

Release Notes: moc9_10_00

Release Datum: 17-01-2025

Improvements

- [ZFW-498] : Handle Normal- and Low-Current variants of MiniMACS6 in Firmware
- [ZFW-388] : Check Application Flash Function
- [ZFW-482] : Adding modules and individual PDOs for TwinCAT 3 NC Axes
- [ZFW-483] : Remove ENDSW_STOP Parameter
- [ZFW-486] : Implement Ethernet PHY test mode on MicroMACS6
- [ZFW-487] : Add settings for MiniMACS6 low current to mocon trunk
- [ZFW-500] : Add 0x1C32/33 to OD

Bugfixes

- [ZFW-488] : Edge detection homing "Current Threshold"
- [ZFW-491] : Axis jump during logic power is off
- [ZFW-147] : EtherCAT Error after saving the user parameters on MasterMACS
- [ZFW-343] : EtherCAT Master: DC Sync Type is not set on slave device
- [ZFW-480] : Software limit violation always leads to abrupt stop
- [ZFW-481] : FW-Crash after can boot-up message
- [ZFW-490] : Wrong MACHINE_ACT_PATH_VELOCITY at standstill and init
- [ZFW-494] : Ethernet RX PDO is only received on PDO 1
- [ZFW-499] : EtherCAT Slave DC sync failing on MiniMACS6

Release Notes: moc9_9_01

Release Datum: 26-11-2024

Bugfixes

- [ZFW-494] : PDO received is only received on PDO 1

Release Notes: moc9_9_00

Release Datum: 10-09-2024

Improvements

- [ZFW-353] : Log Texts are sometimes lost
- [ZFW-415] : Support for UDP sockets
- [ZFW-429] : EtherCAT slave error will trigger application error
- [ZFW-440] : Disable 10V DCDC, if logic supply voltage is below 21.5V
- [ZFW-441] : Throw an over voltage error for logic supplies

[ZFW-448] : SDO for unique ID of controller
[ZFW-449] : Ethernet ARP Announcement in MicroMACS6
[ZFW-450] : Add SSP Ports 1914 & 1915 in MicroMACS6
[ZFW-454] : Implement timeout for undervoltage detection
[ZFW-455] : Logic voltage measured too low
[ZFW-463] : Implement HW Ident readout for MicroMACS6 Module

Bugfixes

[ZFW-447] : Wrong error is issued in case of implausible STO signal
[ZFW-461] : Improve SDO Abort code reporting for EtherCAT Master
[ZFW-475] : DDE-V75: CAN-ID is wrong for PCBAs with HW index ≥ 3

Release Notes: moc9_8_01

Release Datum: 6-8-2024

Improvements

[ZFW-463] : HW Ident readout for MicroMACS6

Release Notes: moc9_8_00

Release Datum: 12-07-2024

Improvements

[ZFW-342] : Suppress current display during calibration
[ZFW-345] : Adding virtual math module to the firmware
[ZFW-347] : Optimize OVC Parameter
[ZFW-348] : Implement Powerdown Save function on OEM Platform
[ZFW-350] : Remove redundant stop function in TG interface
[ZFW-376] : OVC error info
[ZFW-383] : Absolute encoder as source for hardware latching
[ZFW-384] : Trigger Output - Index generator without A/B signal generation
[ZFW-386] : Additional machine process values in kinematics mode
[ZFW-389] : Extend serial number length from 6 to 9 digits
[ZFW-398] : Overwrite of DIP switch for CAN Node ID

Bugfixes

[ZFW-352] : Wrong result in PO_HWAMP_TOTAL_CURRENT
[ZFW-375] : Undervoltage Error with HWAMP_COMTYPE = 0

[ZFW-418] : TG generates position jump in overshoot situations
[ZFW-335] : Incorrect stop behavior after an AxisCvelStart() and a direct program end
[ZFW-396] : Torque Actual Value (0x6077) wrong type
[ZFW-406] : SSI encoders 1 and 2 or 3 and 4 don't work concurrently
[ZFW-407] : False board temperature
[ZFW-412] : Incorrect behavior of the under voltage error

