

D0 Tester Connector Pin Assignment

DIP CONN	D0 CONNECTOR PIN from			
	MODULE			
	B	C	D	E
e4--1	2	102	52	152
2	3	103	53	153
3	4	104	54	154
4	5	105	55	155
5	6	106	56	156
6	7	107	57	157
7	8	108	58	158
9	9	109	59	159
e5--1	11	111	61	161
2	12	112	62	162
3	13	113	63	163
4	14	114	64	164
5	15	115	65	165
6	16	116	66	166
7	17	117	67	167
9	18	118	68	168
10	19	119	69	169
e6--1	21	121	71	171
2	22	122	72	172
3	23	123	73	173
4	24	124	74	174
5	25	125	75	175
6	26	126	76	176
7	27	127	77	177
9	28	128	78	178
10	29	129	79	179

DIP CONN	D0 CONNECTOR PIN from			
	MODULE			
	B	C	D	E
e7--1	31	131	81	181
2	32	132	82	182
3	33	133	83	183
4	34	134	84	184
5	35	135	85	185
6	36	136	86	186
7	37	137	87	187
9	38	138	88	188
10	39	139	89	189
e8--1	41	141	91	191
2	42	142	92	192
3	43	143	93	193
4	44	144	94	194
5	45	145	95	195
6	46	146	96	196
7	47	147	97	197
8	48	148	98	198
9	49	149	99	199
e9--1				
2				
3				
4	T	T	T	T
5	E	E	E	E
6	S	S	S	S
7	T	T	T	T
9				
10	C	C	C	C
11	L	L	L	L
12	I	I	I	I
13	P	P	P	P
14				
15				
16				

The D0 Tester modules C, D, and E are electrically identical to module B. The only difference is in the logical identity of the signals and the backpanel wiring. The following table lists the changes in signal names for each module. Backpanel pin connections have been prepared, and are filed under the name D0TesterBP1.bravo.

SIGNAL NAME	MODULE			
	B	C	D	E
SetPinGrp	00-07	08-15	16-23	24-31
RdPinGrp	00-07	08-15	16-23	24-31
SetPin	000-063	064-127	128-191	192-255
EnPin	000-063	064-127	128-191	192-255
TestPin	000-063	064-127	128-191	192-255
Cmd	13/a-15/a	13/b-15/b	13/c-15/c	13/d-15/d
Intrlk/	a	b	c	d

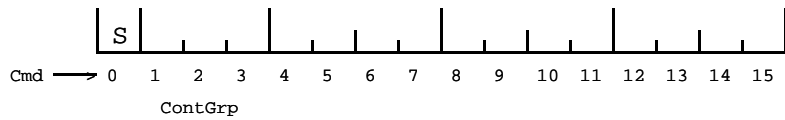
Module Signal Names

# D0 Tester Command Summary

8/29/77

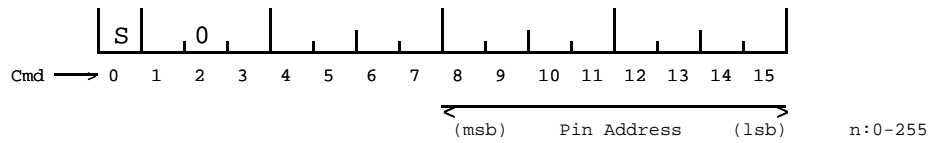
CARTER TSENG

## UTILOUT (177016B):



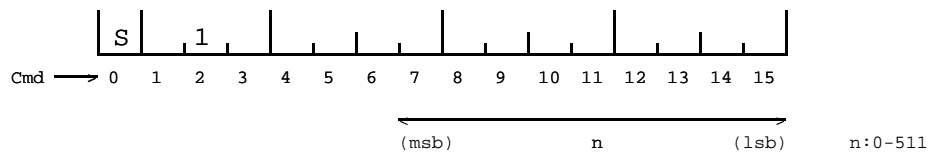
- 0 : Pin Control (Read & Set)
- 1 : Clock Control
- 2 : Load RAM Address
- 3 : Load RAM Data
- 4 : Load Data Byte A & B (Alto to D0)
- 5 : Read Data Nibble a,b,c & d (D0 Output or internal)
- 6 & 7 : (not used)

## PIN CONTROL:



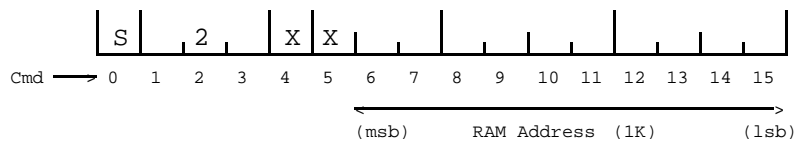
- bit 4 : Enable Pin n drive
- bit 5 : Set pin n to bit 6
- bit 6 : pin n drive state
- bit 7 : Read pin n by UTILIN04

## CLOCK CONTROL



- bit 4 : to boot
- bit 5 : to run n clockstake precedence over bit 6)
- bir 6 : to run n instructions
- n>255:to run clock continuously

## LOAD RAM ADDRESS



X: not used

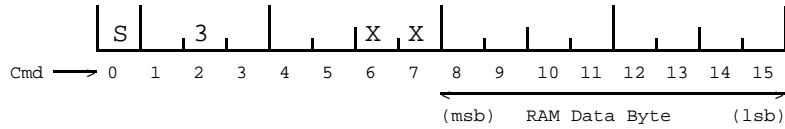


# D0 Tester Command Summary (Conti.)

8/29/77

CARTER TSENG

## LOAD RAM DATA



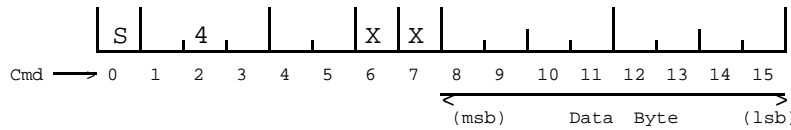
bit 4 : load data to most significant byte of output reg.  
 bit 5 : load data to least significant byte of output reg.

4	5	Function
0	0	X
0	1	B
1	0	A
1	1	AB



Byte → A B

## LOAD DATA BYTE



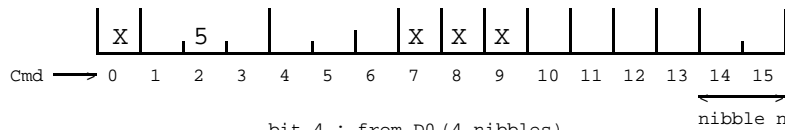
bit 4 : load data to most significant byte of output reg.  
 bit 5 : load data to least significant byte of output reg.

