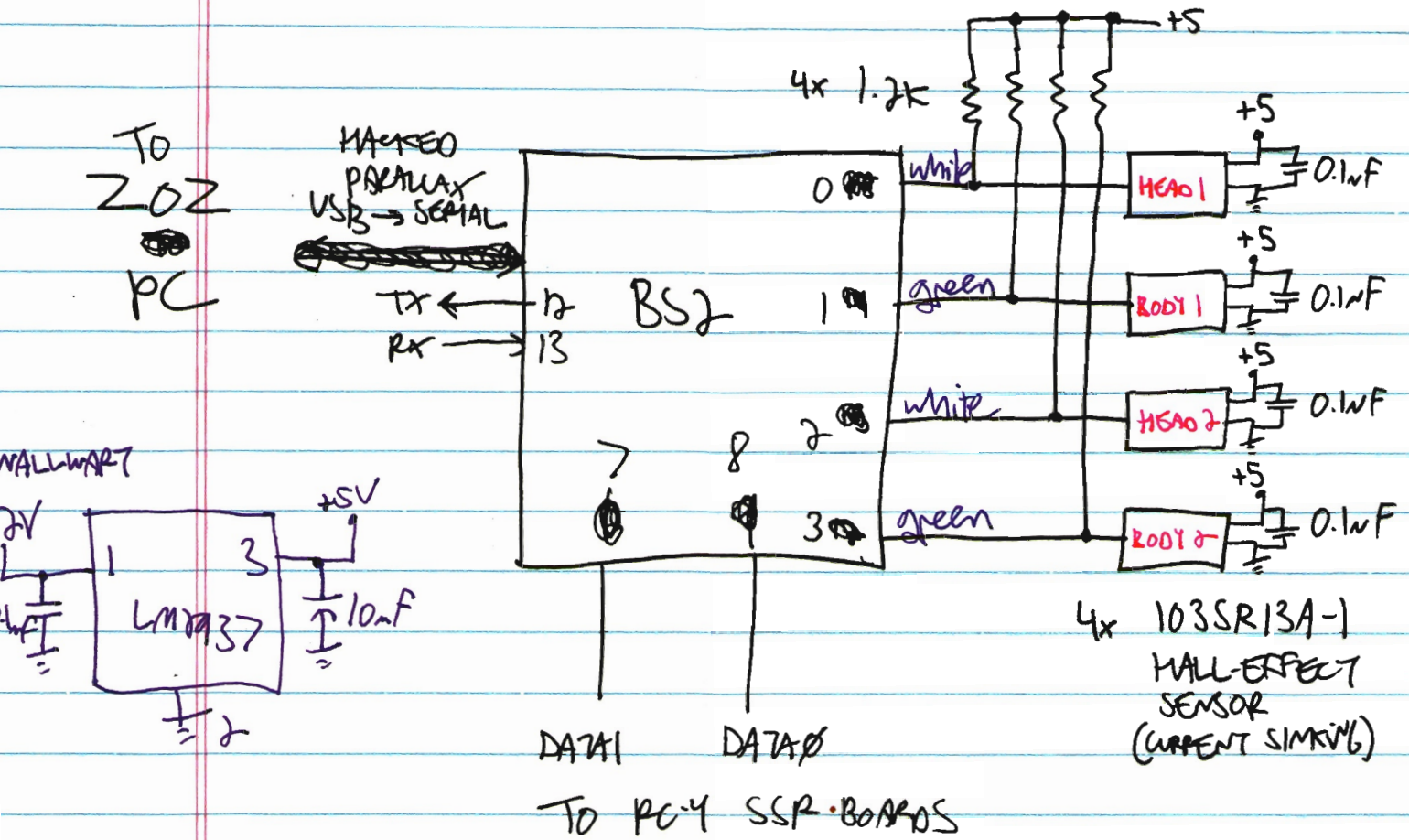


JL

4/23/07

# FIGHTING ROBOTS SENSOR/HEALTH CONTROL BOARD



2 BYTE INPUT: HEADER, COMMAND, VALUE  
 1 BYTE RESPONSE: ACK OR STATUS OF HALL EFFECTS



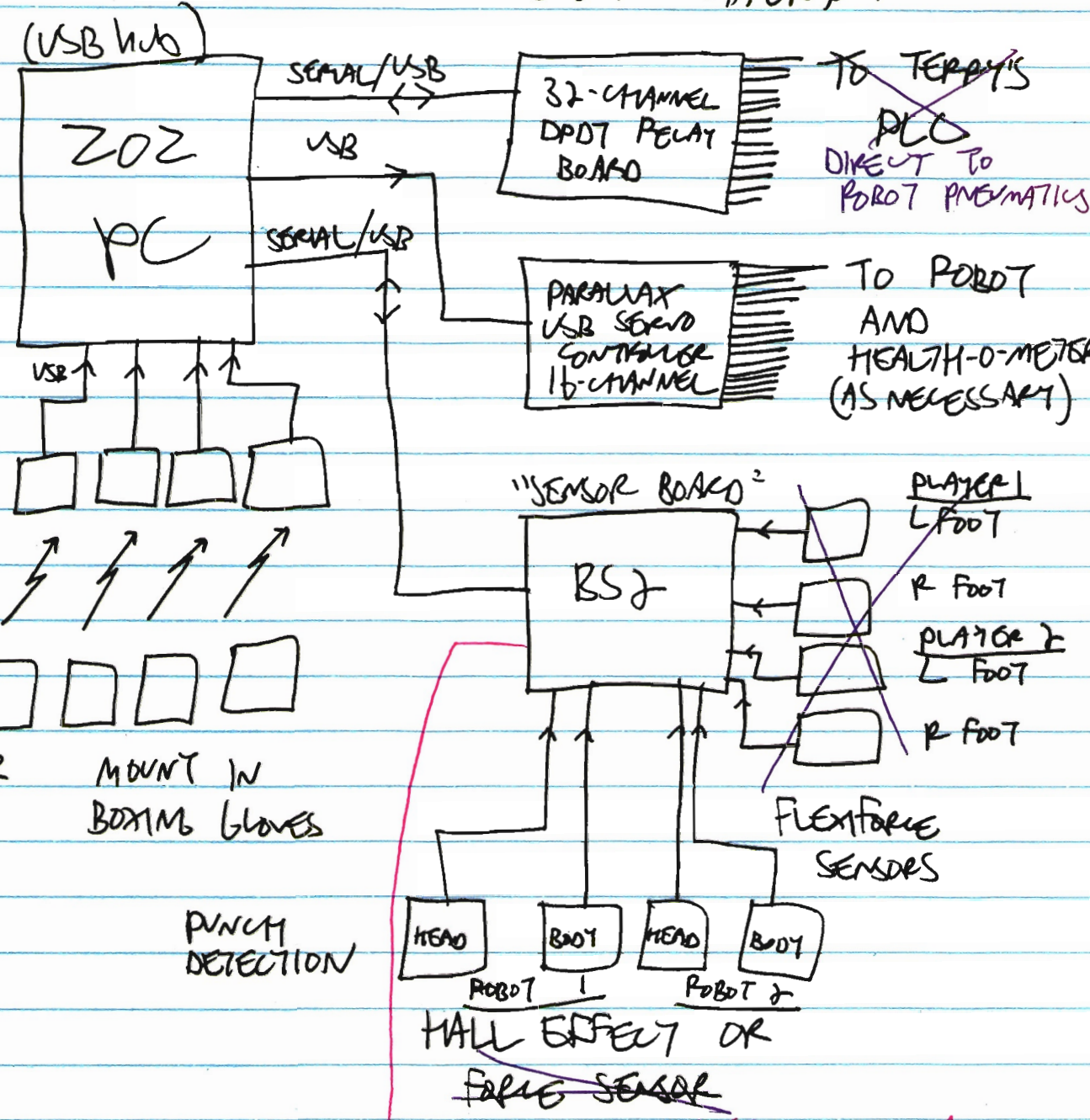
16 pin Color Coding			
	Main Color	Stripe	Used For
1	Beige		1
2	Red	Green	2
3	Pink		3
4	Orange		4
5	Blue		5
6	Red	Yellow	6
7	Grey		7
8	Green		8
9	Black		9
10	Brown		10
11	Purple		11
12	White		12
13	Red		13
14	White	Green	14
15	Yellow		15
16	White	Yellow	16

HALL EFFECT!

