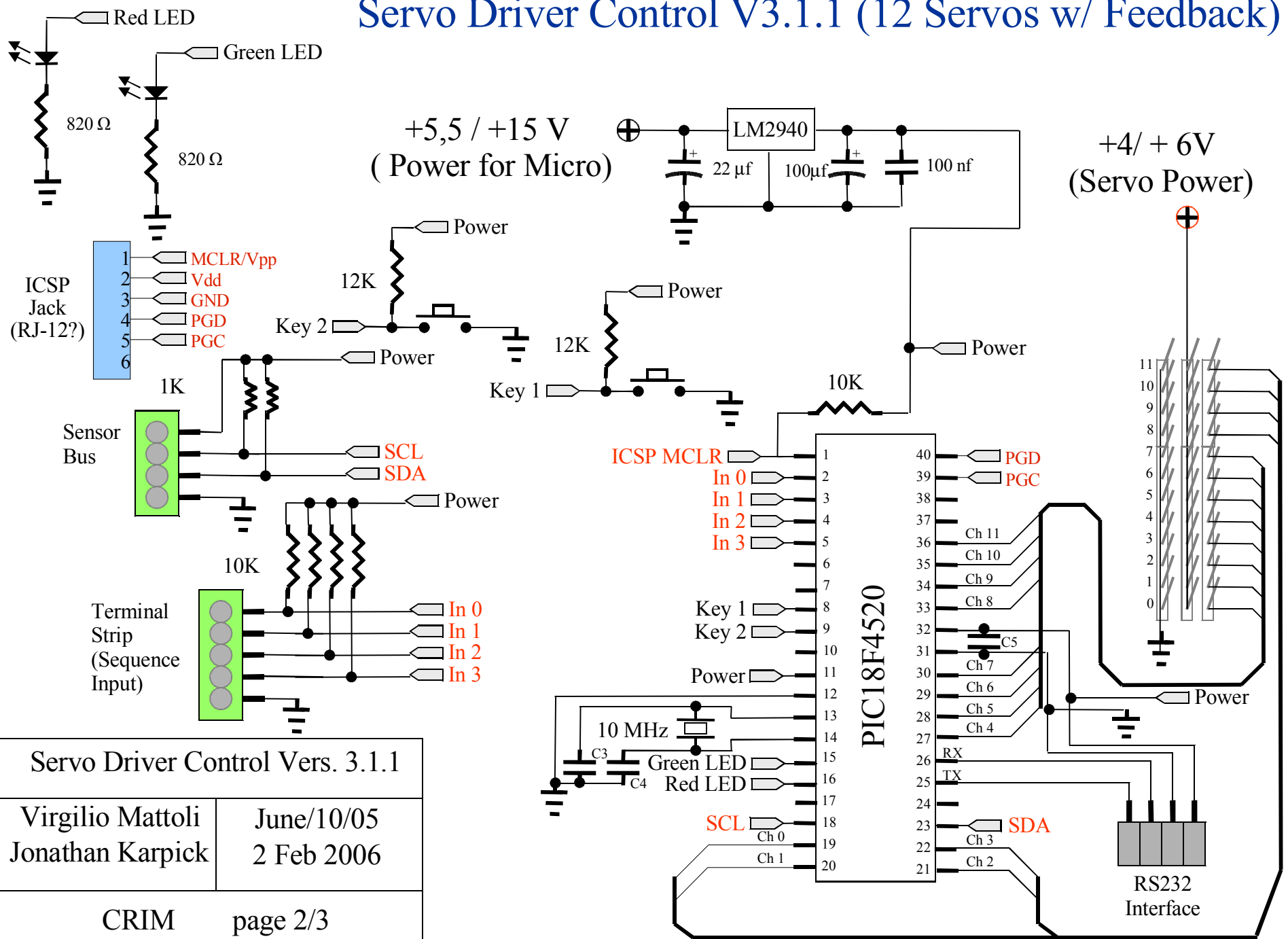


# Servo Driver Control V3.1.1 (12 Servos w/ Feedback)

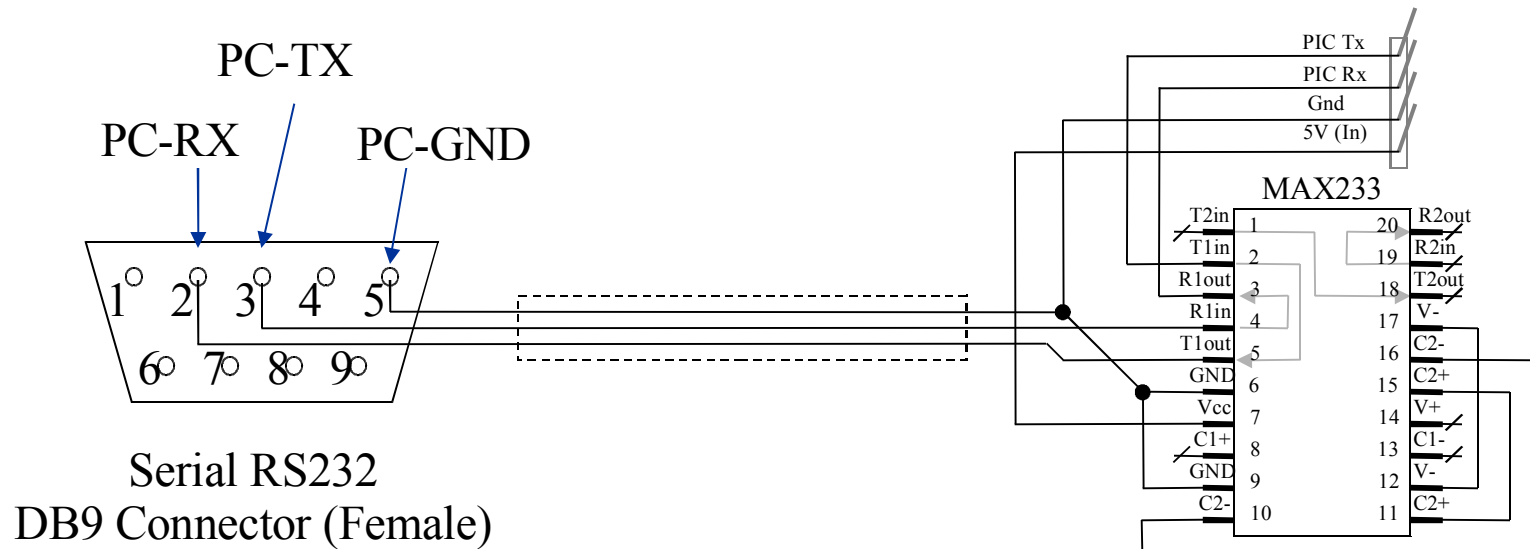


Servo Driver Control Vers. 3.1.1

Virgilio Mattoli  
Jonathan Karpick

June/10/05  
2 Feb 2006

# RS 232 Adapter Cable



Servo Driver Control Vers. 3.1	
Virgilio Mattoli	June/10/05
CRIM	pag.3/3

PIN	Port	'252 Usage	'4520 Usage	Notes	To Assign	Assigned
1	MCLR	MCLR	MCLR / ICSP	Pull up to Vdd and connect to ICSP connector pin 1	Servo 0	1
2	A0	Servo 8	In 0		Servo 1	1
3	A1	Servo 9	In 1		Servo 2	1
4	A2	Servo 10	In 2		Servo 3	1
5	A3	Servo 11	In 3		Servo 4	1
6	A4	In 0			Servo 5	1
7	A5	In 1			Servo 6	1
8	E0	NA	Key 1	Is this polled or interrupt? I think polled... ST Input is good.	Servo 7	1
9	E1	NA	Key 2	Is this polled or interrupt? I think polled... ST Input is good.	Servo 8	1
10	E2	NA			Servo 9	1
11	Vdd	NA	Vdd		Servo 10	1
12	Vss	Vss	Vss		Servo 11	1
13	Osc1	Osc1	Osc1		RX	1
14	Osc2	Osc2	Osc2		TX	1
15	C0	In 2	Green LED		Green LED	1
16	C1	In 3	Red LED		Red LED	1
17	C2	Key 1			Key 1	1