4	5	Function
0	0	X
0	1	B
1	0	A
1	1	AB

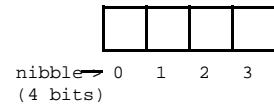


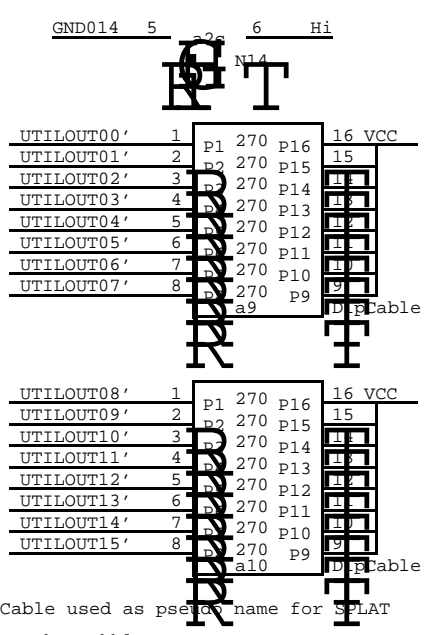
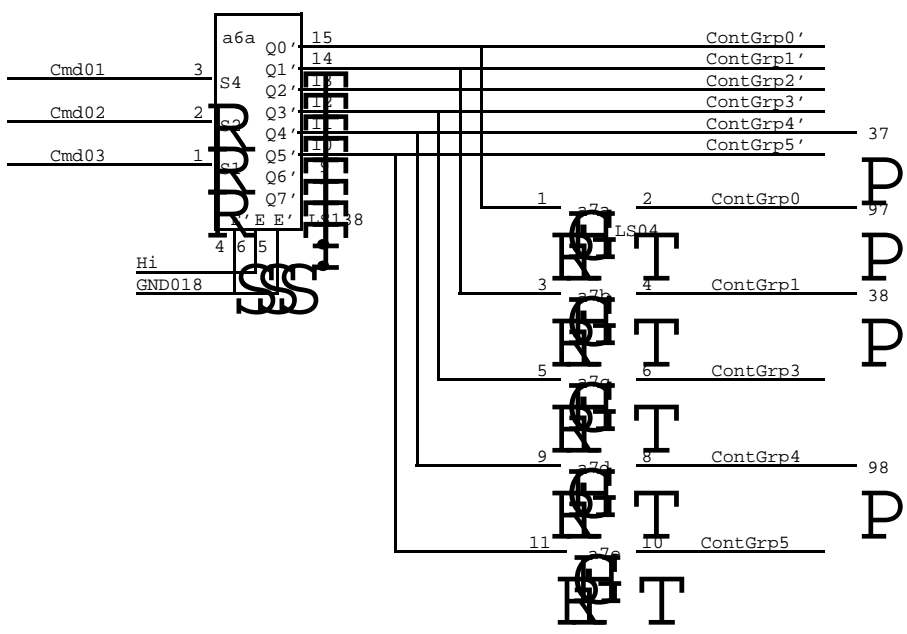
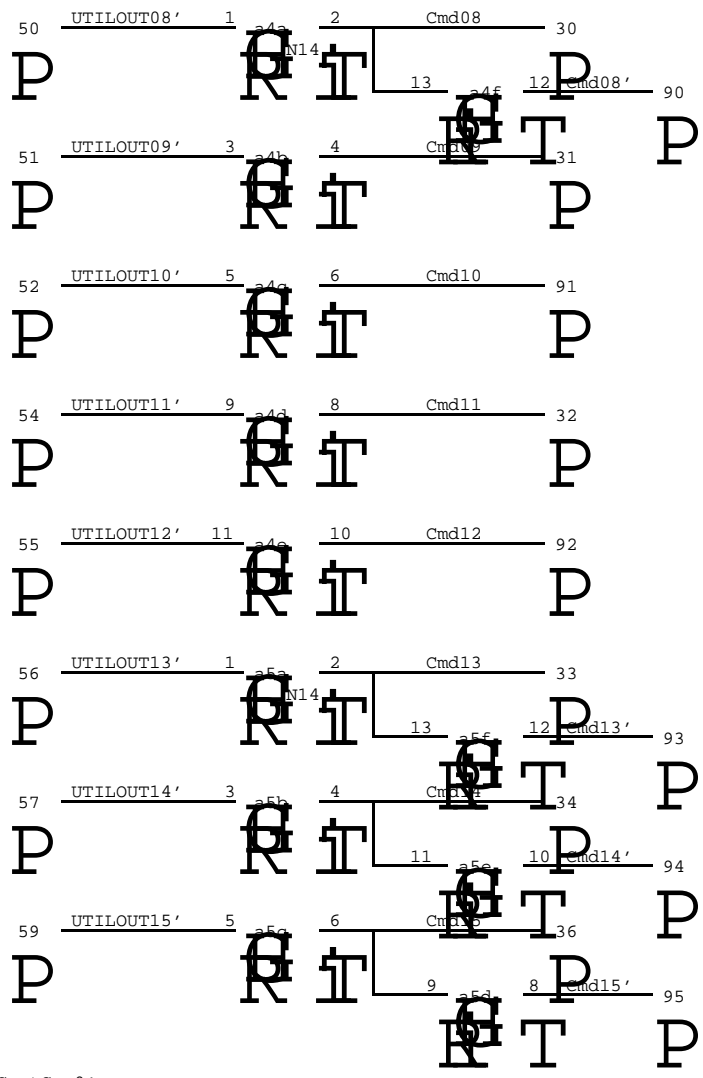
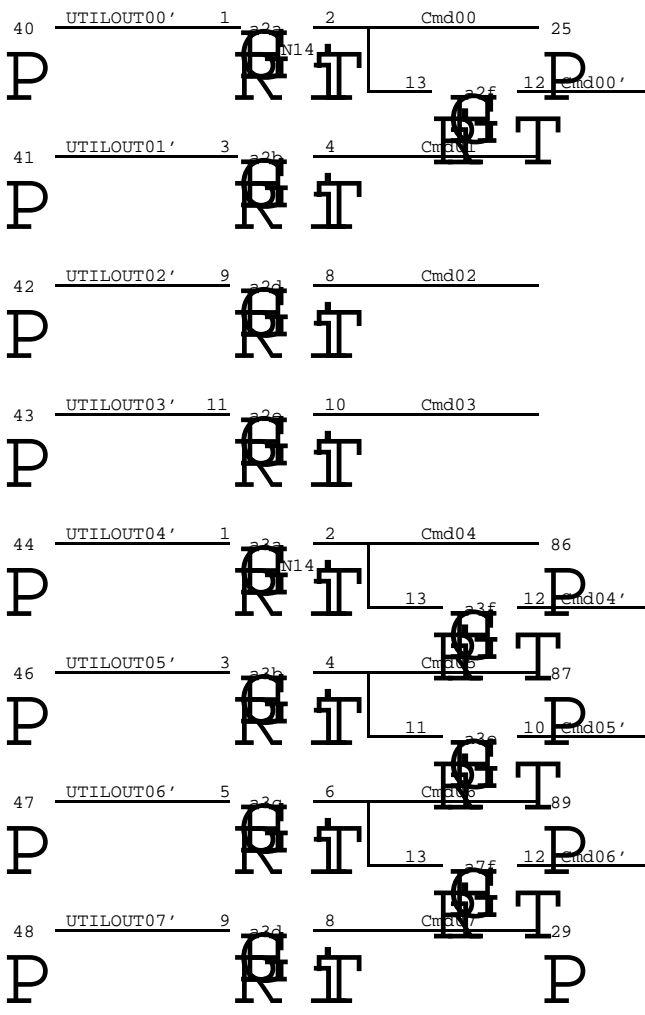
Byte → A B

