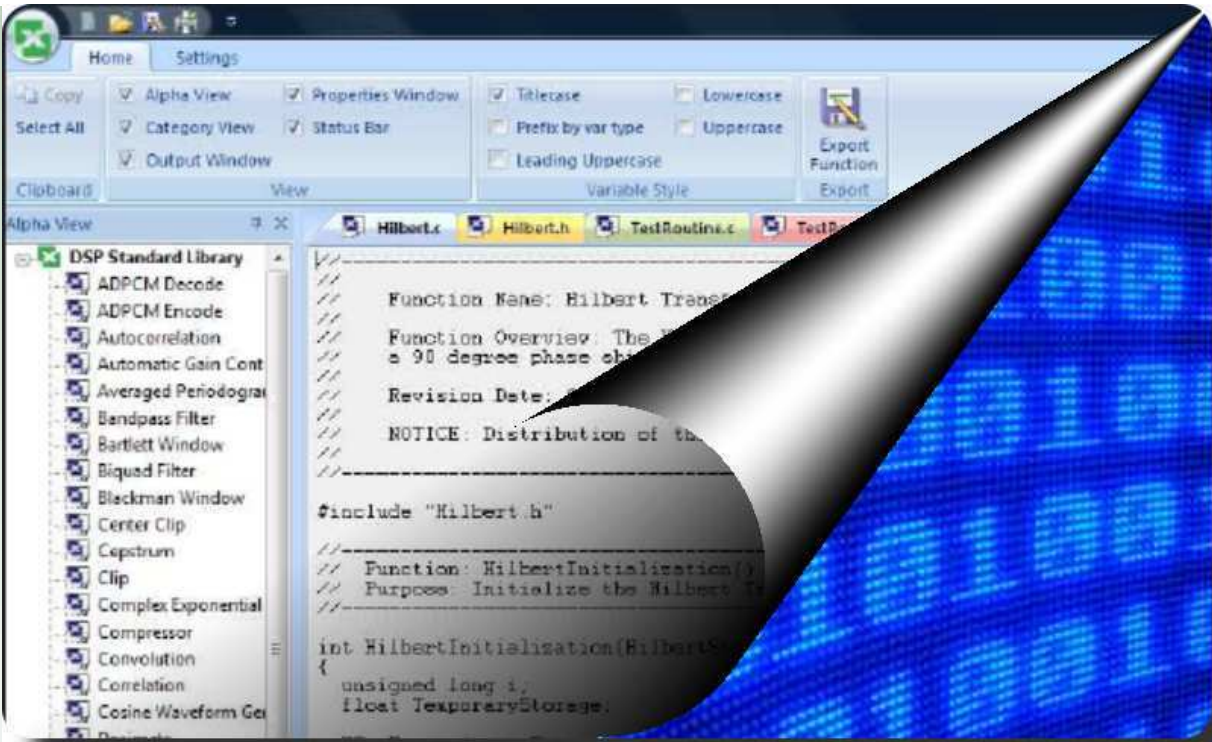




**for Digital Signal Processing, Image Processing,
and Related Applications**

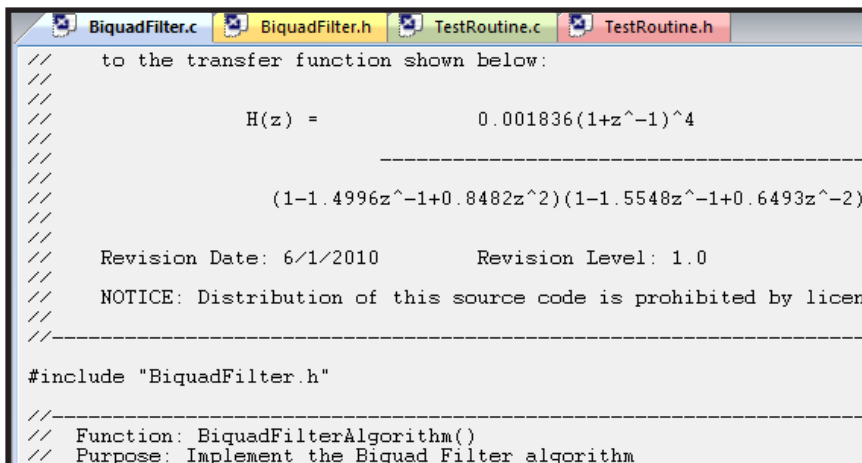


DSP Source Code PLUS... On Demand!