18	C3/SCL	Key 2	SCL	Sensor Bus Clock	Key 2	1
19	D0	NA	Servo 0		In 0	1
20	D1	NA	Servo 1		In 1	1
21	D2	NA	Servo 2		In 2	1
22	D3	NA	Servo 3		In 3	1
23	C4/SDA	Green LED	SDA	Sensor Bus Data	SCL	1
24	C5	Red LED			SDA	1
25	C6/TX	TX	TX	RS232 Comms	PGC	1
26	C7/RX	RX	RX	RS232 Comms	PGD	1
27	D4	NA	Servo 4			
28	D5	NA	Servo 5			
29	D6	NA	Servo 6			
30	D7	NA	Servo 7			
31	Vss	Vss	Vss			
32	Vdd	Vdd	Vdd			
33	B0	Servo 0	Servo 8			
34	B1	Servo 1	Servo 9			
35	B2	Servo 2	Servo 10			
36	B3	Servo 3	Servo 11			
37	B4	Servo 4				
38	B5	Servo 5				
39	B6	Servo 6	PGC	For ICSP – pin 5		
40	B7	Servo 7	PGD	For ICSP – pin 6		

# 12F4520 Pin Assignments

# 12F510 Pin Assignments

PIN	Port	Usage	Notes
1	Vdd	Vdd	
2	Osc1	Osc1	Use internal oscillator?
3	Osc2	Osc2	Use internal oscillator?
4	MCLR	MCLR	MCLR / ICSP – Pin 1
5	AN2	A/D	
6	GP1	SCL / PGC	Connect to sensor bus or use for ICSP
7	GP0	SDA / PGD	Connect to sensor bus or use for ICSP
8	Vss	GND	

Also valid for:  
12F675  
12F683

(major difference is  
internal oscillator frequency)