## READ DATA NIBBLE

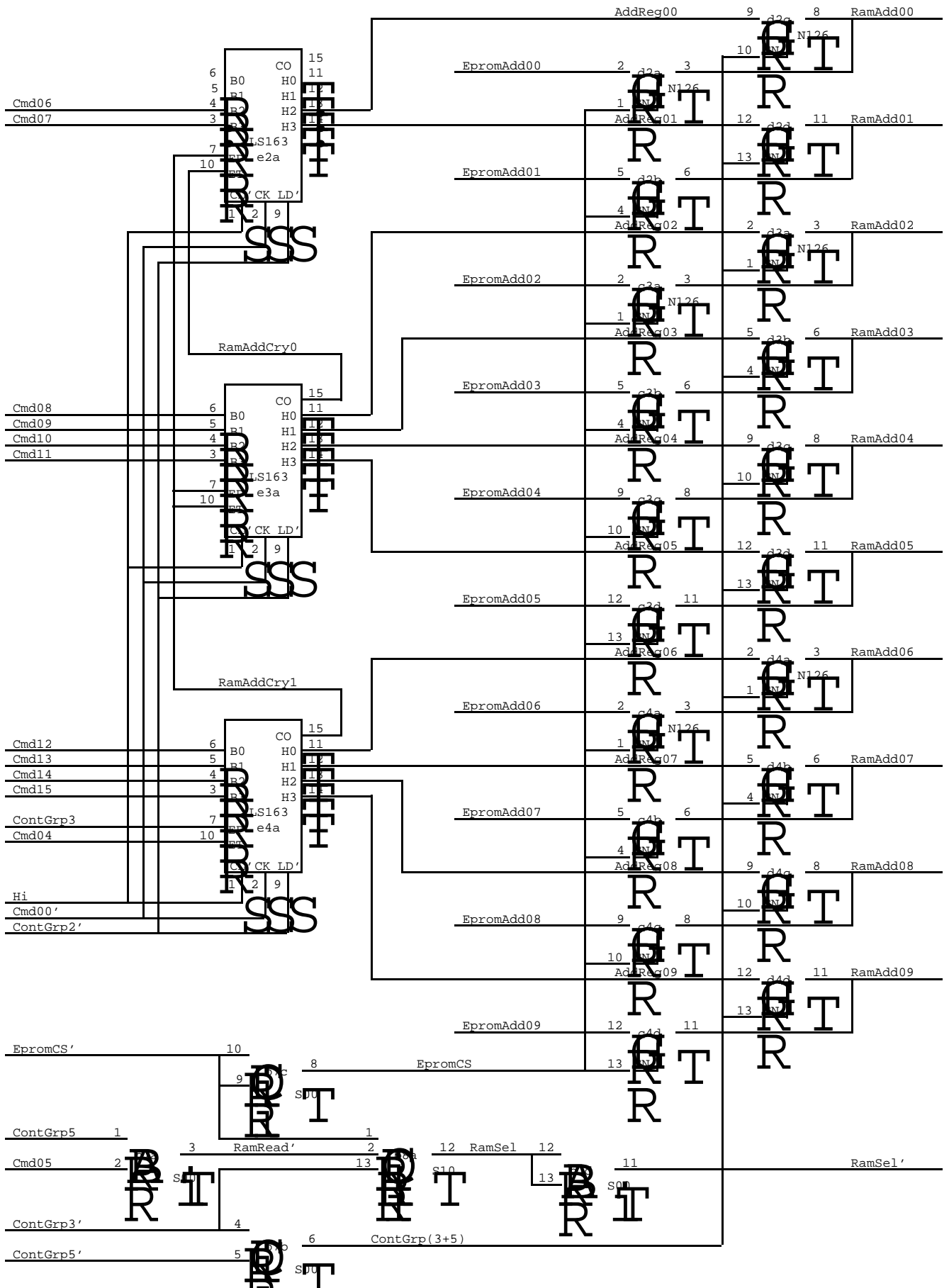


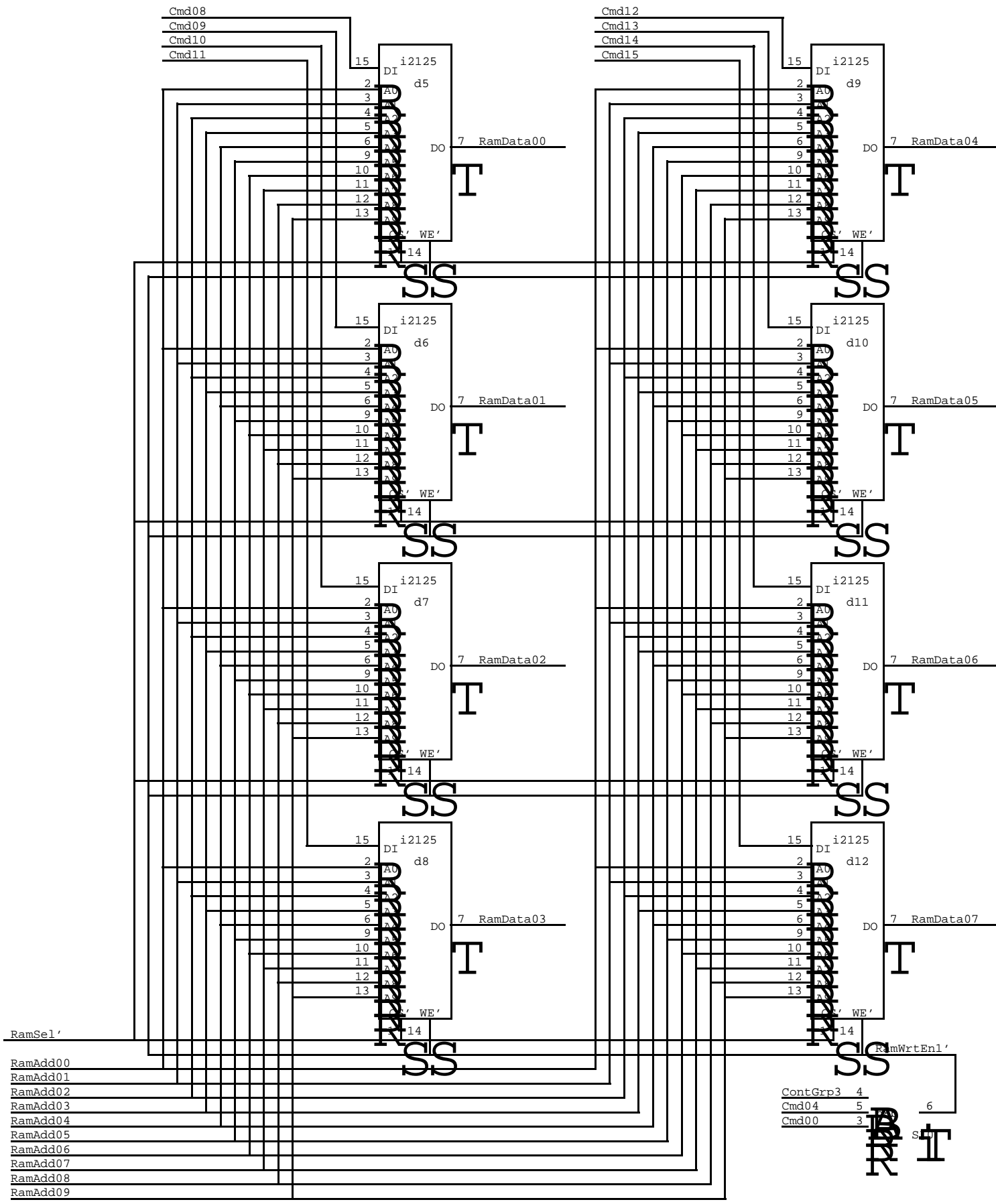
bit 4 : from D0 (4 nibbles)  
 bit 5 : from RAM Data (4 nibbles)  
 bit 6 : from RAM Address (3 nibbles)  
 bit 10 : Turn around test on UTILIN[00]  
 bit 11 : Turn around test on UTILIN[01]  
 bit 12 : Turn around test on UTILIN[02]  
 bit 13 : Turn around test on UTILIN[03]

