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|----------|------------------------------------|--------|------------|
| Title: | StepperCard V3xx_DipSwitchE | ID: | |
| | | 147 | |
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| | | - | <i>CMa</i> |

NMC

Firmware V 3.0.0 DIP-Switch Settings

DIP Switch Options

The DIP-Switch have different meanings in version 3x FW than in pervious versions. The settings are simplified by assigning well defined functions to each switch. Depending on the usage of the card, different setting of these switches are required.

SW1: '1' -> PowerSave-Modus Disable

To be used in ULT devices only

SW2: '1' -> SilentBoot Disable

Must be set for z-Lift axis

SW3: '1' -> DataMode (SSI-Mode) Enable

'0' -> PulseDirection Mode

SW4: '1' -> AutoInnit Enable

To be used for Shakers only

Configurations in Former FW

(„x x x x“ stands for switch settings „SW1 SW2 SW3 SW4“)

In principle there are three different configurations:

- **Cards without „SW3“**, werden neu immer mit der Einstellung „0 0 0 0“ ersetzt, einzige Ausnahme sind Karten in ULT-Geräten. ULT-Geräte verwenden „1 0 0 0“.

- **Cards with „SW4“** werden immer durch „0 0 0 1“ ersetzt.

- Bei **allen anderen Einstellungen** wird wie folgt vorgegangen:

2.0.0.1: „0 0 1 0“

2.0.0.2: „0 1 1 0“

2.0.0.3: „0 0 0 1“

2.0.0.4: „1 0 1 0“

2.0.0.5: „1 1 1 0“

2.0.0.6: „1 0 1 0“

Remark:

In Pulse-Direction Mode the rotary direction is equivalent to the direction when SW 1 is set to '1' regardless of the chip's position!

Appendix: Details of Implementation

```

    btfss    _confJump, SW1                ; disable PowerSave_mode if SW1 is set.
    Bsf     _pwrSaveEnabled                ; this lines make sure that the initialization
    btfsc   _confJump, SW1                ; aka "silentboot" behaves properly
    bcf     _pwrSaveEnable                 ; ("temp" for first move)

    btfss   _confJump, SW1                ; disable PowerSave_mode if SW1 is set.
    bcf     _disablePWRSaveMode           ; ("perm")
    btfsc   _confJump, SW1
    bsf     _disablePWRSaveMode

    btfss   _confJump, SW4                ; set as shaker (with all its flags) when SW4 is set.
    bra     modelInit_notShaker
    bsf     _shakerMode

    bsf     _ssiMode                       ; Shaker use SSI-mode only
    ;bsf    _silentBoot                    ; always use silentBoot
    bsf     _maxSpeed1ByDefault            ; and maxSpeedTable1 by default
    bsf     _needsAnInitMove              ; do the auto-init on startup
    bcf     _disablePWRSaveMode           ; there's no -80°C Shaker yet...
    bsf     _pwrSaveEnabled
    bsf     _moveOptions, TABLE_REV_DIR
    bsf     _movePermOpt, TABLE_REV_DIR
    bra     modelInit_end

modelInit_notShaker
    btfss   _confJump, SW2                ; disable silentBoot if SW2 is set.
    bsf     _silentBoot
    btfsc   _confJump, SW2
    bcf     _silentBoot

    btfsc   _confJump, SW3                ; enter SSI-Mode if SW3 is set, use stepMode otherwise
    bra     modelInit_use_ssi
    bsf     _stepMode
    bcf     _silentBoot
    bcf     _moveOptions, TABLE_REV_DIR
    bcf     _movePermOpt, TABLE_REV_DIR

modelInit_use_ssi
    btfsc   _confJump, SW3
    bsf     _ssiMode

modelInit_end
    return

```