Release Notes

uM-FPU64 Firmware Release 404

Changes in Release 404

New Features
- LU Decomposition and Cholesky Decomposition matrix operations have been added to MOP instruction. These new operations can be used to calculate the inverse matrix, determinant, and to solve sets of linear equations for *n* x *n* matrices of any size.

Changes
- the NaN bit is now set in the status byte by any instructions that return a NaN value
- he NaN bit is now set in the status byte for MOP instructions that set the first element of a matrix to NaN
- the debug string command now supports \r, \n, \t, and \v special characters

Bug Fixes
- added code to prevent DEVIO,SPI read/write instructions from hanging if they are executed before the device has been ENABLED
- changed RIGHT so that status byte is unchanged
- fixed problem with MOP,LU_DECOMP instruction
- When format = 0, FTOA was incorrectly rounding up numbers that ended with a nine on the right side of the decimal point. This problem was introduced in V403 by a fix intended to improve the rounded code for unformatted numbers. It has been fixed and the rounding code for unformatted numbers has been improved.
- Fixed problem causing format errors to occasionally be reporting during programming.
- the RIGHT instruction now leaves the status byte unchanged.
- added code to prevent DEVIO,SPI read/write operations from hanging if they are performed before the device is ENABLED