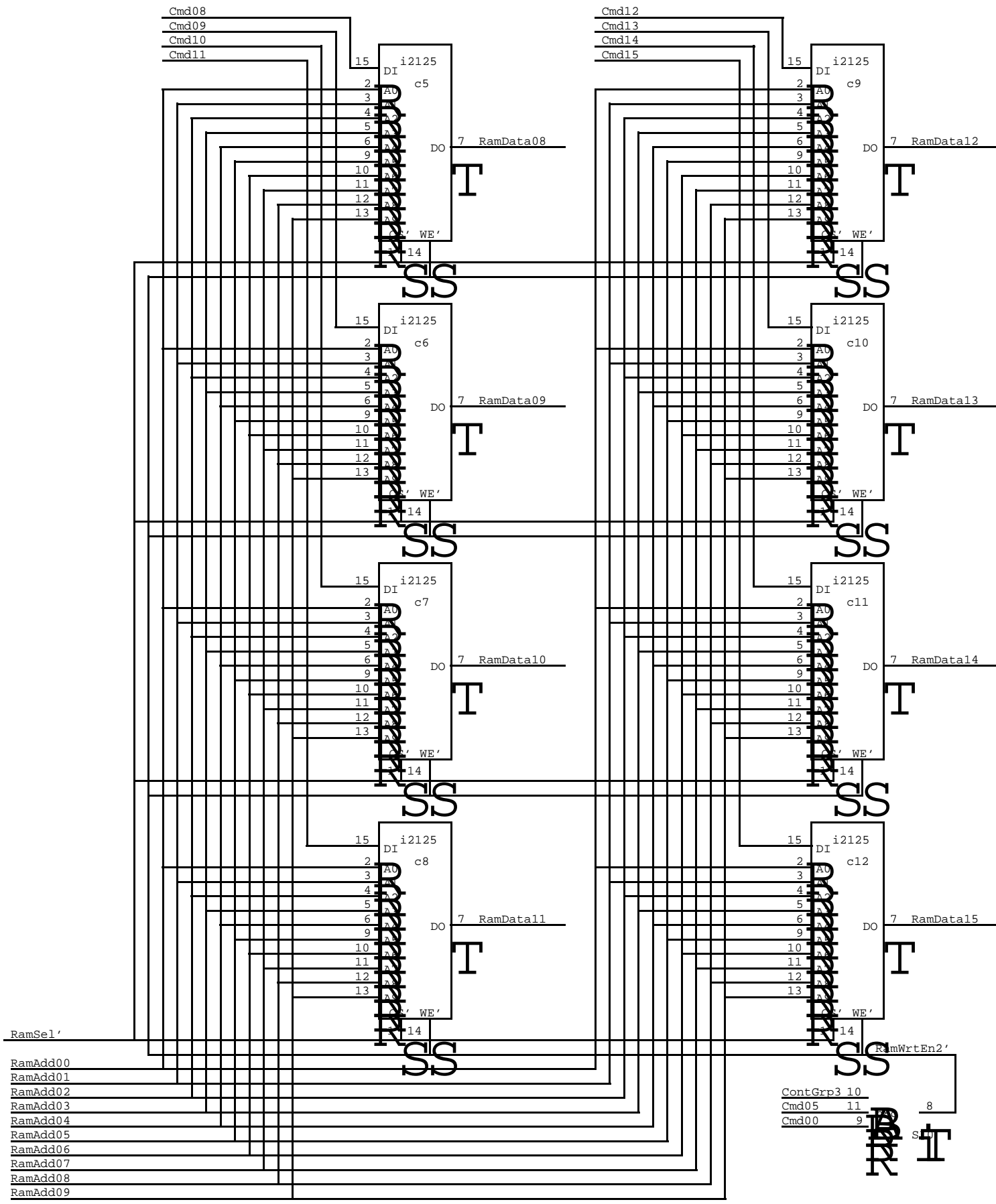


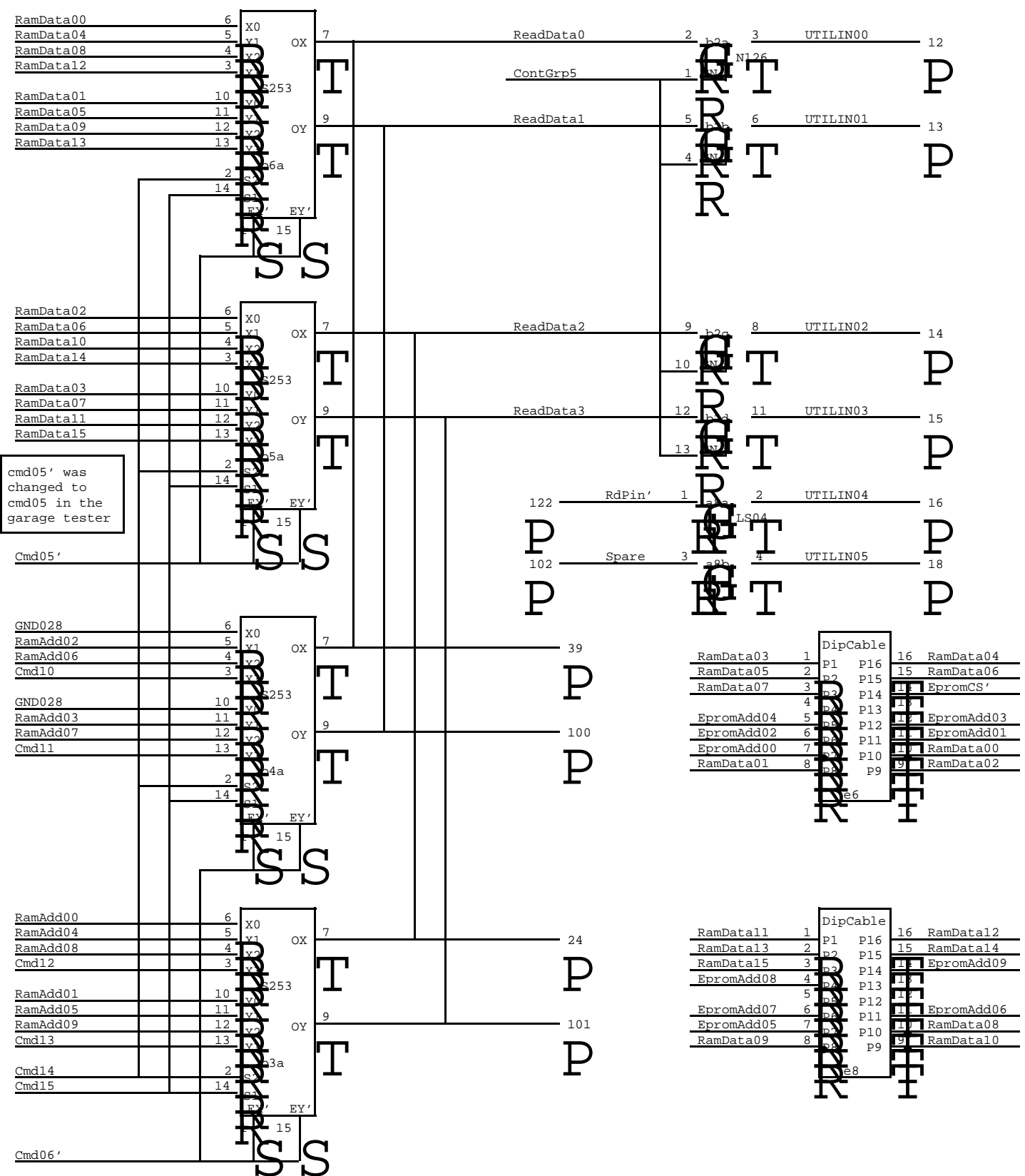


DipCable used as pseudo name for SPLAT to get by Gobble.



