Test Release Changes KFLOP/KMotion Versions 4.34i -> 4.34j 9/28/2017

Trajectory Planner

Fix unnecessary motion buffer flush on G43/G49 tool length offset changes required only for complex kinematics. This eliminates small pauses in certain circumstances.

KMotionCNC Screen Editor

DualPane3AxisSplitVars.scr - example to display GCode Vars

Add DualPane3AxisSplitJogRate.scr Example

Fix KMotionCNC CCW M4 Threading

On Screen Jog Speed Example that updates only when Screen Values Change using EditScreenCount. EditScreenCount in KFLOP can be used to notify KFLOP that some Edit Control Value Changed

Fix issue with Action Messages to Checkboxes checking/unchecking the checkbox but not changing underlying variable.

Persist Edit Controls between sessions

Increase spare edit controls from 20 to 40

Allows a new Action/Script Type called WinMsg (which allows a button to send a standard Windows Message to any Control). The way Microsoft Windows fundamentally works is everything (Buttons, Dialogs, etc...) is a "Window" that can receive messages to do things. Initially we just support sending Button Check or Uncheck messages.

Buttons can send WinMsgs when pushed or Labels can send WinMsgs when Loaded.

Edit Controls now only set Text when the Edit Control is completely empty. This should allow you to specify the initial text when the Screen is first loaded, but then that text or any text entered by the Operator should persist when switching screens. The Same Edit Control must be used on all possible screens for the same thing (even if hidden or shown).

New feature in KMotionCNC Screen Editor - Copy/Paste. This can be used to copy all the settings for one control to another control (except its XY position). To do this select the source control then "copy" then select a single target control and select "paste". Copy/paste can also be used to configure a set of identical controls on one screen script to another screen script. To do this select one or more controls on the source screen and select "copy". Then load/read the new screen and without selecting anything select "copy" the same controls as selected in the source screen will be configured in the same exact manner in the destination screen.

Properly Terminate String messages passed to KMotionCNC App (Fixed invalid Check WinMsg on some PCs)

C Program Examples

New example of WatchdogStatusRequests.c to watch communication to KFLOP

KMotionCNC

Fix issue with GCode Viewer Colors along path (unmatched OpenGL glBegin(GL LINE STRIP)/glEnd)

Add Confirm Program Exit Option

Add M47 Repeat GCode File Loop

Don't Persist FRO and SSO Edit Controls

Cache Control IDs and Names for better performance

Improve DRO and Jog update rate in Simulate mode with no KFLOP Connected

Fix Configurable Program Exit Action

Fix G85 Canned Cycle to retract only to R height Add test example GCode for canned cycle G85

Fix GViewer plotting with Angular Radius Mode with large Angle changes (subdivide lines so they become proper paths in space)

Added Special capability for feed holding during a Tap Cycle On Feed hold during Tap Cycle Feedhold sets Var0 in Tap Program to -2, 0 to release feedhold

Fix bug where CSS was being set in Simulation mode G96/G97 cause problem simulating with no hardware connection

Fix bug sending some blank command Script lines to KFLOP while Jogging (small waste of USB Bandwidth)

Geometric Correction

Fix typos in Help Example Description

KNozz

Added KNozz Nozzle/Bed Heater Documentation

KFLOP

KMotionDef.h – fix comment Channel Number range to 0-7

KMotion.exe

Fix issue with KMotion Command line option to select a specific board

Help

A number of Help Screens updated