# EMBC®

An Industry-Standard Benchmark Consortium

## AutoBench™ Version 1.1      Benchmark Name: Matrix Arithmetic

**Benchmark Description**

This EEMBC benchmark simulates an embedded automotive/industrial application which performs a lot of matrix arithmetic.

The kernel performs an LU decomposition on 'n x n' input matrices. It also computes the determinant of the input matrix then a cross product with a second matrix.

**Optimization Rules**

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

**Algorithm Flowchart**