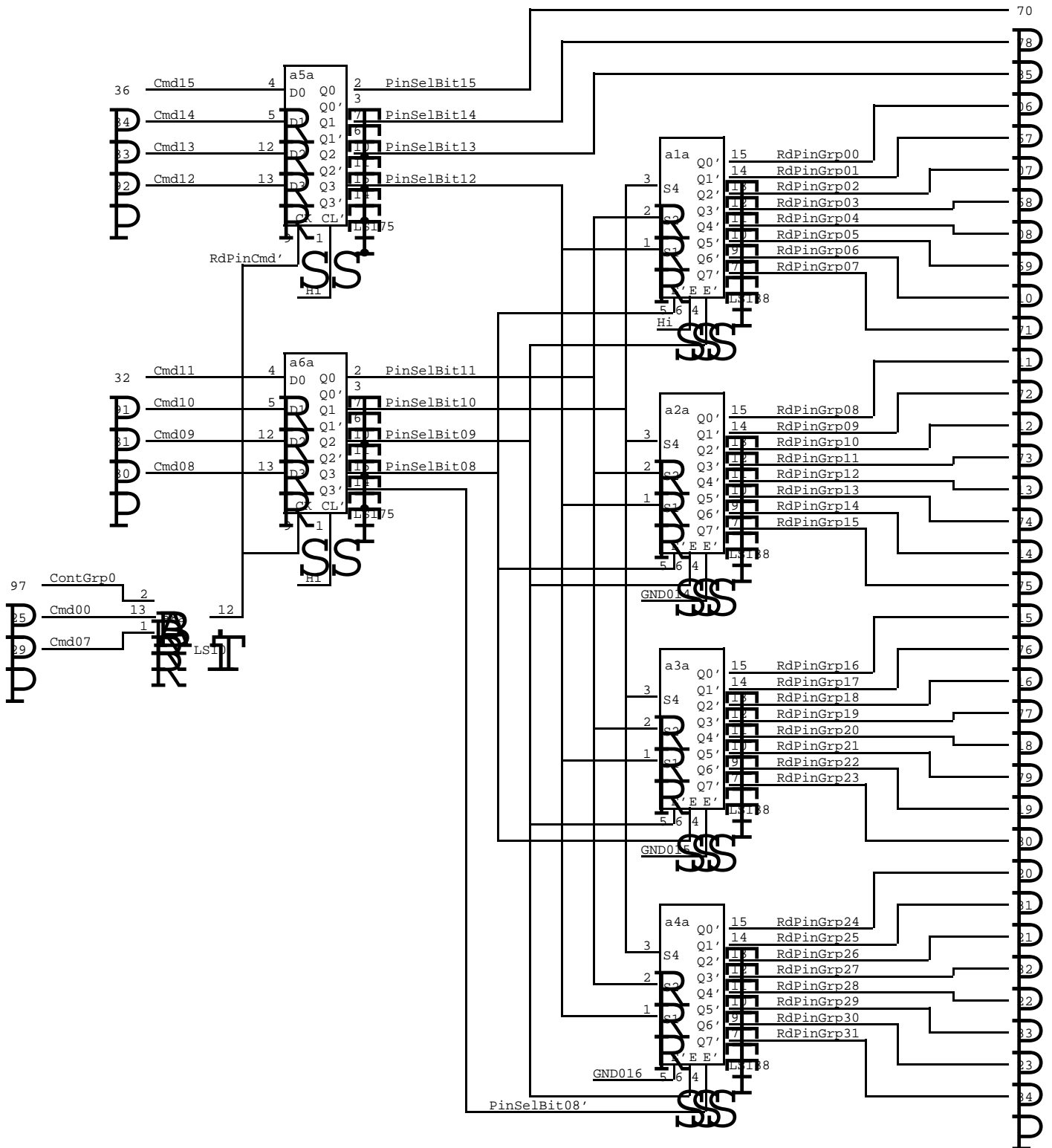


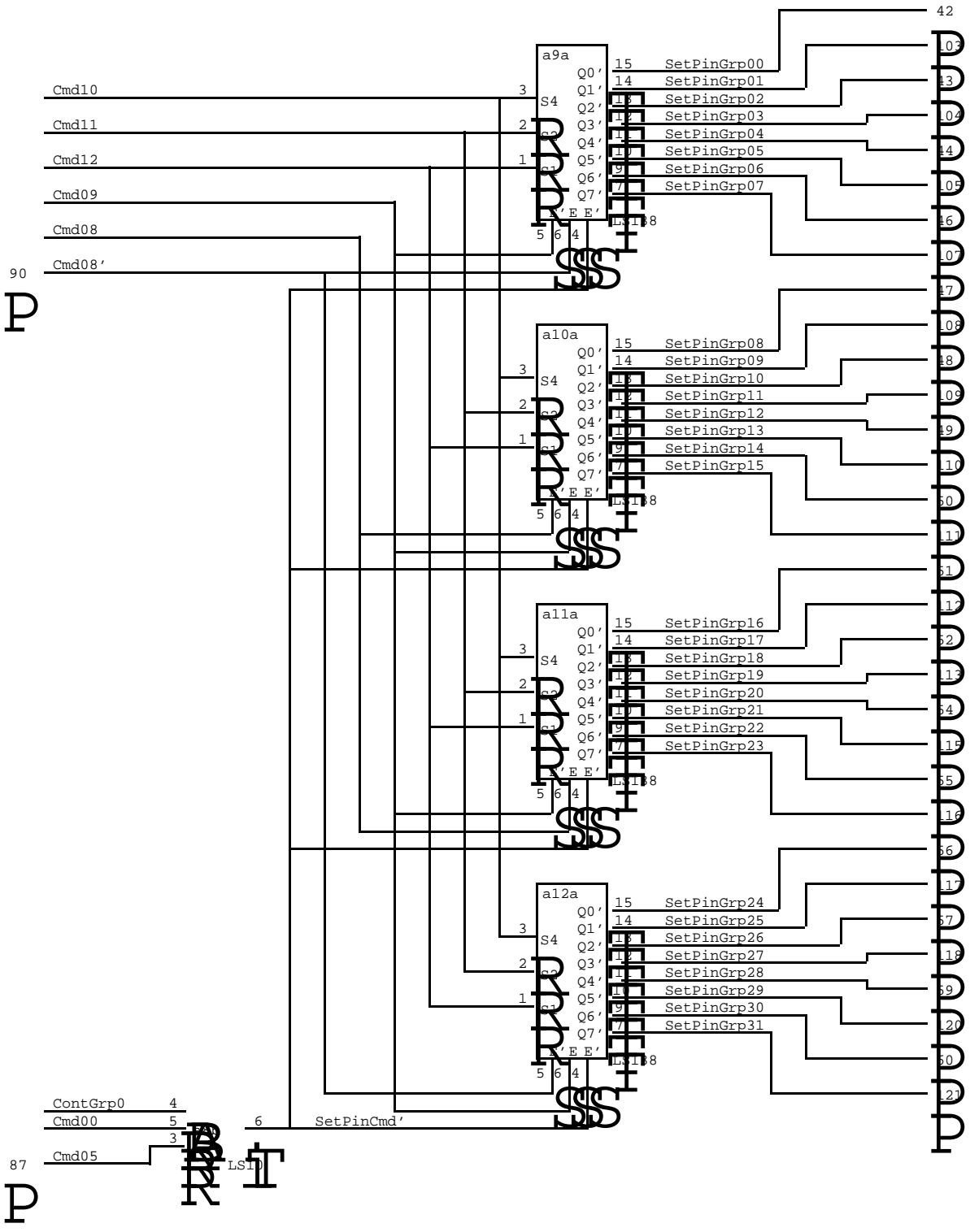




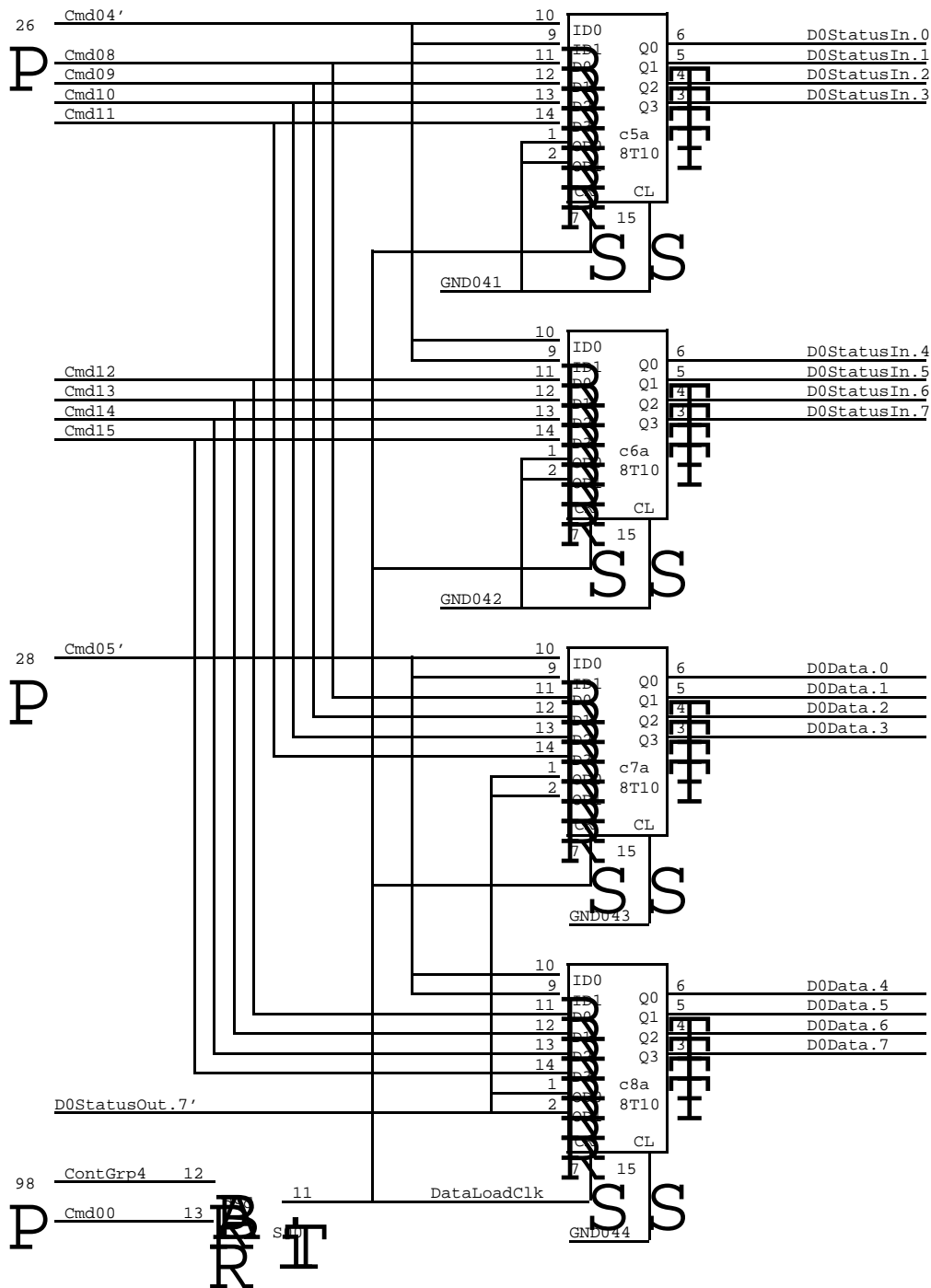
cmd05' was changed to cmd05 in the garage tester

