1K is very bright
I ended up using 20K and it's
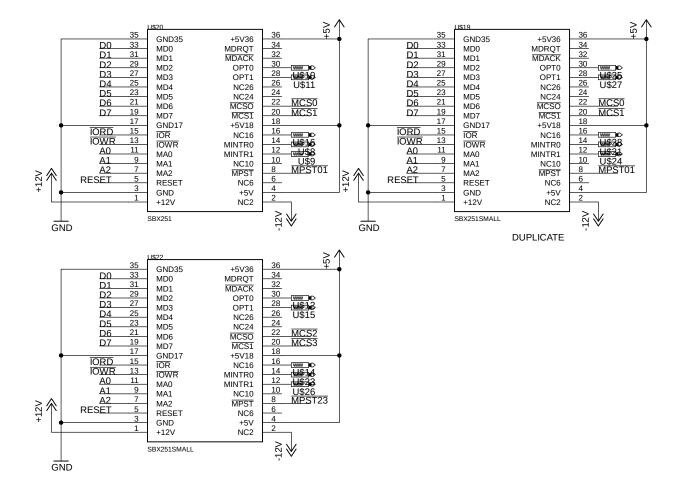still plenty bright...

v 0.11
 * Add duplicate multimodule in center
v 0.12
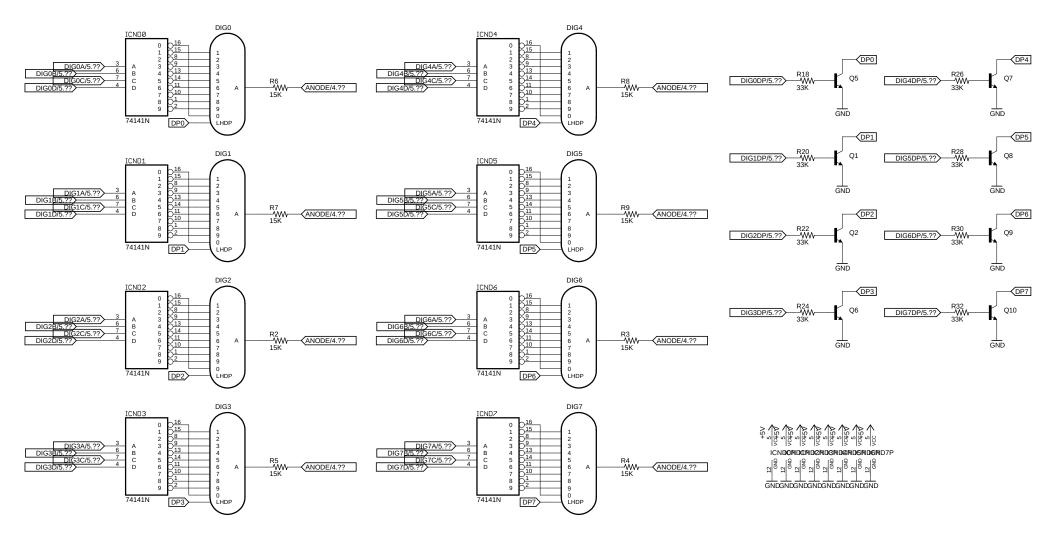 * Reorient voltage adjust pot
 * Add voltage adjust TP
v 0.13
 * Moved anode resistors to keep away fingers

TODO:
 * MWAIT support - look at the PLD for info
 * Int2 button

U$20

35	GND35	+5V36	36
33 D0	MD0	MDRQT	34
31 D1	MD1	MDACK	32
29 D2	MD2	OPT0	30
27 D3	MD3	OPT1	28
25 D4	MD4	NC26	26
23 D5	MD5	NC24	24
21 D6	MD6	MCSO	22
19 D7	MD7	MCS1	20
17	GND17	+5V18	18
15 IORD	IOR	NC16	16
13 IOWR	IOWR	MINTR0	14
11 A0	MA0	MINTR1	12
9 A1	MA1	NC10	10
7 A2	MA2	MPST	8
5 RESET	RESET	NC6	6
3	GND	+5V	4
1	+12V	NC2	2

