



**Automotive/Industrial Subcommittee**      **Benchmark Name: Inverse Fast Fourier Transform (iFFT)**

**Benchmark Description**

This EEMBC benchmark simulates an embedded automotive/industrial application analysis of a time domain analysis of an input frequency spectrum. This might be used in noise cancellation applications.

The kernel computes the 'radix-2' decimation in frequency inverse Fast Fourier Transform (FFT) on complex input values stored in real and imaginary arrays.

**Optimization Rules**

Category	Allowed	Disallowed
ANSI C	X	
Intrinsics/Language Extensions	X	
Custom Libraries	X	
Assembly Language	X	
HW Accelerators	X	

**Algorithm Flowchart**