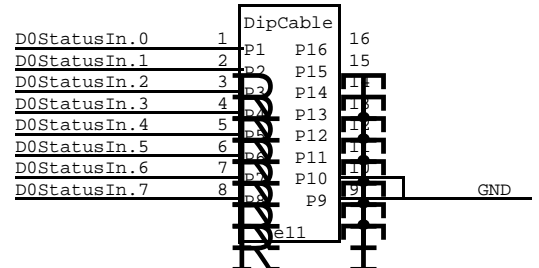
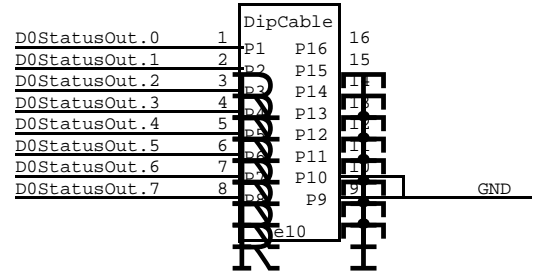
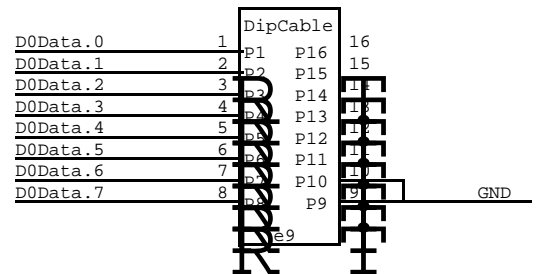
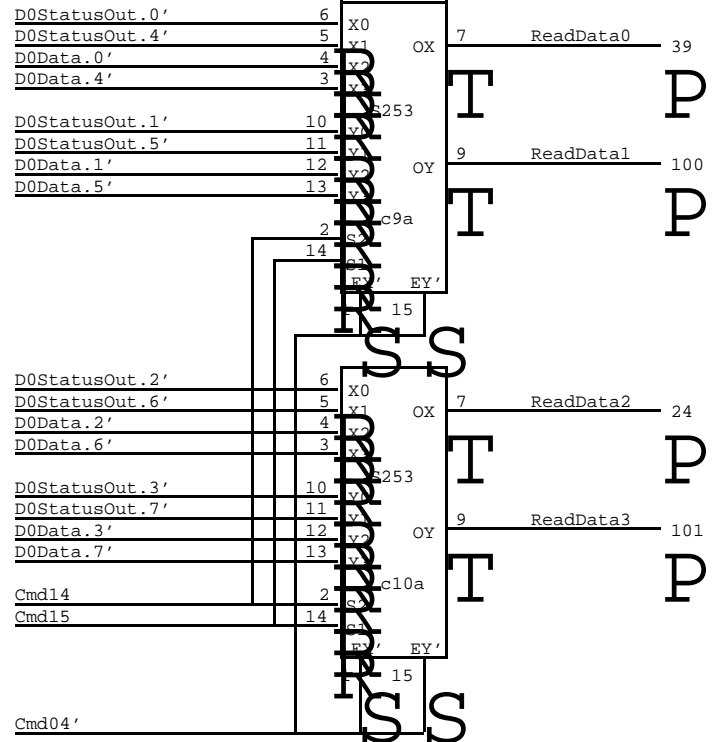
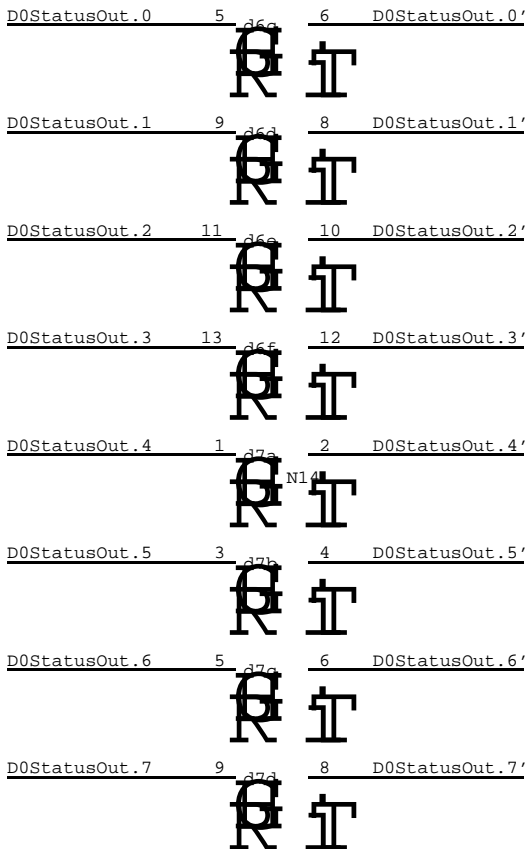
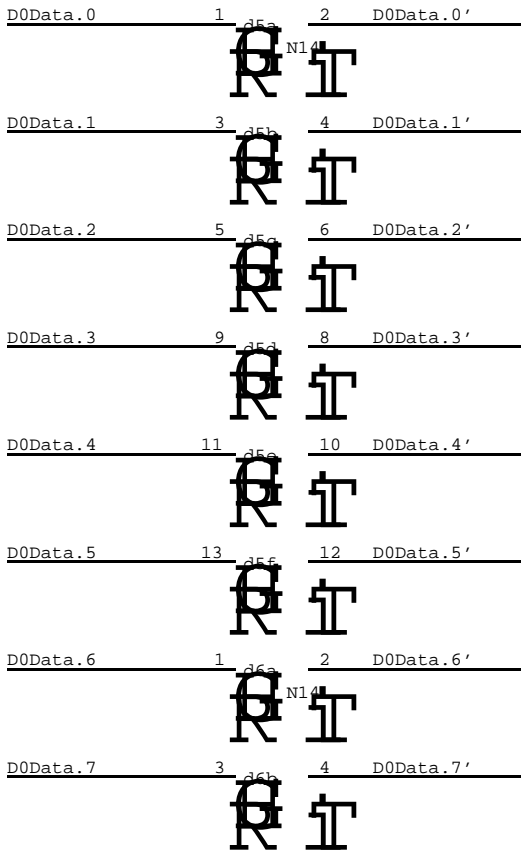
cmd06' was changed to cmd06 in the garage tester



