

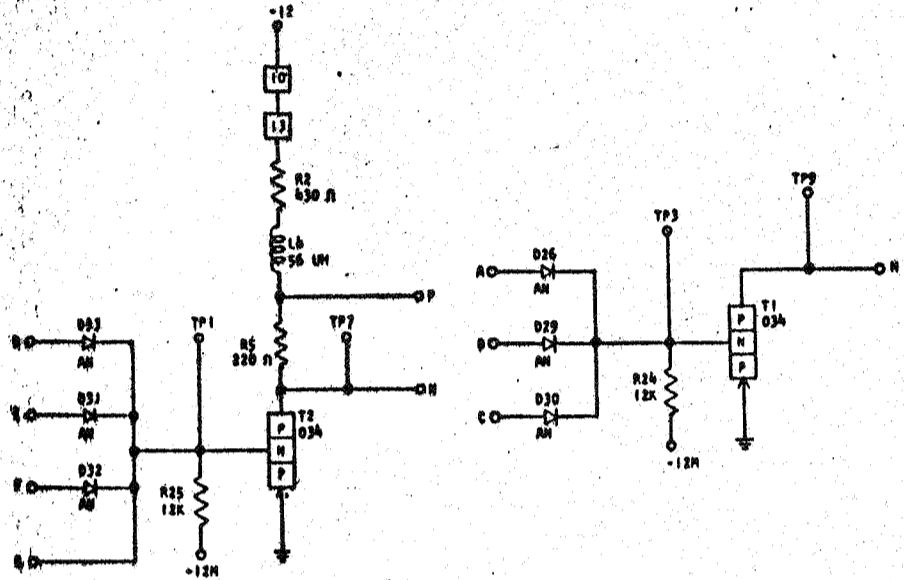
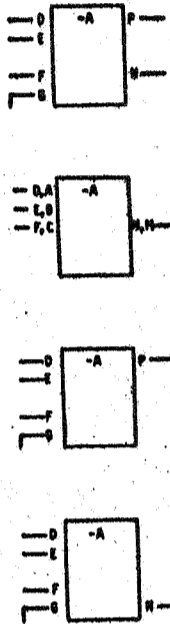
729873

CARD CODE 729873  
JH YU

### REFERENCE DRAWING

SEE PRODUCTION DRAWING 371585

### CTDL HIGH SPEED THREE WAY "AND" PNP ONE LOAD



#### SEQUENCE OF OPERATION

1. ANY INPUT UP, TRANSISTOR OFF, THE OUTPUT IS DOWN
2. ALL INPUTS DOWN, TRANSISTOR ON, THE OUTPUT IS UP
3. INPUTS ON EXTENDER CARD MUST BE DOWN IN COINCIDENCE WITH INPUTS ON CARD FOR UP OUTPUT
4. T1 MUST BE COLLECTOR LOADED
5. PIN P IS CURRENT MODE OUTPUT
6. LOGIC BLOCKS MAY HAVE SYMBOLS OTHER THAN SHOWN

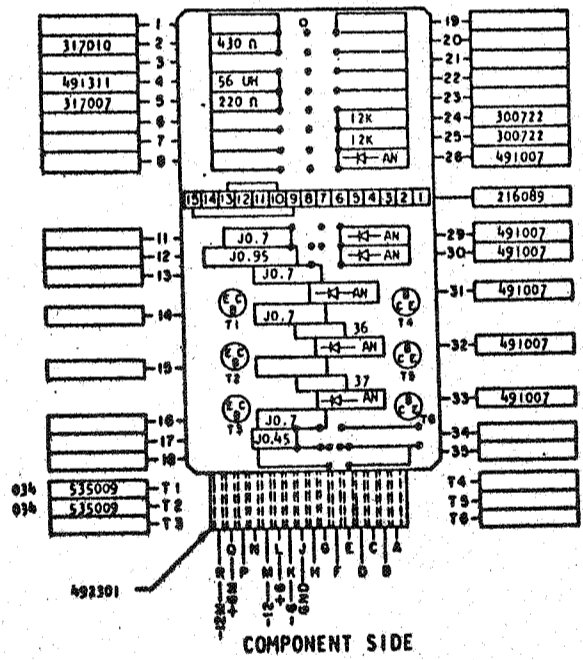
PINS	SIGNAL NAME	WAVE SHAPE	LEVELS		
			MIN	MAX	
D, E, F	T INPUT		UP	+1.44	+6.24
			DOWN	-7.44	-6.24
N U	OUTPUT		UP	-5.4	+2.4
			DOWN	-7.44	-12.48
P U	OUTPUT		UP	-4.93	+3.54
			DOWN	-8.02	-12.48
A, B, C	T INPUT		UP	+1.44	+6.24
			DOWN	-7.44	-6.24
N U	OUTPUT		UP	-5.4	+2.4
			DOWN	-7.44	-12.48
G	EXTENDER INPUT		UP	+6	
			DOWN	0.0	

#### DELAY

	MINIMUM	MAXIMUM
TURN ON	0.15	0.50
TURN OFF	0.05	0.50*

\*THIS DELAY CAN OCCUR ONLY ON HEAVILY LOADED BLOCKS.

NOTE: THE ABOVE RANGES OF DELAYS ARE REPRESENTATIVE. SPECIFIC CIRCUIT APPLICATION AND/OR MIXING CAPACITANCE MAY RESULT IN DELAYS WHICH ARE OUT OF THE GIVEN RANGES. IN SUCH CASES, CARD REPLACEMENT SHOULD INDICATE IF THE CIRCUIT IS OUT OF SPECIFICATIONS. EXAMPLE: LOGIC BLOCK DRIVING OF "OR".



CIRCUIT AND PACKAGING STANDARD	
APPROVAL	DATE
ABC	4-2-62

INTERNATIONAL BUSINESS MACHINES CORP.		DATE	CHANGE NO.	APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.
NAME	CARD ASM TSTR-CTDL HIGH	6-29-62	Ec 115599					
SPEED	THREE WAY "AND" PNP ONE LD	30-6-62	J7 83687					
DESIGN								
DETAIL	NO 1-1-62	SCALE	NONE					
CHECK	WH 1-1-62	DRAW	L16 3-17-62					
APPRO		ENGR						

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