SBX251

+5V

U$11

MCS0
MCS1

U$16
U$8
U$9
MPST01

+12V

GND

-12V

U$19

35	GND35	+5V36	36
33 D0	MD0	MDRQT	34
31 D1	MD1	MDACK	32
29 D2	MD2	OPT0	30
27 D3	MD3	OPT1	28
25 D4	MD4	NC26	26
23 D5	MD5	NC24	24
21 D6	MD6	MCSO	22
19 D7	MD7	MCS1	20
17	GND17	+5V18	18
15 IORD	IOR	NC16	16
13 IOWR	IOWR	MINTR0	14
11 A0	MA0	MINTR1	12
9 A1	MA1	NC10	10
7 A2	MA2	MPST	8
5 RESET	RESET	NC6	6
3	GND	+5V	4
1	+12V	NC2	2

SBX251SMALL

+5V

U$25
U$27

MCS0
MCS1

U$28
U$21
U$24
MPST01

+12V

GND

-12V

DUPLICATE

U$22

35	GND35	+5V36	36
33 D0	MD0	MDRQT	34
31 D1	MD1	MDACK	32
29 D2	MD2	OPT0	30
27 D3	MD3	OPT1	28
25 D4	MD4	NC26	26
23 D5	MD5	NC24	24
21 D6	MD6	MCSO	22
19 D7	MD7	MCS1	20
17	GND17	+5V18	18
15 IORD	IOR	NC16	16
13 IOWR	IOWR	MINTR0	14
11 A0	MA0	MINTR1	12
9 A1	MA1	NC10	10
7 A2	MA2	MPST	8
5 RESET	RESET	NC6	6
3	GND	+5V	4
1	+12V	NC2	2

SBX251SMALL

+5V

U$12
U$15

MCS2
MCS3

U$14
U$23
U$26
MPST23

+12V

GND

-12V

ICND0
0 16
1 15
2 8
A 3 9
B 4 13
C 5 14
D 6 11
7 10
8 1
9 2

DIG0
16
15
8
9
13
14
11
10
1
2

DIG0A/5.?? 3
DIG0B/5.?? 6
DIG0C/5.?? 7
DIG0D/5.?? 4

A
R6
15K
ANODE/4.??
DP0
LHDP
74141N

ICND1
ICND1A... DIG1A/5.?? 3
DIG1B/5.?? 6
DIG1C/5.?? 7
DIG1D/5.?? 4
DIG1
R7
15K
ANODE/4.??
DP1
LHDP
74141N

ICND2
DIG2A/5.?? 3
DIG2B/5.?? 6
DIG2C/5.?? 7
DIG2D/5.?? 4
DIG2
R2
15K
ANODE/4.??
DP2
LHDP
74141N

ICND3
DIG3A/5.?? 3
DIG3B/5.?? 6
DIG3C/5.?? 7
DIG3D/5.?? 4
DIG3
R5
15K
ANODE/4.??
DP3
LHDP
74141N

ICND4
DIG4A/5.?? 3
DIG4B/5.?? 6
DIG4C/5.?? 7
DIG4D/5.?? 4
DIG4
R8
15K
ANODE/4.??
DP4
LHDP
74141N

ICND5
DIG5A/5.?? 3
DIG5B/5.?? 6
DIG5C/5.?? 7
DIG5D/5.?? 4
DIG5
R9
15K
ANODE/4.??
DP5
LHDP
74141N

ICND6
DIG6A/5.?? 3
DIG6B/5.?? 6
DIG6C/5.?? 7
DIG6D/5.?? 4
DIG6
R3
15K
ANODE/4.??
DP6
LHDP
74141N

ICND7
DIG7A/5.?? 3
DIG7B/5.?? 6
DIG7C/5.?? 7
DIG7D/5.?? 4
DIG7
R4
15K
ANODE/4.??
DP7
LHDP
74141N

A B C D

DIG0DP/5.?? R18 33K Q5 DP0 GND
DIG1DP/5.?? R20 33K Q1 DP1 GND
DIG2DP/5.?? R22 33K Q2 DP2 GND
DIG3DP/5.?? R24 33K Q6 DP3 GND

DIG4DP/5.?? R26 33K Q7 DP4 GND
DIG5DP/5.?? R28 33K Q8 DP5 GND
DIG6DP/5.?? R30 33K Q9 DP6 GND
DIG7DP/5.?? R32 33K Q10 DP7 GND

