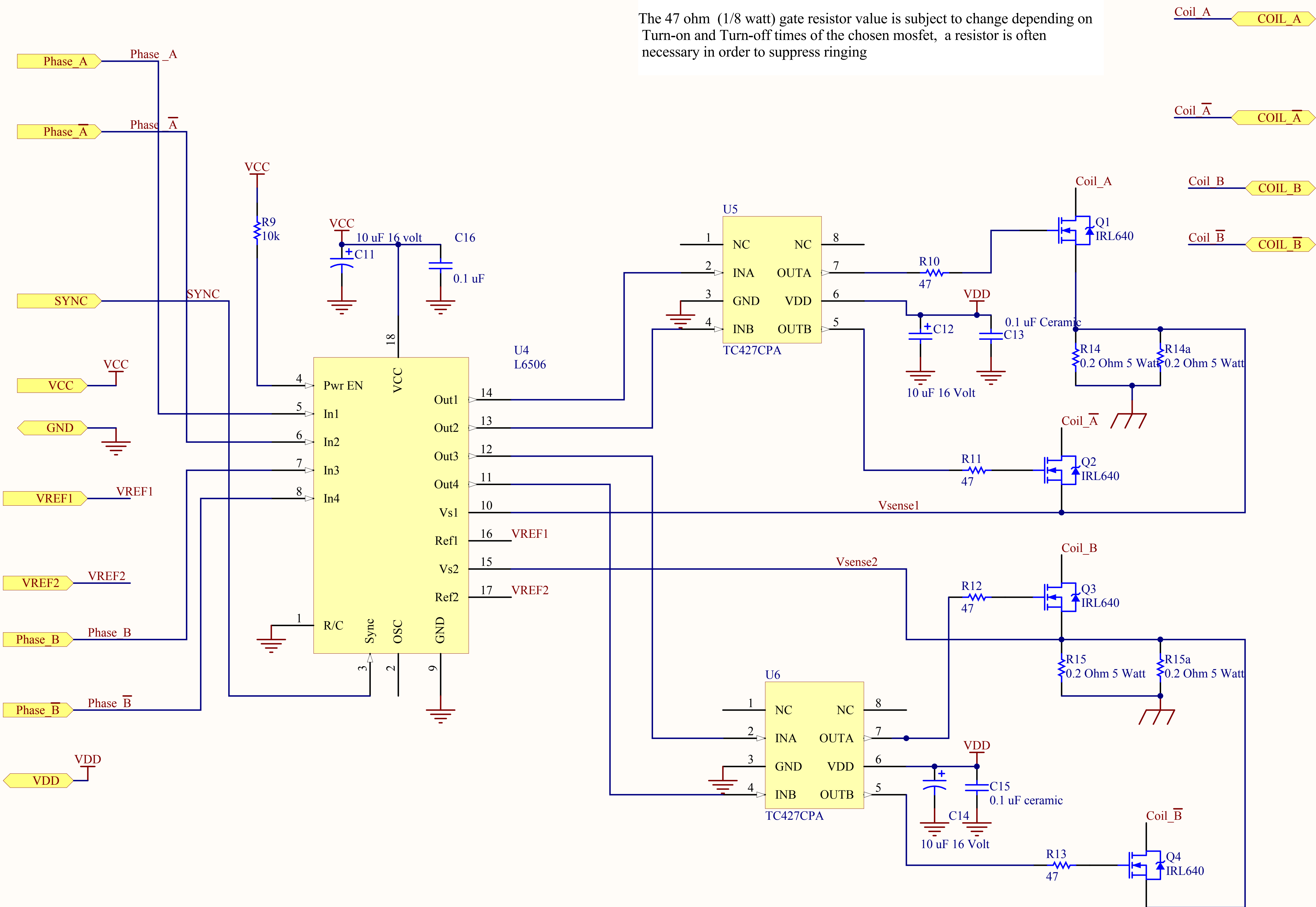


Use IRL640 logic input power MOSFETS

The 47 ohm (1/8 watt) gate resistor value is subject to change depending on Turn-on and Turn-off times of the chosen mosfet, a resistor is often necessary in order to suppress ringing



Title				MARDUS-KREUTZ CHOPPER WITH L6506			
Size		Number				Revision	
Letter						0.00	
Date:	3/14/2007			Sheet	of	2/3	
File:	C:\Program Files\...\Chopper_A.SchDoc			Drawn By:	KREUTZ		



For 8 Amp option use 2 Oz copper FR4 pcb or beefup with solder the PCB traces corresponding with the coil connections and +Vmotor. Replace also the 10 Amp slow Blow fuse by 20 Amp Slow Blow Fuse. 10 Amp fuse has been calculated for 4 Amp peak coil current. Keep the Sensor resistor's bodies separated from the PCB board by at least 1 mm.

