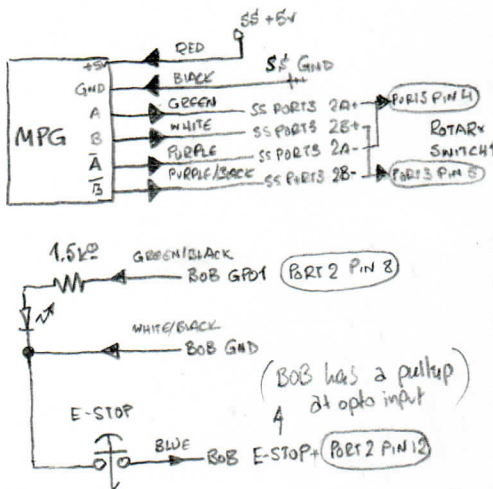


PIC18F1330 @ 32 MHz (INTERNAL OSCILLATOR)
WITH 4x PLL

PIN	STATUS	ASSIGNMENT
RA0	INPUT	X axis
RA1	INPUT	Y axis
RA2	INPUT	OFF
RA3	INPUT	5 th axis or B axis
RA4	INPUT	Z axis
RA5	INPUT	4 th axis or A axis
RA6	OUTPUT	B ₀
RA7	INPUT	x100

PIN	STATUS	ASSIGNMENT
RB0	INPUT	G th axis or C axis
RB1	OUTPUT	PHM AUDIO OUT
RB2	INPUT	x10
RB3	INPUT	x1
RB4	OUTPUT	A ₂
RB5	OUTPUT	A ₁
RB6	OUTPUT	A ₀
RB7	OUTPUT	B ₁



- BLUE/BLACK
- ORANGE
- PINK/BLACK
- BROWN/BLACK
- YELLOW/BLACK

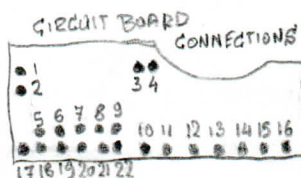
ROTARY SWITCH 2

	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{8}$	DEC
$\times 1$	1	1	0	6
$\times 10$	1	0	1	5
$\times 100$	0	1	1	3
BETWEEN POSITIONS	1	1	1	7

