



Got Nanometer Design Headaches? Relief is here! 

Galaxy™ Design Platform with CCS modeling technology

FREE Webcast · Wednesday, June 14, 2006 · 2:00pm ET / 11:00am PT

[TechView: Communications]

[OC-48/STS-16 Framers Manages Packet Protocols Over Sonet](#)

[Louis E. Frenzel](#)

ED Online ID #11285

October 27, 2005

Copyright © 2006 Penton Media, Inc., All rights reserved.

Printing of this document is for personal use only.



The Internet Protocol is growing in wide-area networks (WANs). That doesn't mean that Sonet/SDH systems are going away, though. These reliable, secure, and fast systems will continue to form the basis for most WANs. But triple-play services will require a new method for packaging all that data.

The XRT95L53 can handle the job. Developed by Exar Corp., this flexible Sonet/SDH framer and DS3/E3 mapper combines Generic Framing Procedure (GFP), virtual concatenation (VCAT), and the Link Capacity Adjustment Scheme (LACS) ([see the figure](#)). Vendors of multiservice access or provisioning platforms, Sonet/SDH add/drop and terminal multiplexers (ADM), layer 2 and 3 switches, and routers and storage-area network equipment can build flexible line cards to handle just about any packet format.

The chip integrates 48 clear-channel fractional DS3/E3 mappers, as well as VCAT and LCAS functions that allow the system to optimally map voice, video, and packet data over Sonet/SDH networks. An on-chip STS-1 (51-Mbit/s) cross-connect permits grooming at the STS-1 level to external devices enabling multiprotocol line cards required for next-generation ADMs. The XRT95L53 also incorporates flexible OC-48/OC-12/OC-3 SERDES, so the device can handle multiple applications concurrently at different data rates.

32-Bit Microcontrollers



It's our newest 68K/ColdFire microcontroller.

Register now for a live seminar near you.



Galaxy™ Design Platform with CCS modeling technology

FREE Webcast
Wednesday, June 14, 2006
2:00pm ET / 11:00am PT

Also The XRT95L53 provides an optimal mix of legacy and next-generation features. That way, designers can build systems to support cutting-edge features like the General Framing Procedure (GFP) over DS3 and VCAT/LCAS without sacrificing the ability to do ATM over Sonet/SDH.

The chip supports packet mapping form Ethernet, PPP, Resilient Packet Ring (RPR), Multi-protocol Label Switching (MPLS), and any proprietary protocol a vendor may use. Using either the OIF SPI-3 interface or Exar's G-header interfaces, customers can map any type of data over Sonet/SDH on a per-channel basis.

Housed in a 780-pin BGA package, the XRT95L53 operates from 3.3- and 5-V supplies over the standard industrial temperature range. It costs \$695 in 1000-unit quantities. Samples will be available within about 60 days.

Exar Corp.
www.exar.com

Figure 1



Thanks to its flexibility, the XRT95L53 can be used in equipment line cards in just about any format.

Resources

<input type="text"/>	<input type="text"/> Click to add Electronic Design to your Google Toolbar (IE) <input type="text"/>
----------------------	--



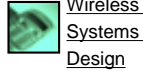
[Electronic Design Europe](#)



[EEPN](#)



[Microwaves & RF](#)



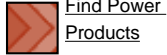
[Wireless Systems Design](#)



[Discover Circuits](#)

Part Finder

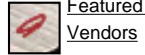
brought to you by:



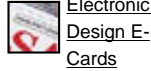
[Find Power Products](#)



[Military Electronics](#)



[Featured Vendors](#)






[Electronic Design E-Cards](#)



[Free Design Resources](#)

RSS Feeds

-  [Electronic Design](#)
-  [Microwaves & RF](#)
-  [EE Product News](#)



[Job Board](#)



[Ideas for Design](#)



[Basics of Design](#)



[Design FAQs](#)



[Events](#)

Marketplace

Cadence Technology on Tour 2006

See all the latest Cadence product and flow demos. At a location near you—no lines, no waiting. Meet with technical experts. Learn how to use Cadence technology to your advantage. Register today>>>

PCI Express Performance Measurements Webcast hosted by Agilent

PCI Express Performance Measurements Webcast hosted by Agilent

Register for Expert Training at UL University

Need help navigating safety standards or new regulations? UL University's 1,500+ course list includes seminars on hazard-based safety engineering and short-circuit current ratings. Visit UL University and sign up now for a workshop in your area.

Feel like the microcontrollers you're using are limiting?

Need more performance and flexibility for your next application? Our AVR microcontrollers are here to help! Click here to receive the AVR reference guide.

Electronic Design Ebooks from National Semiconductor, Arrow, Keithley and more!

Download a free Ebook from our library and stay up-to-date on current trends and technologies. Technical resources are compiled by Electronic Design and available for immediate download to your PC.

Sponsored Links



[Planet EE Network Home](#) | [Contact Us](#) | [Editorial Calendar](#) | [Media Kit](#) | [Headlines](#) | [Site Feedback & Bugs](#)
Copyright © 2006 Penton Media, Inc., All rights reserved. [Legal](#) | [Privacy](#)