Release Notes: moc9_7_01

Release Datum: 23-01-2024

Bugfixes

[ZFW-375] : MiniMACS6: Undervoltage Error with HWAMP_COMTYPE = 0

Release Notes: moc9_7_00

Release Datum: 22-11-2023

Improvements

[ZFW-314] : Increase CanOpen Slave PDOs number to 8
[ZFW-304] : PDO mapping writes too many bytes to target buffer
[ZFW-320] : New parameter HWAMP_IDQ_D_REF
[ZFW-334] : AxisParameter ESCCOND = 2 shall do a direct AxisControl(xx,Off)
[ZFW-344] : Improve readout rounding of values in user units

Bugfixes

[ZFW-291] : Hall sensor problem with monitoring turned off
[ZFW-303] : Possible crash with Ethernet Sockets
[ZFW-316] : TX Pdo Length is wrong when LinkSdo is used
[ZFW-318] : TX PDO 1 cannot be disabled
[ZFW-324] : MiniMACS6 Ethernet stopps working after a random time
[ZFW-329] : AxisControl(axis, ON) is supposed to wait for the internal amplifier
[ZFW-331] : Velocity controller overflow with SSI Encoder

Release Notes: moc9_6_04 moc9_9_00

Release Datum: 03-09-2024

Bugfixes

[ZFW-475] : DDE-V75: CAN-ID is wrong for PCBAs with HW index ≥ 3

Release Notes: moc9_6_03

Release Datum: 22-02-2024

Bugfixes

[ZFW-385] : Fix HW-ID detection on DDE-V75

Release Notes: moc9_6_02

Release Datum: 25-10-2023

Bugfixes

[ZFW-291] : Hall sensor problem with monitoring turned off

[ZFW-324] : MiniMACS6 Ethernet stopps working after a random time

Release Notes: moc9_6_01

Release Datum: 25-08-2023

Bugfixes

[ZFW-316] : TX Pdo Length is wrong when LinkSdo is used

Release Notes: moc9_6_00

Release Datum: 24-05-2023

Improvements

[ZFW-60] : New Synctype for SyncPos/SyncVel command

[ZFW-254] : DataType conflict for Schindler DDE-V75

[ZFW-264] : Current limits for DDEV75

[ZFW-277] : Create Test Mode for MicroMACS6

[ZFW-278] : DDE-V75: Switch state must be inverted for HW-ID 3 and higher

[ZFW-285] : Adaptation of the data length according to CANOpen

[ZFW-293] : MiniMACS6: Prevent CAN 1 Loopback

[ZFW-296] : DualScara -ve Y-axis kinematics

[ZFW-4] : Error Handling Overcurrent

Bugfixes

[ZFW-247] : Scara kinematics init problem
[ZFW-265] : Overflow in current controller
[ZFW-241] : CAN Transmit PDO has wrong length
[ZFW-243] : FW Crash after EthernetOpenClient with program in autostart
[ZFW-256] : Schindler object "Clear Door Floor Table" reset
[ZFW-257] : Schindler objects, access highest sub index
[ZFW-259] : Errorinfo() and ErrorAxis() not correct for some Amplifier related errors
[ZFW-272] : CANSYNCTIMER is not set correct
[ZFW-276] : DDE-V75: Add flashing states for the PWR-LED
[ZFW-279] : Amplifier Temperature shows CPU temperature
[ZFW-282] : Calculated PDO Length is not returned on MiniMACS6
[ZFW-300] : Axis State is not OFF after boot up

Release Notes: moc9_5_00

Release Datum: 20-01-2023

Improvements

[ZFW-140] : Changes in Version Objects for DDE-V75
[ZFW-196] : New error type 118 for violation of amplifier initialization order
[ZFW-214] : Report application flash failure on bootup
[ZFW-216] : DDE-V75: Integrate motor-inertia into moving mass estimation
[ZFW-219] : MiniMACS6, MicroMACS6 and PC-ENC support for HWDIGIN_POLARITY parameter
[ZFW-237] : HALL Sensor Error Handling
[ZFW-250] : Immediate reload of application authentication key

