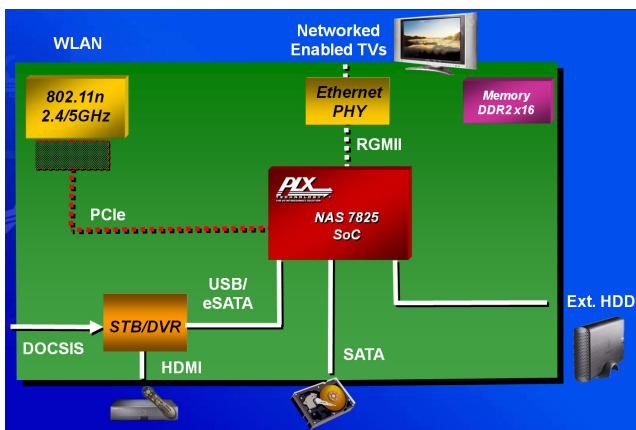
Part Number	CPU Cores	Integrated USB	GigE Ports	SATA Ports	PCIe Ports	RAID	Network Offload Engine	DDR2 DRAM	Boot Option	Encryption	GPIO (#)
NAS7821	Dual Core ARM11 2x 750MHz	2x USB2.0	1x RGMII	2	1	0 & 1	TSO	512MB	HDD NAND (MLC/SLC) SPI NOR UART	AES-256/ SHA-1/2	50
NAS7825		2x USB2.0	2x RGMII	2	2	0 & 1	TSO	512MB		AES-256/ SHA-1/2	50
OXE810DSE	Single Core ARM9 370MHz	1x USB2.0 / 2x USB1.1	1x GMII	2	0 (1x PCI)	0 & 1	TSO	256MB	HDD NOR UART	AES-128	35

#### Single Drive NAS System on a Chip Solutions

Part Number	CPU Cores	Integrated USB	GigE Ports	SATA Ports	PCIe Ports	RAID	Network Offload Engine	DDR2 DRAM	Boot Option	Encryption	GPIO (#)
NAS7820	Dual Core ARM11 2x 750MHz	2x USB2.0	1x RGMII	1	1	--	TSO	512MB	HDD NAND (MLC/SLC) SPI NOR UART	AES-256/ SHA-1/2	50
OXE810SE	Single Core ARM9 370MHz	1x USB2.0 / 2x USB1.1	1x GMII	1	0 (1x PCI)	--	TSO	256MB	HDD NOR UART	AES-128	35

### Featured NAS Product from PLX

#### Consumer NAS SoC with dual-core processor, dual-RGMII, dual-PCIe, and dual-SATA port



The NAS 7825 is a next generation multi-functional network-attached storage (NAS) device. Its unique Trident architecture includes dual-core ARM 11 MP (each core running at 750 MHz), application specific hardware engines for networking, storage, security, and highly structured firmware for the highest performance at the lowest system cost. NAS 7825 enables innovation and rapid market footprint expansion into the new generation of "NAS related" products such as routers, gateways, PVR/DVR, and set-top boxes with attention to high-performance, interfaces, cost, and application flexibility.

NAS 7825 is the ideal solution for media enabled consumer devices including streaming multiple HD quality media files, remote access, back-up, security (including AES-128/256 bit encryption and hashing), file sharing, routing, bridging, voice-over-IP (VoIP), and much more. NAS 7825 provides two integrated SATA ports, hardware based RAID 0 and RAID 1, dual RGMII, dual PCIe, and dual USB 2.0 Host/Device ports supporting additional expansion capabilities such as USB HDDs.

**See DAS on page 2**

### Direct Attached Storage (DAS) Controllers



#### Universal Interface to SATA RAID Controllers

Part Number	USB	FireWire	eSATA Ports	SATA Ports	Spanning	RAID	Encryption	GPIO (#)
OXUFS936DS	1x USB 2.0	FW800	1	2	Yes	0, 1	No	24*
OXUFS936DSE	1 x USB 2.0	FW800	1	2	Yes	0, 1	AES-128	24*
OXUFS936QSE	1 x USB 2.0	FW800	1	4	Yes	0, 3, 5, 10	AES-128	24*
OXUFS946DSE	1 x USB 2.0	FW800	1	2	Yes	0, 1	AES-128 / AES-256	19

\*Additional secondary GPIO are available - please consult datasheet

#### FireWire / USB to SATA Controllers

Part Number	USB	FireWire	eSATA Ports	SATA Ports	Spanning	RAID	Encryption	GPIO (#)
OXUF934DSA	1 x USB 2.0	FW400	No	2*	Yes	0, 1	No	12
OXUF934DSB	1 x USB 2.0	FW800	No	2*	Yes	0, 1	No	12
OXUF943SE	1 x USB 2.0	FW800	No	1	No	No	AES-128 / AES-256	19 with PWM**
OXUFS944SE	1 x USB 2.0	FW800	1	1	No	No	AES-128 / AES-256	19 with PWM**

\*SATA host port can be reconfigured for eSATA device port

\*\*PWM = pulse width modulation

#### USB to SATA Controllers

Part Number	USB	SATA Ports	UAS Support	NCQ	JBOD	RAID	Encryption	GPIO (#)
OXU3100	1 x USB 3.0	1	Yes	Yes	No	No	No	9
OXU3101	1 x USB 3.0	1	Yes	Yes	No	No	AES-128 / AES-256	9
OXU3102	1 x USB 3.0	2	Yes	Yes	Yes	0, 1	AES-128 / AES-256	27
OXU931DS	1 x USB 2.0	2*	No	Yes	No	0, 1	No	12
OXU931S	1 x USB 2.0	1	No	No	No	No	No	**
OXU931SF	1 x USB 2.0	1	No	No	No	No	No	8

\*SATA host port can be reconfigured for eSATA device port

\*\* Fixed function IOs = HDD activity; two HID controllable LEDs; One button

#### Other PLX Products:

- PCI Express Switches & Bridges
- PCI to PCI, & PCI to PCI-X Bridges
- PCI to Local Bus & Target Bridges
- Serial Bridges - UARTs
- USB Controllers