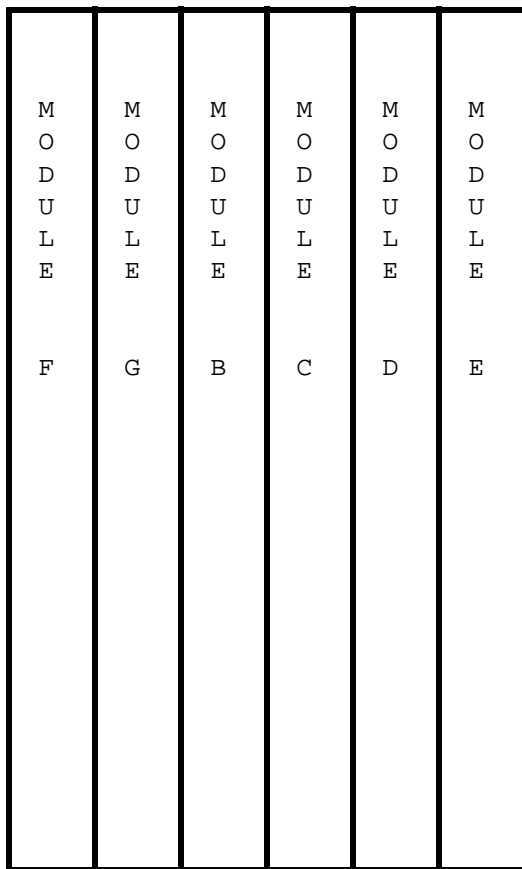




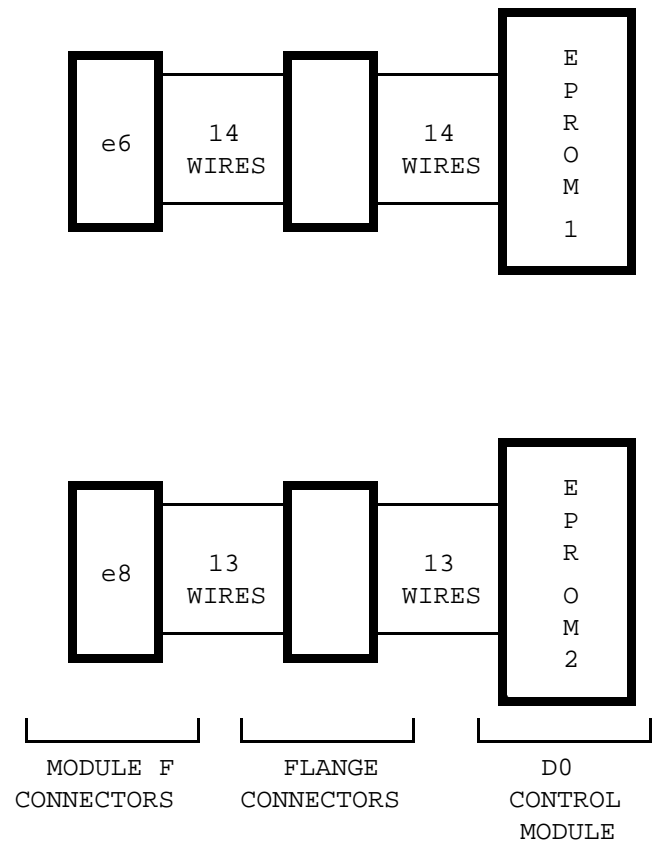








Tester Module Arrangement in Card Cage



Eprom Simulator Cabling

2  
1  
0  
1  
2

6  
5  
4  
3  
2  
1

A

LS 259	@	#	\$	%	~	&	*	(	!	)	!	!	@
-----------	---	---	----	---	---	---	---	---	---	---	---	---	---

B

LS 259	@	#	\$	%	~	&	LS 04	(	!	)	!	!	@
-----------	---	---	----	---	---	---	----------	---	---	---	---	---	---

C

LS 251	@	#	\$	%	~	&	*	(	!	)	!	!	@
-----------	---	---	----	---	---	---	---	---	---	---	---	---	---

D

N26	@	#	\$	%	~	&	*	(	!	)	!	!	@
-----	---	---	----	---	---	---	---	---	---	---	---	---	---

E

N26	@	#	DIP CABLE	DIP CABLE	DIP CABLE	DIP CABLE	DIP CABLE	DIP CABLE	!	)	!	!	@
-----	---	---	--------------	--------------	--------------	--------------	--------------	--------------	---	---	---	---	---

D0 TESTER CARD      B,C,D,E  
COMPONENT SIDE

2  
1  
0  
1  
2

6  
5  
4  
3  
2  
1  
0

A

!	@	#	\$	%	~	&	*	(	!	)	!	!	@
•	NI4	NI4	NI4	NI4	SN74 •S 138	SN74 •LS04	SN74 •LS04	898-3 -270	898-3 -270	•	•	•	A

B

!	@	#	\$	%	~	&	*	(	!	)	!	!	@
•	NI26	SN74 •253	SN74 •253	SN74 •253	SN74 •253	SN74 •S00	SN74 •S10	•	•	•	•	•	B

C

!	@	#	\$	%	~	&	*	(	!	)	!	!	@
•	•	NI26	NI26	I •225	I •225	I •225	I •225	I •2125	I •2125	I •225	I •225	I •225	C

D

!	@	#	\$	%	~	&	*	(	!	)	!	!	@
•	NI26	NI26	NI26	I •2125	I •2125	I •2125	I •2125	I •225	I •2125	I •2125	I •2125	I •2125	D

E

!	@	#	\$	%	~	&	*	(	!	)	!	!	@
•	SN74 •S 163	SN74 •S 163	SN74 •S 163	•	Dip Cable	•	Dip Cable	•	•	•	•	•	E

