

An Industry-Standard Benchmark Consortium

AutoBenchTM Version 1.1

Benchmark Name: Bit Manipulation

Benchmark Description

This EEMBC benchmark simulates an embedded automotive/industrial application where large numbers of bits have to be manipulated, many decisions have to be taken based upon bit values and bit arithmetic takes place.

The kernel simulates part of a character display system where characters are shifted into a line buffer. The line buffer is then converted into a series of pixels by mapping characters through a display character ROM. The pixels are moved into a display buffer until the entire buffer is displayed.

Optimization Rules

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

Algorithm Flowchart

