


[DOWNLOAD](#)


## Implementation of a High-Speed FPGA and DSP Based FFT Processor for Improving Strain Demodulation Performance in a Fiber-Optic-Based Sensing System

By Douglas L Farley

Bibliogov, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.NASA's Aviation Safety and Security Program is pursuing research in on-board Structural Health Management (SHM) technologies for purposes of reducing or eliminating aircraft accidents due to system and component failures. Under this program, NASA Langley Research Center (LaRC) is developing a strain-based structural health-monitoring concept that incorporates a fiber optic-based measuring system for acquiring strain values. This fiber optic-based measuring system provides for the distribution of thousands of strain sensors embedded in a network of fiber optic cables. The resolution of strain value at each discrete sensor point requires a computationally demanding data reduction software process that, when hosted on a conventional processor, is not suitable for near real-time measurement. This report describes the development and integration of an alternative computing environment using dedicated computing hardware for performing the data reduction. Performance comparison between the existing and the hardware-based system is presented.



**READ ONLINE**  
[ 1.09 MB ]

### Reviews

*The ideal ebook i possibly study. Better then never, though i am quite late in start reading this one. It is extremely difficult to leave it before concluding, once you begin to read the book.*

-- **Ava Witting**

*The ideal ebook i possibly study. Better then never, though i am quite late in start reading this one. It is extremely difficult to leave it before concluding, once you begin to read the book.*

-- **Ava Witting**

## Related eBooks



### **Games with Books : 28 of the Best Childrens Books and How to Use Them to Help Your Child Learn - From Preschool to Third Grade**

Book Condition: Brand New. Book Condition: Brand New.



### **Games with Books : Twenty-Eight of the Best Childrens Books and How to Use Them to Help Your Child Learn - from Preschool to Third Grade**

Book Condition: Brand New. Book Condition: Brand New.



### **Words and Rhymes for Kids: A Fun Teaching Tool for High Frequency Words and Word Families**

AUTHORHOUSE, United States, 2009. Paperback. Book Condition: New. 279 x 211 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.This book is designed to make learning fun for children in kindergarten through primary grades. It teaches recognition of high...



### **Abc Guide to Fit Kids: A Companion for Parents and Families**

Murdoch Books, 2007. Paperback. Book Condition: New. Brand new books and maps available immediately from a reputable and well rated UK bookseller - not sent from the USA; despatched promptly and reliably worldwide by Royal Mail;



### **A Magician Never Tells and Elephant Bones: 2**

Hachette Children's Group. Paperback. Book Condition: new. BRAND NEW, A Magician Never Tells and Elephant Bones: 2, Paul Jennings, Andrew Weldon, Andrew Weldon, Ricky is an ordinary boy, about 10 years old, who dreams of being famous. And he has a secret...



### **Six Steps to Inclusive Preschool Curriculum: A UDL-Based Framework for Children's School Success**

Brookes Publishing Co. Paperback. Book Condition: new. BRAND NEW, Six Steps to Inclusive Preschool Curriculum: A UDL-Based Framework for Children's School Success, Eva M. Horn, Susan B. Palmer, Gretchen D. Butera, Joan A. Lieber, How can inclusive early educators plan and deliver...