2  
1  
0  
1  
2

6  
5  
4  
3  
2  
1

A

!	@	#	\$	%	~	&	*	(	!	)	!	!	@
IS 138	IS 138	IS 138	IS 138	IS 175	IS 175	•	•S 10	•S 138	IS 138	•S 138	•S 138	•S 138	A

B

!	@	#	\$	%	~	&	*	(	!	)	!	!	@
•	•	•	•	•	•	•	•	•	•	•	•	•	B

C

!	@	#	\$	%	~	&	*	(	!	)	!	!	@
•	•	•	•	•S 10	•S 10	•S 10	•S 10	•S 253	•S 253	•S 169	•S 169	•S 169	C

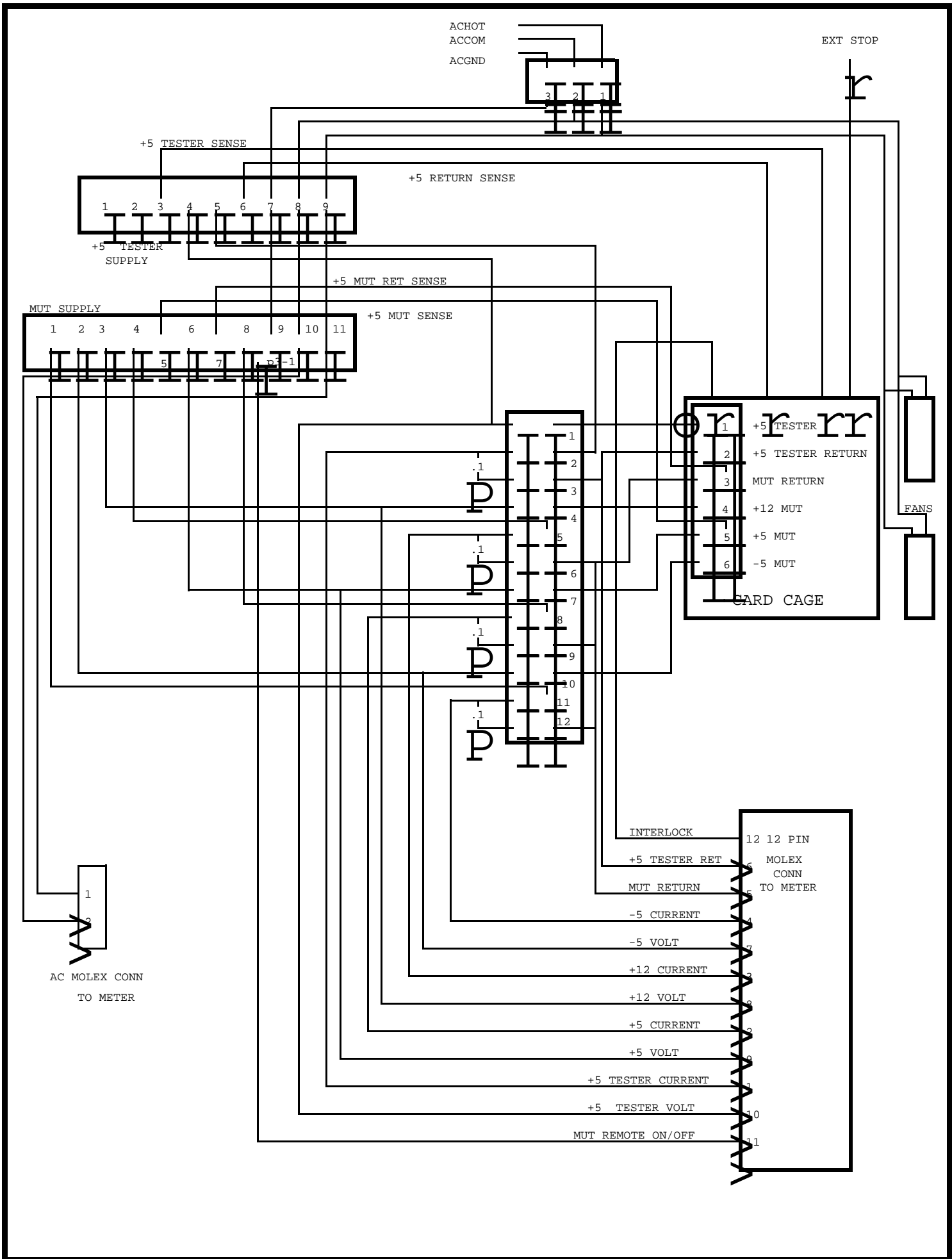
D

!	@	#	\$	%	~	&	*	(	!	)	!	!	@
•	•	•	•	•N 14	•N 14	•N 14	•S 175	•S 00	•S 10	•S 04	•S 112	•S 112	D

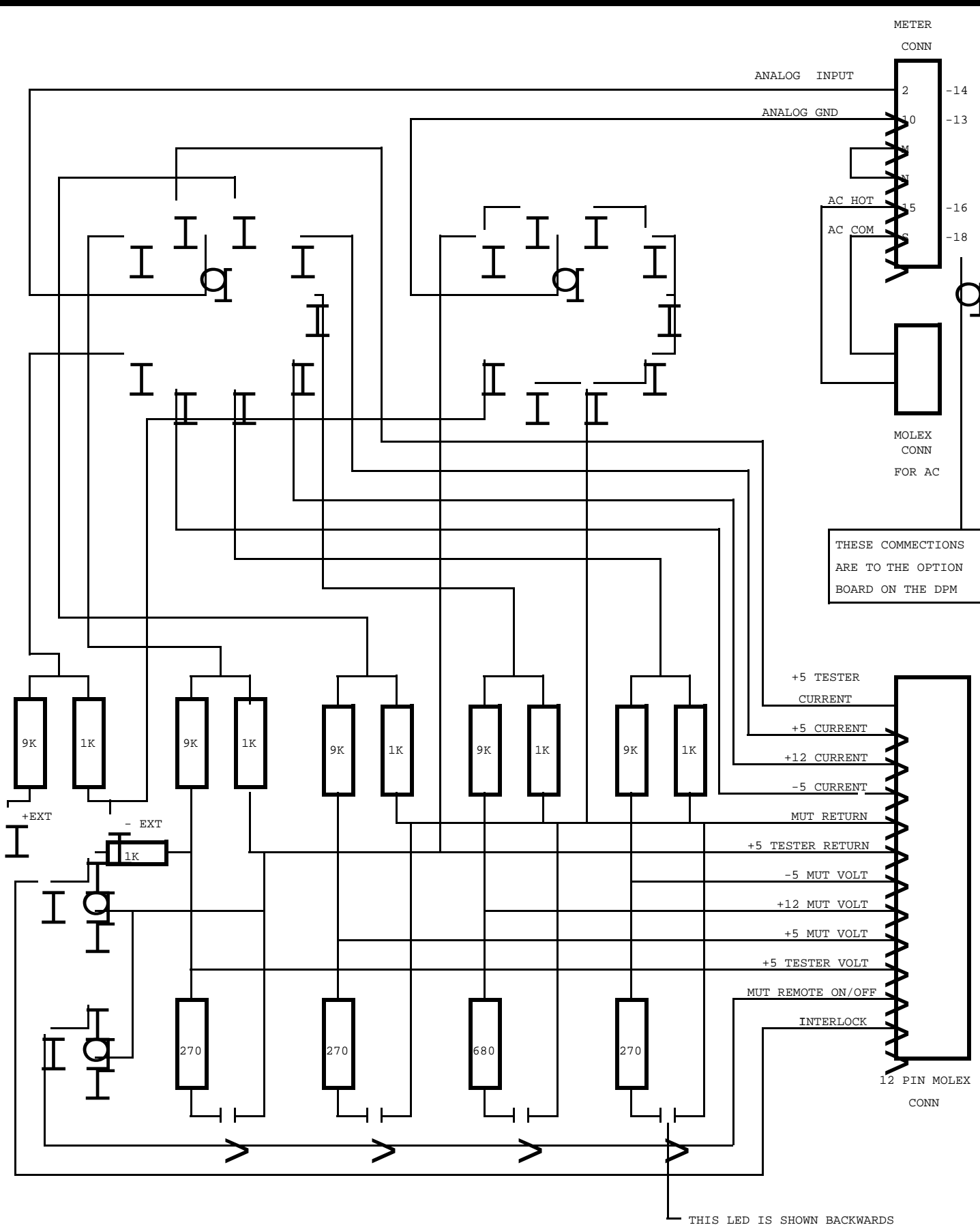
E

!	@	#	\$	%	~	&	*	(	!	)	!	!	@
•	•	•	•	•	•	•	•	DIP CABLE	DIP CABLE	DIP CABLE	•	•	E

D0 TESTER G BOARD  
COMPONENT SIDE







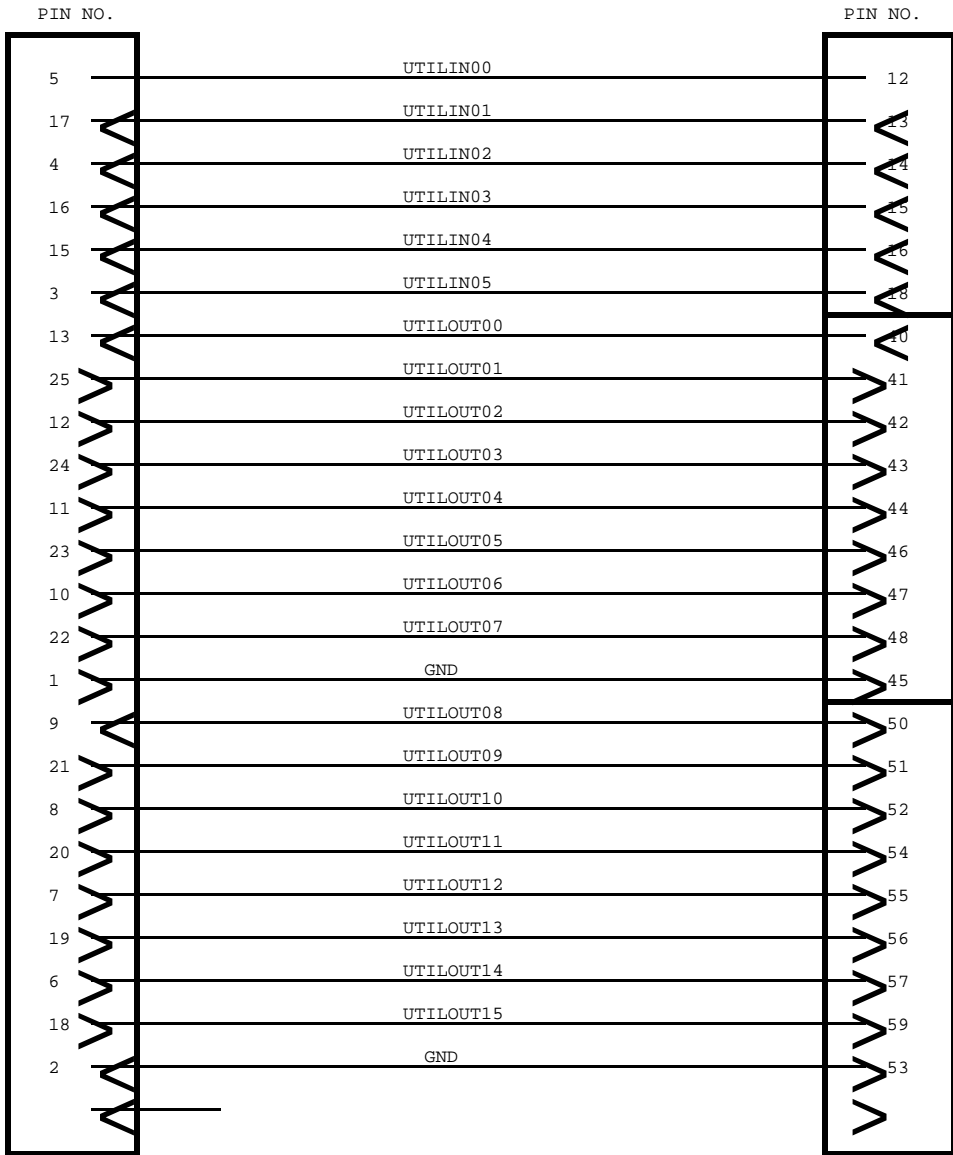
THESE CONNECTIONS ARE TO THE OPTION BOARD ON THE DPM

THIS LED IS SHOWN BACKWARDS

METER CIRCUITRY

DB 25-P

F BRD EDGE CONN



THE ABOVE IS A DIAGRAM OF THE INTERNAL CABLING OF THE UTILIN AND UTILOUT BITS FROM THE F BRD EDGE CONN VIA BERG CONNS TO THE DB25-P FOR THE ALTO THAT IS LOCATED ON THE D0TESTER INTERFACE PLATE.