Software Expertise with a click

CodeBox Overview

CodeBox software provides developers with signal processing algorithm source code on demand. To minimize the learning curve associated with implementation of the source functions, CodeBox source code is written in plain flat C source. CodeBox is essentially a library of specialized source code for you to use in developing your applications; it includes functions for DSP algorithms such as FIR/IIR filter implementation, transforms, signal generators, analog I/O, image processing, and more.



```
// to the transfer function shown below:
//
//          0.001836(1+z^-1)^4
//          -----
//          (1-1.4996z^-1+0.8482z^2)(1-1.5548z^-1+0.6493z^-2)
//
// Revision Date: 6/1/2010      Revision Level: 1.0
// NOTICE: Distribution of this source code is prohibited by licen
//-----
#include "BiquadFilter.h"
//-----
// Function: BiquadFilterAlgorithm()
// Purpose: Implement the Biquad Filter algorithm
```

Software Algorithm Expertise with a Click!

Save Time

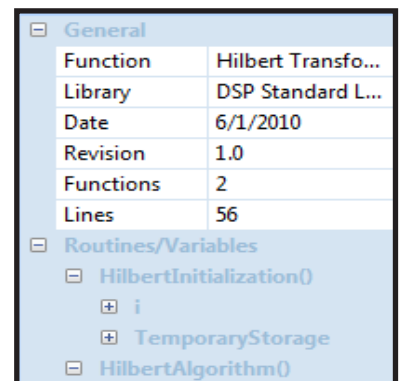
CodeBox allows the software developer to select from a variety of signal processing categories and immediately view and use the algorithm source code; in addition an accompanying test routine that demonstrates its usage is also available to the user. This source code can be exported to file, or copy and pasted, and even allows the user some control over variable nomenclature used within the source function. The ability to access algorithm source code on demand for difficult signal processing concepts provides both calendar and man-time savings, and allows the software developer to more efficiently implement signal processing designs. Codebox displays additional function details for the selected algorithm and convenient content-related resources are available for more involved functions to allow the user to 'study-up' on that particular function.

How CodeBox Works

To obtain the source code for a function, select from either a category list, or an alphabetical list, and you are ready to get the code for your application.

1. Algorithm source code is shown immediately after selecting one of the CodeBox functions.
2. A test routine that calls the algorithm is provided to show you how the function is used, as well as possible knowledge references for the function.
3. Select a tab to view the source code for the function, the test code, one of the header files, or the reference information.
4. Use the Export button to write the algorithm source to file where you can access it.

After exporting your function, the source files are ready for use in developing your specific application using standard development tools, such as a C compiler.



General	
Function	Hilbert Transfo...
Library	DSP Standard L...
Date	6/1/2010
Revision	1.0
Functions	2
Lines	56

Routines/Variables

- HilbertInitialization()
- ⊕ i
- ⊕ TemporaryStorage
- HilbertAlgorithm()

View Function Details Quickly

Source Code that works with you

Benefits

Benefits of using CodeBox to obtain your source code versus creating source code manually include:

- Reduction in project cost
- Reduction in man-time savings
- Reduction in project schedule
- Reduction in learning curve
- Reduction in project risk

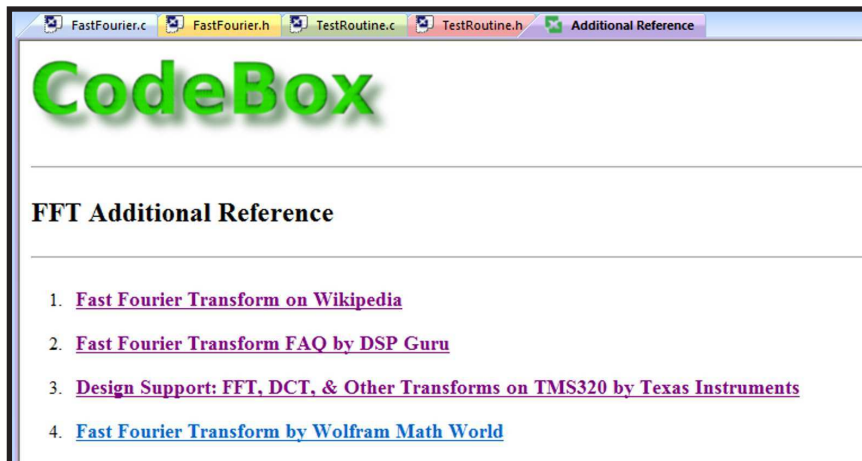
Features

CodeBox includes a variety of features to enhance your engineering software development. The ability for you to select different formats for variables allows for a semicustom styling of the source code.

CodeBox also includes reference links for some of the more complex functions to allow you to get additional information on that function.

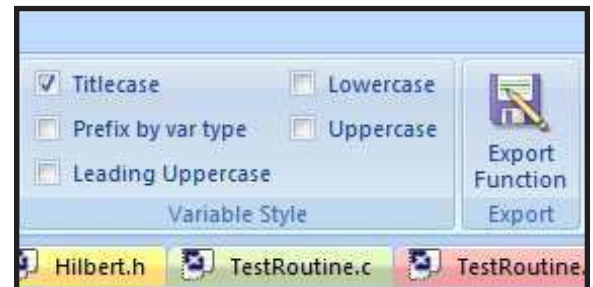
You see, CodeBox is more than just plain source code - it's source code PLUS!

