

Firmware Build_FW1047_FF1471 (26.09.2016)
DspFirmware: Build 1047
Release Date: Date: 2016-09-21 09:19:15 +0200 (Mi, 21 Sep 2016)
SVN Revision: Revision: 23185
RLID: 4&5&6 & 16
Remarks: supporting TSx5x RevB,RevC&RevD and TSP350&700 Rev0,Rev1 Drives,

Changes since last Build:

- version number DSP_FWID increased to 1047
- FIX: prevent from i2t error after a STO watchDog test
- CHG: optimized i2t calculation (calculate number of samples to transfer once only)
- FIX: no longer poll STO fault reason if fault is pending. this prevents from unpredicted behaviour using other FPGA write access commands
- FIX: path interpolator timestamp modulo wrap problem solved

SPECIAL_VERSION (not released)

- 1047_1 implementation for special summation inputs via TamVars for iD with TamVar2, iQwith TamVar3 and position X with TamVar4. Do not use TamVars(2..4) in Tama prog if FW 1047_1 is installed!
- 1047_2 implementation for compensation of nonlinear PWM output using TamVar0,1,2,24 and TamIntVar0-4. Do not use TamVar0,1,2,24 and TamIntVar0-4 in Tama prog if FW 1047_2 is installed!

FpgaFirmware: Build 1471
Release Date: 2015-10-27

Changes since last Release:

- 1) new hardware type TOA11 HR1
- 2) new hardware type TOEA1 HR1
- 3) new hardware type TOEA2 HR1 Analog
- 4) new hardware type TOEA2 HR1 FFT
- 5) TSD80 with 20MHz current sampling and new filter
- 6) sending latched STO signals to DSP
- 7) TSD80 with dual encoder support

Refactorings:

- Xilinx build process with XST and PlanAhead support
 - removal of configurations
 - different architectures changed to different components
 - avoiding assignments of vectors with different low and high indices
 - avoiding record field attributes e.g. data.x.length
 - removing assert in synthesizable code
 - avoiding identical component names from different libraries
 - avoiding equal names after record field substitution e.g. data.x will be the same as data_x
 - avoiding loops with bidirectional signals (e.g. mdio)
- Cdc and Sync library
- Firmware Id in a separate top level file
- Option Module port data types
- Monitor_IO Serializer with simpler reset logic (timing problems)
- Option Module in general
- Original and modified PciE code with same interface
- Eim Interface, adding debug utilities
- Fifo Interface
- Creating extended local bus library
- Removing TSD80 local bus interface

Bug Fixes

- Analog encoder logging swapped x and y

Triamec Motion AG Firmware ReleaseNotes

- TSD80 and MCI42 leds
- PWM local bus device did not reflect the state of the STO signals
- PLL locked problems

Bridge Monitor TSPxx0 Firmware: Build 282

Release Date: 2016-09-21 16:24:46 +0200 (Mi, 21 Sep 2016)

SVN Revision: Revision: 23195

Remark: FW downloadable with FFID \geq 1036 only!

Changes:

- phase lost detection is realized within amplitude tracking. DC supply or one phase operation is no longer regularly supported.
- introduced workbench mode (enable within local bus register) which can be used to operate the drive with DC supply or with one Phase supply.
- reduced line disturbance check time from 3 line periods (60ms) to 20ms
- made sure no double operations are used in the code
- prevent state changes into fault states
- set filter edge frequencies of AC line filters to 500Hz to prevent from oversampling
- correct LED control for ACline LED (former MID stabilizer LED)
(no AC: both PWR LED off; AC all phases: PWR GREEN on; AC NOT all phases: PWR RED on)
- removed the whole mid voltage chopper functionality from the firmware
- no longer make GPIO pin BRAKE_DETECT pull down (this makes circuit symmetrical)

Bug Fixes:

- review line disturbance detection. detection is now capable to detect loss of one or two AC line phases. old implementation did only detect loss of all phases