Bugfixes

[ZFW-240] : MiniMACS6: Program/Array download with Beckhoff EtherCAT fails
[ZFW-192] : ApossC: Put local variables on the stack
[ZFW-197] : Insufficient range check in HW_AMP parameters
[ZFW-210] : Homing fails when drive is already on limit switch
[ZFW-213] : MiniMACS6 and PC-Enc: Two Latch modules linked to the same encoder does not work.
[ZFW-220] : EtherCAT Master failure when many drives are connected
[ZFW-223] : SyncVel - AxisStop leads to uncontrolled movement
[ZFW-234] : FW Crash at different baud rates
[ZFW-244] : Overflow of PID_FFPART at very high speed
[ZFW-245] : DDE-V75: Application is only authenticated on download

Release Notes: moc9_4_00

Release Datum: 01-07-2022

Improvements

- [ZFW-56] : Resetting the current controller values after an AxisControl(xxx, OFF)
- [ZFW-105] : Setting POSERR to 0 will deactivate the following error monitoring
- [ZFW-139] : Implement glitch filter for encoders on NXP platforms
- [ZFW-152] : DDE-V75: Digital output 17 shall control 24V_EN Signal
- [ZFW-157] : HALL Velocity measurement feature
- [ZFW-158] : MasterMACS will register itself with controller name on DHCP server
- [ZFW-161] : DDE-V75: Provide 24V_POK and 24V_CAN signals to application
- [ZFW-165] : Integrate RS485 option in DDE-V75 firmware
- [ZFW-168] : Improved undervoltage behaviour
- [ZFW-169] : Add CiA402 SDO Object for CSV, CSP and CST
- [ZFW-181] : Return article number in SDO 0x1018/2
- [ZFW-187] : Show SSI values in Diagnostics Window

Bugfixes

- [ZFW-99] : HWAMP_PISRC_REFVEL is not used
- [ZFW-148] : InterruptDelete(POSBITS, xy) is only applied to axis 0
- [ZFW-149] : InterruptSetup(APOS,...,ONCE) does not work correctly
- [ZFW-150] : USB Host causes crash on boot DDE-V75
- [ZFW-151] : MicroMACS6: Analog input scaling has changed
- [ZFW-154] : Inaccurate temperature measured on board with NTC resistor on MicroMACS6
- [ZFW-160] : Actual position jumps on program restart
- [ZFW-167] : DDE-V75: Reboot controller after undervoltage when logic supply OK
- [ZFW-172] : Lag element in amplifier's PI Controller
- [ZFW-173] : MiniMACS6: Digital outputs 1-4 cannot be controlled after Signal Generator was active
- [ZFW-175] : Internal overcurrent detection without a internal Amplifier
- [ZFW-176] : PC-ENC reads hardware identification and index wrong.
- [ZFW-179] : PC-ENC reports error 117 on CanRestart command
- [ZFW-180] : Board voltage measurement faulty with PC-ENC HW index 1
- [ZFW-182] : REG_COMPOS jumps with Scara kinematics and a path move
- [ZFW-183] : Virtual Master Module does not achieve exact target velocity
- [ZFW-186] : Too big SXP PDO can crash the controller

Release Notes: moc9_3_01

Release Datum: 31-05-2022

Bugfixes

- [ZFW-173] : MiniMACS6: Digital outputs 1-4 cannot be controlled after Signal Generator was active

Release Notes: moc9_3_00

Release Datum: 31-03-2022

Improvements

- [ZFW-111] : Make Firmware download CanOpen compatible for DDE-V75
- [ZFW-70] : Implement encoder signal generator on MiniMACS6
- [ZFW-80] : Enhance zfc files to allow combined download of firmware and application
- [ZFW-94] : Check option board firmware version
- [ZFW-96] : Optimize Motor Current Measurements on MiniMACS6
- [ZFW-121] : Improved current supervision for twins
- [ZFW-123] : Control of the CAN LED in the firmware on DDE-V75
- [ZFW-126] : MicroMACS6 has 1MBaud default baudrate on CAN bus
- [ZFW-128] : MACS5, MasterMACS and MiniMACS compatible to newest FTDI driver 2.12.36.4
- [ZFW-134] : Remove Kinematics out of MACS5 Firmware
- [ZFW-137] : Use of SSI encoder with bit number greater than 32
- [ZFW-143] : MicroMACS6 now runs High Speed on USB