Signal Processing Algorithms



Example of Additional Function Information

CodeBox provides an assortment of signal processing algorithms. Simply choose a desired algorithm from either an alphabetized or category view list and the function automatically appears in source code tab windows. Choose the Export button to save the source code to file where you can access it for your applications.



CodeBox allows choices in variable naming conventions

Value Added Benefit

CodeBox is priced such that after using it to develop one or two functions, it could pay for itself in the resulting man-time savings. CodeBox is not designed as a replacement for engineering expertise, but is aimed at allowing the engineer to produce code more quickly. CodeBox could even be used to assist in teaching students fundamentals of signal processing software development. CodeBox is a nice addition for virtually any software development from a single engineer to a large advanced engineering team.

Algorithm Details

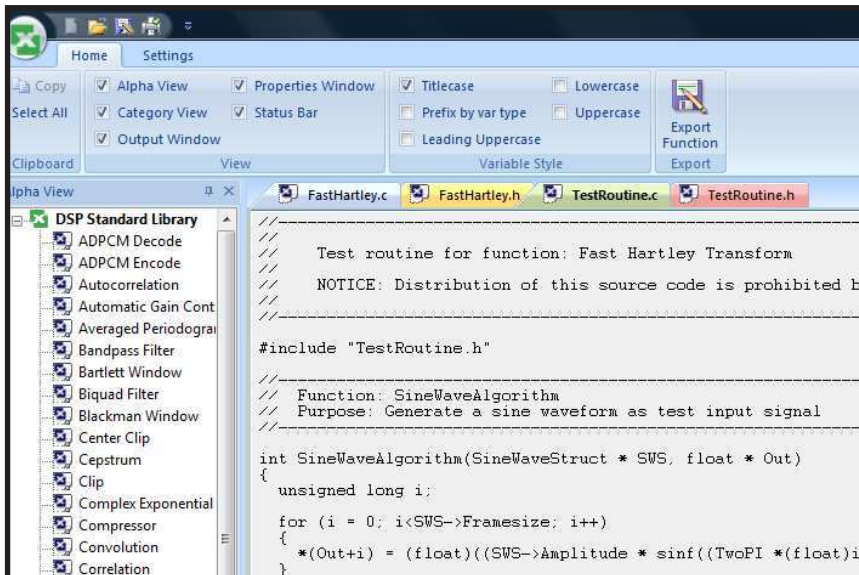
CodeBox provides a convenient Properties view that allows access to pertinent details about the selected function. Details include variable names, routines used, lines-of-code count, and more.

Additional Function Information

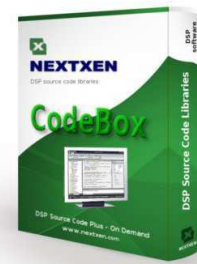
For some of the more complex functions, CodeBox provides an additional tab containing online links to sources which may offer further insight about the function and its use. This additional information is often times helpful during project development.

Variable Nomenclature

Variable naming conventions are supported when viewing and exporting source code. CodeBox allows you to generate variable names using Titlecase, Leading Uppercase, Uppercase, Lowercase, or Prefixed by Variable Type. This eases integration with your own source code and results in a more maintainable source base for your project.



Source code for test functions is also typically generated



Increase your productivity
 Get CodeBox to help you with your engineering efforts involved with DSP applications. Software expertise with a click!

DSP Library

The CodeBox DSP Library contains a set of powerful algorithms that are commonly used in signal processing applications. Having source code for these algorithms will provide you with a jump start for your DSP development.

Professional Edition

For DSP Engineering Professionals, CodeBox Professional Edition includes the source code contained in both the DSP Standard Library and the Image Processing Library.

Image Processing Library

The CodeBox Image Processing Library includes a mix of sophisticated algorithms that are applicable in image-specific applications.

How to Order

Order online, call, or email/fax a Purchase Order.

NOTE: Academic institutions may qualify for a discounted price on software

Visit us on the web and find out more about NEXTWave SPL.

Software Editions

CodeBox software is available in 3 editions:

- DSP Library (NXSL1000)**
- Image Processing Library (NXSL1005)**
- Professional Edition (NXSL1020)**

The Standard DSP Library includes common functions used in many DSP applications while the Image Processing Library contains functions related to digital image processing. The CodeBox Professional Edition includes all functions in the DSP Library plus all functions in the Image Processing Library.

NEXTXEN, LLC.
www.nextxen.com
info@nextxen.com
(800) 290-4650

