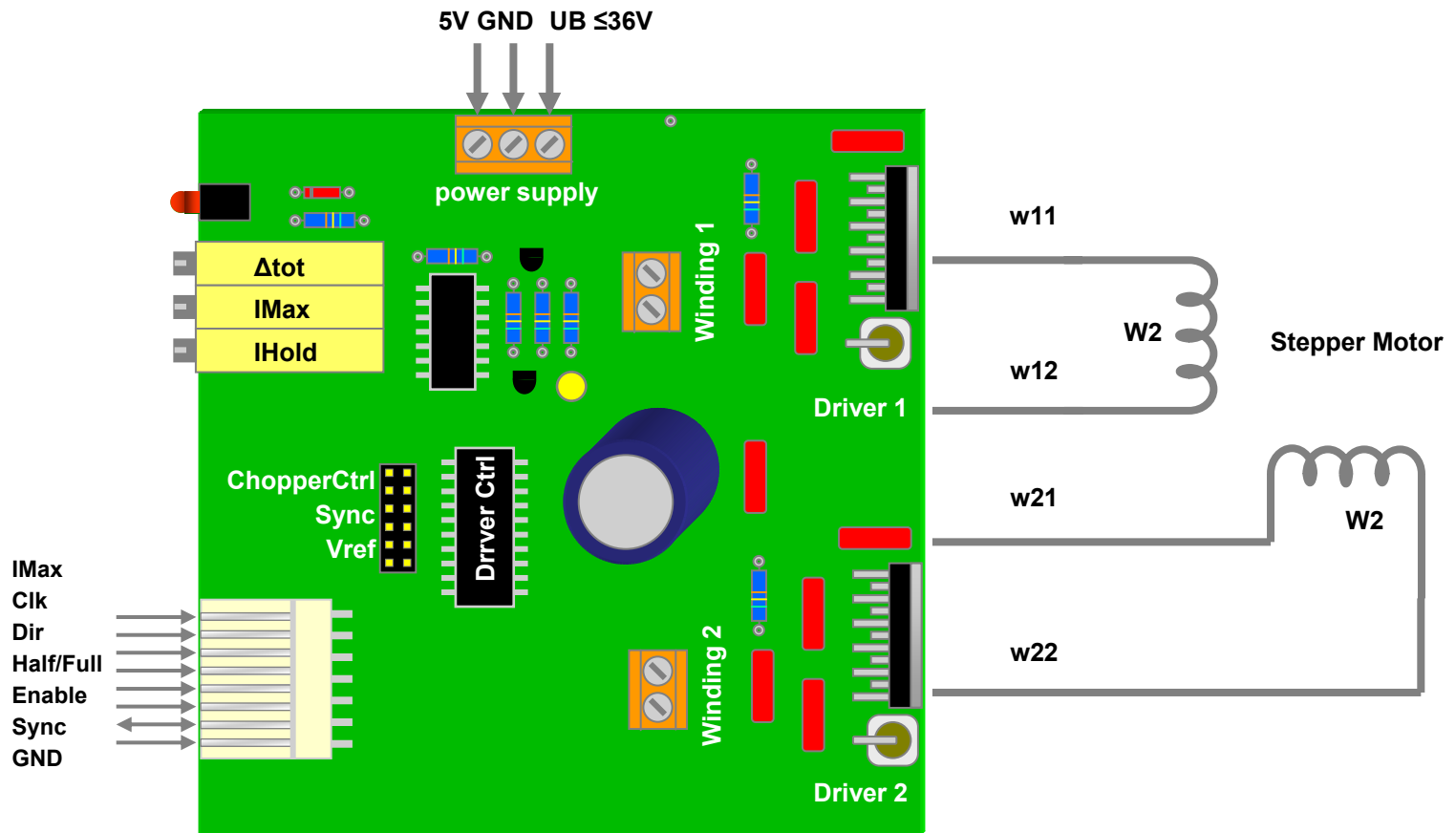


Setup of delay shutdown of IMaxInOn:
 $T_{off} = (R7 + R_{P1}) \cdot C11 \cdot \ln(U_{BSV} / U_{off_IC2})$
 U_{off_IC2} depends on the used part.
 Setup with oscilloscope
 T_{off} can be between 1-10 ms

Setup of IHold and IMax:
 IHold: Motor winding current if pin IMaxInOn = Low
 IMax: Motor winding current if pin IMaxInOn = High
 Step 1: Setup P3 to IHold
 $I_{Hold} = V_{RefIn} / R_{Sense1,2}$ (R_{Sense1}=0.1ohm)
 Step 2: Setup P2 to IMax

Setup of Stepper Card
 Jumper 1: Set Chopper Control (according to the motor)
 Case 1: PIN 1-2 UBSV Control (Phase chopping, for motors with small inductance)
 Case 2: PIN 3-4 GND-Control (default) Inhibit (fast chopping)
 Jumper 2: Set Oscillator
 Case 1: PIN 5-6 use external oscillator, put to GND
 Case 2: PIN 7-8 use internal oscillator (default)
 Jumper 3: Set Reference voltage
 Case 1: PIN 9-10 use internal reference voltage (default)
 Case 2: PIN 11-12 use external reference voltage

Schematics
 Stepper Motor controller
 I_{Max} = 4 Ampere
 UB min = 20 V
 UB max = 40 V
 For smaller motors (around 1 Ampere) setup
 R_{Sense1} and R_{Sense2} to 0.47 ohm
 R5 = 820K
 R8 = 15K
 R14 = 150K



4A Stepper Motor Card
Version 1.2