B ₁	B ₀	DEC
0	1	1
1	0	2
1	1	3
0	0	0

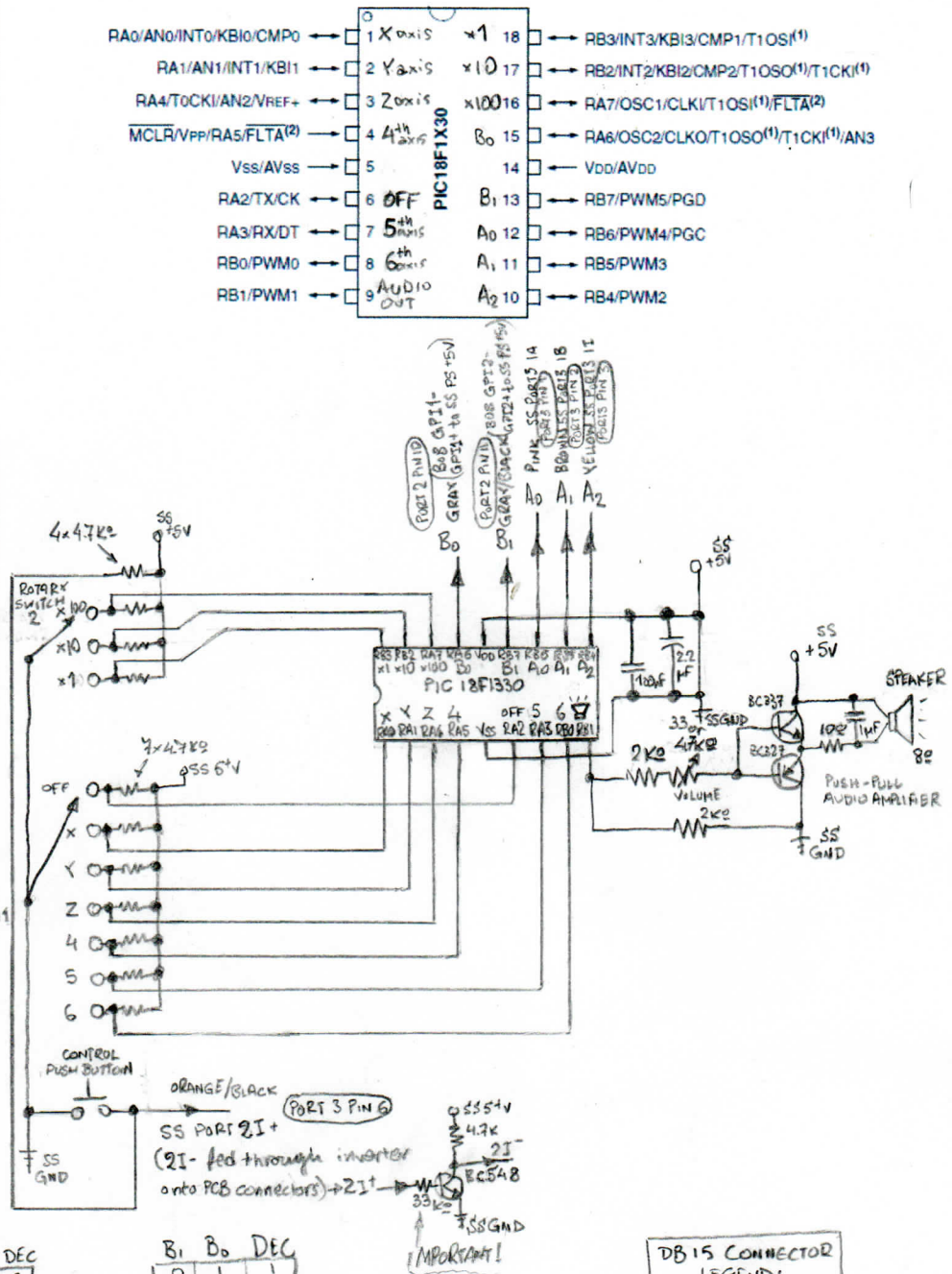
	X_6	X_5	X_4	X_3	X_2	X_1	X_0	D.F.C
OFF							0	126
X	1					0	1	125
Y		1			0		1	123
Z			1		0			119
4 th			0	1				111
5 th		0	1					95
6 th	0		1		1			63
Johnson positives	1	1	1		1	1		127

A ₂	A ₁	A ₀	Dec
0	0	0	0
0	0	1	1
0	1	0	2
0	1	1	3
1	0	0	4
1	0	1	5
1	1	0	6
1	1	1	7



CIRCUIT BOARD CONNECTIONS LEGEND

1. SPEAKER	8. x1	16. 6th axis
2.)	9. SS PS + DV	17. B0
3.)	10. x axis	18. B1
4.)	11. y axis	19. A0
5.)	12. z axis	20. A1
6. CONTROL	13. 4th axis	21. A2
7. x100	14. OFF	22. SS PS GND
8. x10	15. 5th axis	



DB15 CONNECTOR
LEGEND:

1. RED +5V (SS PS)
2. BLACK GND (SS PS)
3. GREEN A (SS PORT3 2A)
4. WHITE B (SS PORT3 2B)
5. PURPLE A (SS PORT3 2A-)
6. PURPLE-BLACK B (SS PORT3 2B-)
7. GREEN-BLACK LED+ (BOB GPIO1)
8. WHITE-BLACK LED- (BOB GND)
9. YELLOW A2 (SS PORT3 1I)
10. BROWN A1 (SS PORT3 1B)
11. PINK A0 (SS PORT3 1A)
12. GRAY B0 (BOB GPIO4, GPIO4¹→SS+5V)
13. GRAY-BLACK B1 (BOB GPIO2, GPIO2¹→SS+5V)
14. ORANGE-BLACK CONTROL (SS PORT 2I+, 2I-→2I¹)
15. BLUE C-STOP+ (BOB E-STOP+)