Test Release Changes KFLOP/KMotion Versions 4.35e -> 4.35f 12/16/2020

KFLOP

Fix G32 Threading Bug introduced in V4.35c where FRO and Feedhold was supported for G95. During the start of a Threading pass instead of starting the pass at the specified FRO a Resume from Feedhold was being performed. This ramped the FRO from 0 up to the desired FRO. At higher Spindle RPMs if the FRO had not fully ramped up by the time the Spindle Synchronized (0 degrees), and Z motion began, then the Z Motion could be incorrect (lag). Furthermore, the effect would be somewhat random depending on the time needed to Synchronize the Spindle (wait to be at 0 degrees).

Fix potential bug when triggering Spindle Threading where threading begins before Threading parameters are completely configured. Caused by compiler code optimization re-ordering instructions. Adding Memory barrier forces proper order.

TI Compiler

Fix missing symbols for TI Compiler dropped in last Version

GCodeInterpreter/CoordMotion

Change Soft Limit Checks to include Kinematics to check actual Actuator (axis) Positions.

Fix Feedrate/crash error switching between distance/minute and distance/Rev. The bug is triggered by a
G95 - G1 - G94 - G1
sequence without anything in between. The final G1 uses a garbage feed rate as it errors on what method to use and does neither. A more common sequence is:
G95 - G1 - G0 - G94 - G1 or
G95 - G1 - G94 - G0 - G1
where the rapid “cleans” up Threading mode.

Kinematics

Add Kinematics5AxisTableAB