



CP - Current Position
 STM - Steps to Move
 SPD - steps/sec pos -> CW
 ACL - Acceleration
 DCL - Deceleration
 MODE b0 - 0 - stopped, 1 - moving
 b1 - 1 - accel
 b2 - 1 - decel
 b3 - 1 - at speed
 b4 - 1 cw, 0 ccw
 b5 - 1 = decel_to_stop
 b6 - 1 continue, accel
 b7 - 1 continue, decel
 SSPIN - 0 - stop, 1 - start
 Set SPD, ACL, DCL first then STM
 STM - cleared to zero after accepted

Eq1 - Step number at velocity $V = (V^2 - V_o^2) / (2 * a)$
 Eq2 - delay = Frequency / velocity
 Eq3 - velocity = $\sqrt{V_o^2 + (2 * a * step)}$
 Eq4 - Calculate Ac_steps and Dc_steps
 If STEPS >= AC_steps + DC_steps
 then SLEW steps = STEPS - (Ac + Dc)
 Else
 Eq5 - $X = STEPS / (Ac_steps + Dc_steps)$
 AC_steps *= X
 Dc_steps *= X
 SLEW steps = STEPS - (Ac + Dc)
 Eq6 - $Iv = \sqrt{V^2 - (2 * Decel * STEP N)}$