Bugfixes

- [ZFW-138] : MiniMACS6: Voltage and Analog Input dividers wrong for hardware indexes > 3
- [ZFW-58] : Current offset assignment imprecise
- [ZFW-104] : AxisStatus Flags are not set correctly
- [ZFW-110] : NXP Platform controllers crash on CanOpenRestart when CAN hardware is broken
- [ZFW-119] : MiniMACS6 ethernet socket cannot be re-opened after program close
- [ZFW-130] : MicroMACS6 emergency reset does not work
- [ZFW-132] : Logic power down sequence incorrect
- [ZFW-136] : MiniMACS6: SSI Clock over 2.5MHz does not work
- [ZFW-141] : Virtual Master Module velocity ramp fails
- [ZFW-142] : PROFTIME Parameter can't be written in Apossc Mode

Release Notes: moc9_2_01

Release Datum: 6-1-2022

Bugfixes

- [ZFW-112] : DDE-V75 controller sometimes crashes on startup

Release Notes: moc9_2_00

Release Datum: 14-12-2021

Improvements

- [ZFW-5] : Stepper Motor Supported on MiniMACS6
- [ZFW-6] : Chopper Supported on MiniMACS6
- [ZFW-8] : CPU Temperature Measurement on MiniMACS6
- [ZFW-15] : Logic Supply Voltage is monitored
- [ZFW-20] : Direction Compensation for Incremental Encoder Latching
- [ZFW-44] : MicroMACS6 controller support
- [ZFW-81] : Position PID: Reset of Integral sum when target reached
- [ZFW-3] : Incremental resolution up to 1'280'000 inc/rev is now supported

Bugfixes

- [ZFW-40] : PFG_FLAG "INDEX_HIT" did not work
- [ZFW-85] : AmpErrorClear blocked communication for 50ms
- [ZFW-90] : AxisTargetReached command is blocking sometimes
- [ZFW-18] : Motor does not coast but decelerate abruptly on AxisControl(OFF)
- [ZFW-64] : Wrong temperature limits on MiniMACS6
- [ZFW-84] : VIRTAMP_REFOUTP and VIRTAMP_REFOUTN to the same output did not work
- [ZFW-109] : MiniMACS6, MicroMACS6, PC-ECN and DDE-V75 controllers missed CAN telegrams sometimes
- [ZFW-23] : SdoRead/Write commands do not return error when ECat Master is inactive

Release Notes: moc9_1_01

Release Datum: 25-11-2021

Bugfixes

- [ZFW-90] : AxisTargetReached command is blocking sometimes

Release Notes: moc9_1_00

Release Datum: 30-09-2021

Improvements

- [ZFW-10] : DDE-V75: I2T Monitoring implemented
- [ZFW-41] : All controllers: Unification of temperature units to 1/10 degrees celsius (SDOs 0x2202/135 and 0x4800/17)
- [ZFW-76] : DDE-V75: Implemented DIN_12 (JHCT_L) for DDE-V75.2
- [ZFW-65] : DDE-V75: New voltage divider in DDE-V75.2 HW

Bugfixes

- [ZFW-19] - MiniMACS6: CanOpenRestart() can lead to a crash if called repeatedly.
- [ZFW-27] - MasterMACS: Save program with included sourcecode did not work
- [ZFW-40] - All controllers: STATBIT_INDEX_HIT in command InterruptSetup(STATBIT...) did not work
- [ZFW-54] - MiniMACS6: Homing could fail when the homing was executed twice without controller reboot
- [ZFW-63] - MasterMACS: Board temperature measurement was not implemented on MasterMACS (SDO 0x2202/135)
- [ZFW-68] - Controllers with integrated amplifiers: Undervoltage is also reported for non-active axes