Title			MARDUS-KREUTZ UNIPOLAR STEPPER DRIVER WITH L6506		
Size	Number			Revision	
Letter				0.00	
Date:	3/14/2007			Sheet of	1/3
File:	C:\Program Files\...\Input-Power.SchDoc			Drawn By:	KREUTZ

A

B

C

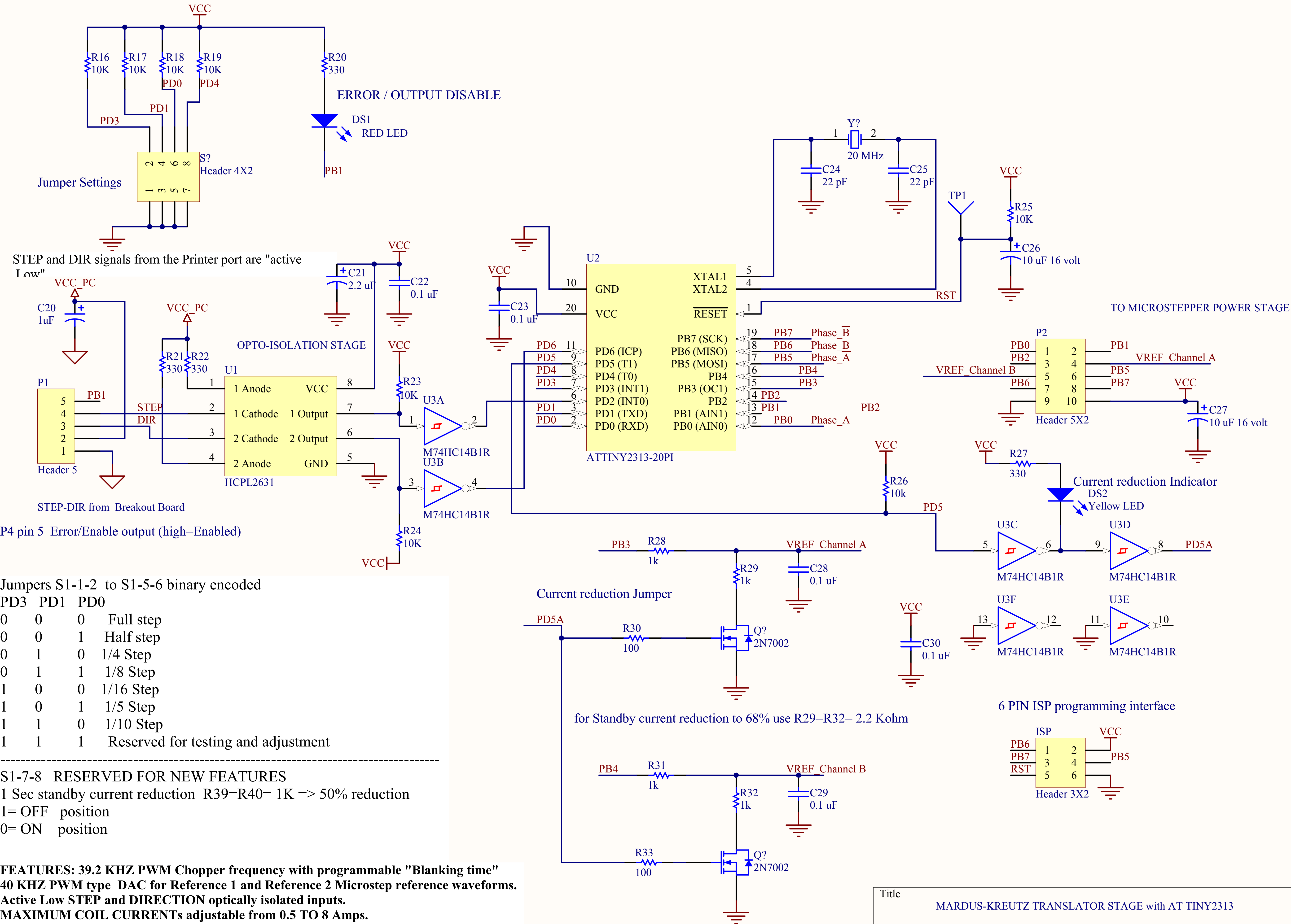
D

A

B

C

D



Jumpers S1-1-2 to S1-5-6 binary encoded

PD3	PD1	PD0	
0	0	0	Full step
0	0	1	Half step
0	1	0	1/4 Step
0	1	1	1/8 Step
1	0	0	1/16 Step
1	0	1	1/5 Step
1	1	0	1/10 Step
1	1	1	Reserved for testing and adjustment

S1-7-8 RESERVED FOR NEW FEATURES
1 Sec standby current reduction R39=R40= 1K => 50% reduction
1= OFF position
0= ON position

FEATURES: 39.2 KHZ PWM Chopper frequency with programmable "Blanking time"
40 KHZ PWM type DAC for Reference 1 and Reference 2 Microstep reference waveforms.
Active Low STEP and DIRECTION optically isolated inputs.
MAXIMUM COIL CURRENTs adjustable from 0.5 TO 8 Amps.
Automatic coil current reduction after 1 seconds (selectable %)
Microstep Modes: Full, Half, 1/4, 1/5, 1/8, 1/10, 1/16

Title			MARDUS-KREUTZ TRANSLATOR STAGE with AT TINY2313		
Size	Number		Revision		
Letter			2.1F-00		
Date:	3/14/2007		Sheet of	3 / 3	
File:	C:\Program Files\...\Translator2.f.SchDoc		Drawn By:	KREUTZ	