+5V +5V +5V +5V +5V +5V +5V +5V VCC
ICND0 DP0 ICND1 DP1 ICND2 DP2 ICND3 DP3 ICND4 DP4 ICND5 DP5 ICND6 DP6 ICND7 DP7
GND GND GND GND GND GND GND GND
GND GND GND GND GND GND GND GND

Jumper DTC to GND

Adjust R11 for 170V output on anode resistors

IC3

D0	3	D1	Q1	2	DIG0A
D1	4	D2	Q2	5	DIG0B
D2	7	D3	Q3	6	DIG0C
D3	8	D4	Q4	9	DIG0D
D4	13	D5	Q5	12	
D5	14	D6	Q6	15	
D6	17	D7	Q7	16	
D7	18	D8	Q8	19	DIG0DP

DIG0STB 11 CLK
RESET 1 CLR

74HCT273N

IC9

D0 3 D1 Q1 2 DIG4A
D1 4 D2 Q2 5 DIG4B
D2 7 D3 Q3 6 DIG4C
D3 8 D4 Q4 9 DIG4D
D4 13 D5 Q5 12
D5 14 D6 Q6 15
D6 17 D7 Q7 16
D7 18 D8 Q8 19 DIG4DP

DIG4STB 11 CLK
RESET 1 CLR

74HCT273N

IC6

D0 3 D1 Q1 2 DIG1A
D1 4 D2 Q2 5 DIG1B
D2 7 D3 Q3 6 DIG1C
D3 8 D4 Q4 9 DIG1D
D4 13 D5 Q5 12
D5 14 D6 Q6 15
D6 17 D7 Q7 16
D7 18 D8 Q8 19 DIG1DP

DIG1STB 11 CLK
RESET 1 CLR

74HCT273N

IC10

D0 3 D1 Q1 2 DIG5A
D1 4 D2 Q2 5 DIG5B
D2 7 D3 Q3 6 DIG5C
D3 8 D4 Q4 9 DIG5D
D4 13 D5 Q5 12
D5 14 D6 Q6 15
D6 17 D7 Q7 16
D7 18 D8 Q8 19 DIG5DP

DIG5STB 11 CLK
RESET 1 CLR

74HCT273N

IC7

D0 3 D1 Q1 2 DIG2A
D1 4 D2 Q2 5 DIG2B
D2 7 D3 Q3 6 DIG2C
D3 8 D4 Q4 9 DIG2D
D4 13 D5 Q5 12
D5 14 D6 Q6 15
D6 17 D7 Q7 16
D7 18 D8 Q8 19 DIG2DP

DIG2STB 11 CLK
RESET 1 CLR

74HCT273N

IC11

D0 3 D1 Q1 2 DIG6A
D1 4 D2 Q2 5 DIG6B
D2 7 D3 Q3 6 DIG6C
D3 8 D4 Q4 9 DIG6D
D4 13 D5 Q5 12
D5 14 D6 Q6 15
D6 17 D7 Q7 16
D7 18 D8 Q8 19 DIG6DP

DIG6STB 11 CLK
RESET 1 CLR

74HCT273N

IC8

D0 3 D1 Q1 2 DIG3A
D1 4 D2 Q2 5 DIG3B
D2 7 D3 Q3 6 DIG3C
D3 8 D4 Q4 9 DIG3D
D4 13 D5 Q5 12
D5 14 D6 Q6 15
D6 17 D7 Q7 16
D7 18 D8 Q8 19 DIG3DP

DIG3STB 11 CLK
RESET 1 CLR

74HCT273N

IC13

D0 3 D1 Q1 2 DIG7A
D1 4 D2 Q2 5 DIG7B
D2 7 D3 Q3 6 DIG7C
D3 8 D4 Q4 9 DIG7D
D4 13 D5 Q5 12
D5 14 D6 Q6 15
D6 17 D7 Q7 16
D7 18 D8 Q8 19 DIG7DP

DIG7STB 11 CLK
RESET 1 CLR

74HCT273N

+5V
20 VCC +5V 20 VCC +5V 20 VCC +5V 20 VCC +5V 20 VCC +5V 20 VCC +5V 20 VCC +5V 20 VCC

IC3P IC6P IC7P IC8P IC9P IC10P IC11P IC13P

10 GND 10 GND 10 GND 10 GND 10 GND 10 GND 10 GND 10 GND

GND GND GND GND GND GND GND GND