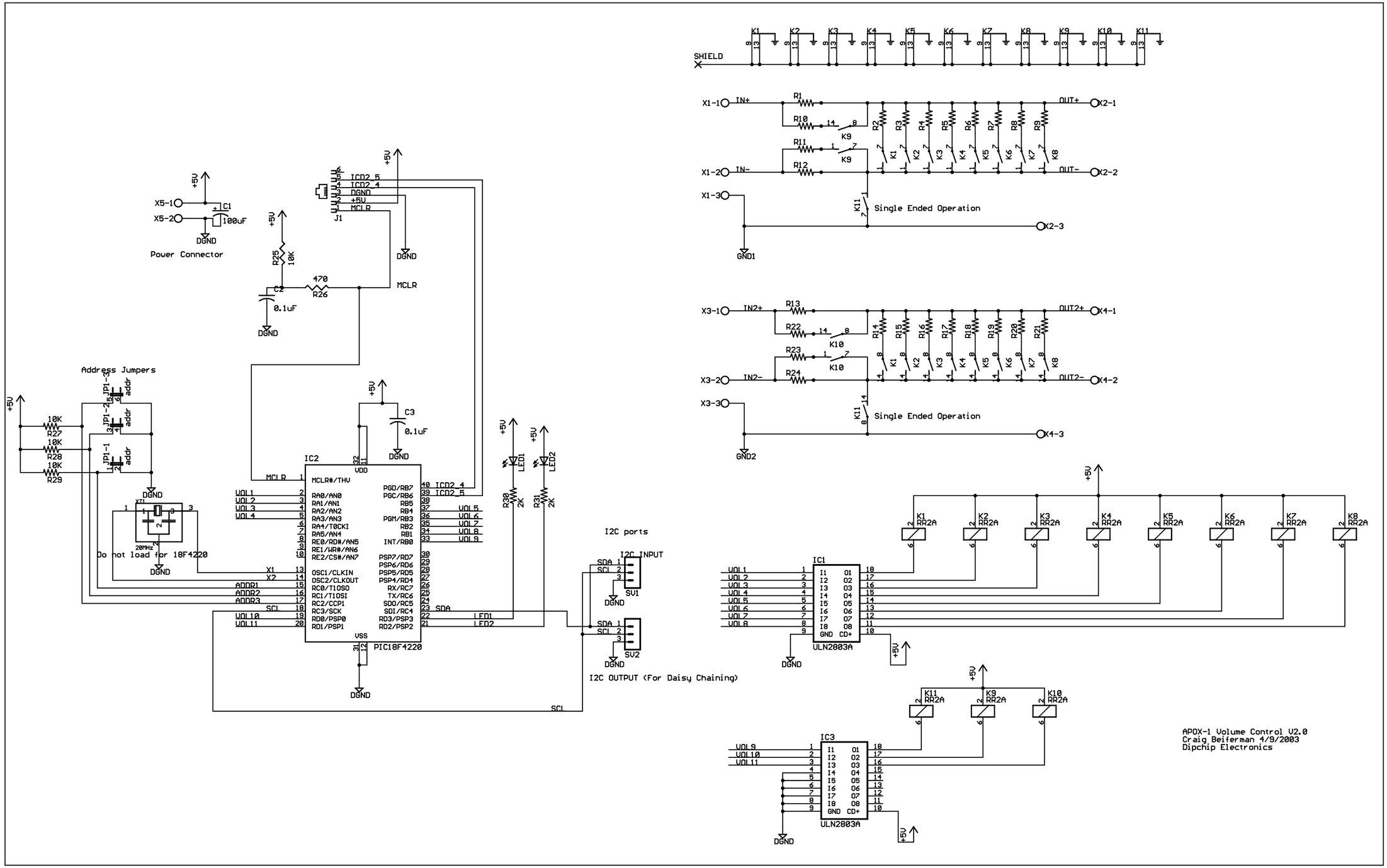
SHIELD
K1 K2 K3 K4 K5 K6 K7 K8 K9 K10 K11
X1-1 IN+ R1 R10 K9 R2 R3 R4 R5 R6 R7 R8 R9 OUT+ X2-1
X1-2 IN- R11 K9 R12 OUT- X2-2
X1-3 K11 Single Ended Operation X2-3
GND1
X3-1 IN2+ R13 R22 K10 R14 R15 R16 R17 R18 R19 R20 R21 OUT2+ X4-1
X3-2 IN2- R23 K10 R24 OUT2- X4-2
X3-3 K11 Single Ended Operation X4-3
GND2
X5-1 X5-2 C1 100uF DGND
Power Connector
+5V R25 10K C2 0.1uF 470 R26 MCLR
J1 ICD2_5 ICD2_4 DGND +5V MCLR
Address Jumpers
JP1-3 JP1-2 JP1-1 addr
10K R27 10K R28 10K R29
XT1 20MHz C3 0.1uF
Do not load for 18F4220
IC2 PIC18F4220
MCLR# VDD VSS
RA0/AN0 RA1/AN1 RA2/AN2 RA3/AN3 RA4/T0CKI RA5/AN4 RE0/RD#/AN5 RE1/WR#/AN6 RE2/CS#/AN7
OSC1/CLKIN OSC2/CLKOUT RC0/T1OSO RC1/T1OSI RC2/CCP1 RC3/SCK RD0/PSP0 RD1/PSP1
PGD/RB7 PGC/RB6 RB5 RB4 PGM/RB3 RB2 RB1 INT/RB0
PSP7/RD7 PSP6/RD6 PSP5/RD5 PSP4/RD4 RX/RC7 TX/RC6 SDO/RC5 SDI/RC4 RD3/PSP3 RD2/PSP2
VOL1 VOL2 VOL3 VOL4 VOL5 VOL6 VOL7 VOL8 VOL9 VOL10 VOL11
ADDR1 ADDR2 ADDR3 SCL SDA LED1 LED2 X1 X2
LED1 LED2 R30 2K R31 2K
I2C ports
I2C INPUT SV1
I2C OUTPUT (For Daisy Chaining) SV2
IC1 ULN2803A
IC3 ULN2803A
K1 K2 K3 K4 K5 K6 K7 K8 RR2A
K11 K9 K10 RR2A
APOX-1 Volume Control V2.0
Craig Beiferman 4/9/2003
Dipchip Electronics