1	Red	TSV
2	Black	GND
3	Green	-Signal
4	White	-Signal



# FIGHTING ROBOTS ELECTRONIC SYSTEM BLOCK DIAGRAM



ZSTAR USB RX MODULES

ZSTAR 3-AXIS ACCELEROMETER MODULES

MOUNT IN BOXING GLOVES

PUNCH DETECTION

Solenoid valves - 110V AC

13.8V DC - ~~SSR~~ **POWER ISSUES** rely board

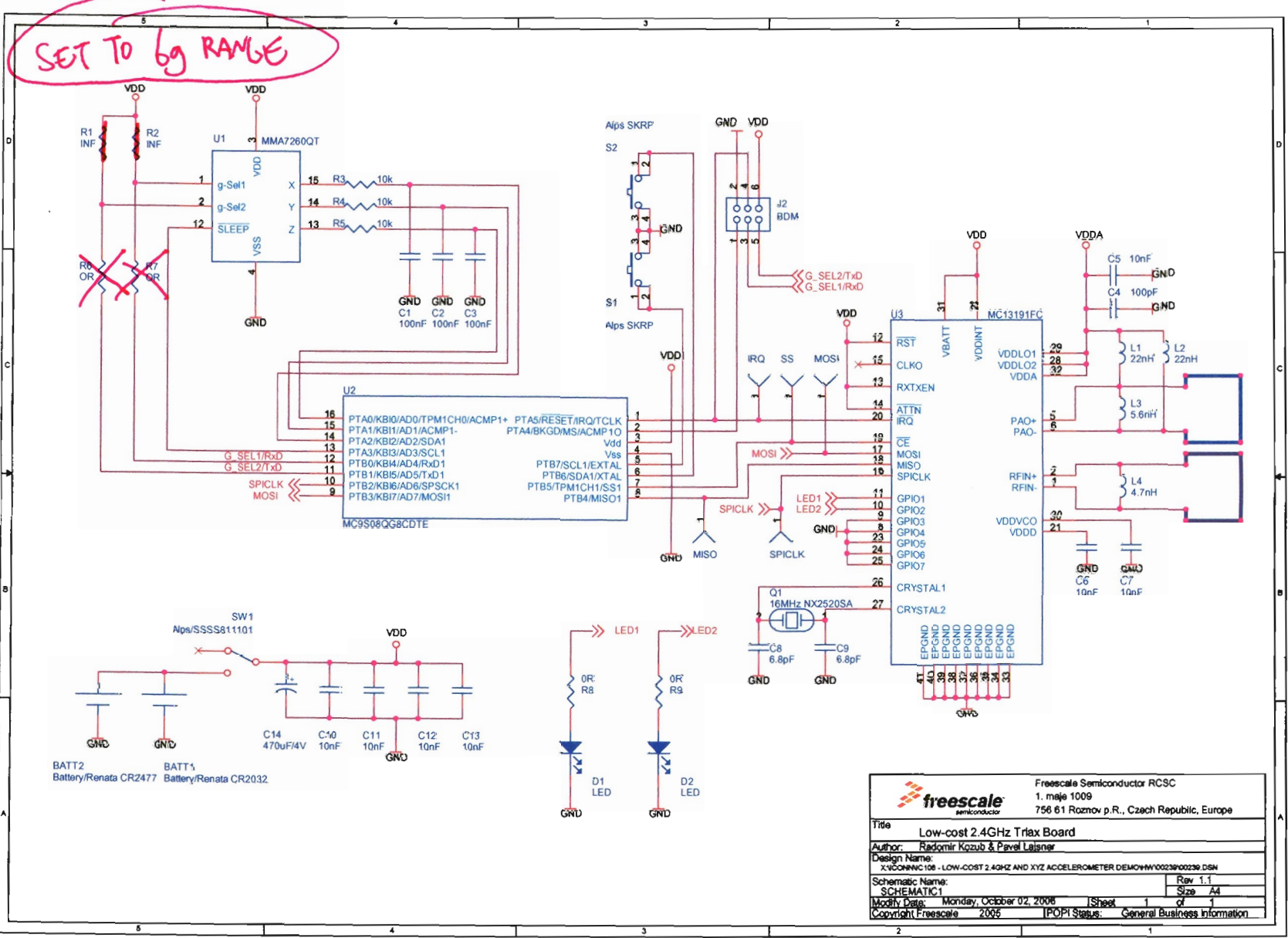
- SCORE BOARD / HEALTH-O-METER DESIGN?  
- KILL SWITCH

HEALTH-O-METER  
PC4 SSR MODULES  
120V AC SPOT-LIGHTS COLORED

PC4 SSR MODULES

DRAG RACE TRACK STARTER LIGHTS HACK

### 3.4.4 Sensor Board schematics



		Freescale Semiconductor RCSC 1. maje 1009 756 61 Roznov p.R., Czech Republic, Europe
Title: Low-cost 2.4GHz Triax Board		
Author: Radomir Kozub & Pavel Lajner		
Design Name: XNCONN108 - LOW-COST 2.4GHZ AND XYZ ACCELEROMETER DEMOHW0023900239.DSN		
Schematic Name: SCHEMATIC1		Rev: 1.1
Monthly Date: Monday, October 02, 2006		Sheet 1 of 1
Copyright: Freescale 2005		POPI Status: General Business Information

Figure 3-6. Sensor Board Schematics

Prototype This! Episode 2: Boxing Robots, Joe Grand's Engineering Development Notes, www.grandideastudio.com



4/26/07

# ZSTAR MODULE CONFIGURATION

9600, N81

PC	demo	Purpose
R	→ N	Comm. handshake

→ Ø, 9, A, F  
 repeat 4 times

force channel selection  
 (to ensure all units properly connect)

Turn on TRANSMITTER  
 93

Set g to 6.0g range

6 → 3

confirm proper g setting

