




SCHEMATIC FOR COMPONENT

	SUPPLY PIN				RAULAND P/N		
	+14V	+10V	+5V	-0V			
			5		ECO125		
			14	3,4,5,7	ECO185		
			1,4,10,13,14	7	ECO178		
			16	8	ECO126		
			20	10,1	ECO181		
			14	7	ECO186		
			2,4,14	7,11,23	ECO178		
9				10	ECO076		
				1	ECO042		
				16	46,78,9	ECO071	
				11,20	10,18	ECO181	
16				12,7,15	8	ECO079	
		8			4	ECO132	
				16	8,11	ECO182	
				OUT	GND	ECO049	
				16	12,7,15	8	ECO079
					20	1,0	ECO181
					8,10,12	12,3,24	ECO172
					16	6,8,12	ECO071
3		2			1	ECO088	
4					13	EH0003	
					7,21	1	ECO171
					16	8	ECO180
					14	17	EH0008
					16	6,8	ECO071
5					3	ECO175	
					8	1	ECO004
10					9	ECO102	
					16	8	ECO179
					11,20	10,17,18	ECO181
					3,11,13,16	1,4,8,15	ECO184
					1	8	ECO060
					22,24	12	ECO207
					24	12	ECO116
16						DO247	
1,11					SEE NOTE 4	DO247	
					16	DO247	
					E	ETMP56517	
					E	ETS2N5089	

NOTES:

- UNLESS OTHERWISE SPECIFIED, RESISTORS ARE RATED IN OHMS, 25%, AND ARE 1/4 W. K=1,000. CAPACITORS ARE RATED IN MICROFARADS, PF= PICO FARADS
- SYMBOLS CROSS REFERENCE:
 - CIRCUIT COMMON (-0V)
 - INDIVIDUAL TERMINATION POINT OR CAGE CLAMP CONNECTOR
 - SCREW TERMINAL
- FOR 50HZ CLOCK OPERATION, ADD J1 AND J2. CUT TRACKS BETWEEN: J2 AND U6 PIN 6 J1 AND U6 PIN 5
- J3: REMOVED FOR NCS3000, NCS3005 INSTALLED FOR TCS000, TCS005
- SOME LINES REPRESENT MORE THAN ONE WIRE, THESE ARE INDICATED BY DIAGONAL FEEDER LINES ENTERING THE BUS.
- THE PROGRAMMABLE JUMPER LOCATED ABOVE U47 IS USED TO REDUCE THE POSSIBILITY OF ACCIDENTAL "WRITE" OPERATION TO THE EEPROM.
 "N" POSITION: NORMAL OPERATION
 "L" POSITION: LOCKED OUT FROM WRITE OPERATIONS
 JUMPER POSITION SHOULD BE CHANGED ONLY WITH POWER OFF.

KC 1471		G
DATE 11-7-1984		
ISSUE	CHANGE	
A	DELETED RPI. ADDED: R67 THRU R74, D5, D6, D7, C66 THRU C77, U14, U40, U52, C72 NOT USED. VALUES OF FOLLOWING COMPONENTS WERE: R7-1.5K, R8-22K, R9-1K, R10-222, R30-12K, R31-6.8K, R32-12K, R37-10K, R39-20K, R52-10, R63-4.7K, C34-10/25, C35-1/25, C46-10/25, C65-1000PF 2-11-85	
B	ADDED C64, R66, RPI, D5. PORT "A" WAS PORT "C". C4 WAS 10/25V. W1A WAS W1C. 3-22-85	
C	R74 WAS 1/4 WATT. 8-23-85	
D	CHANGED ALL THE PINS ON U46 & 47. ADDED OUTPUT X-FRM SCHEMATIC. ADDED +14 AND J3 TO SCHEMATIC FOR RY6-RY28. CHANGED NOTE 4. ADDED NOTE 6. REMOVED J3-J6. CONNECTED U48 & 49, PIN 26. ADDED /35 TO C71. INVERTED CHIP SELECTS. 11-26-85	
E	NOTE 4 JUMPER INSTRUCTIONS CHANGED. 2-5-86	
F	C30 & C67 WERE .01 C38 WAS .1 R39 WAS 33K. R37 WAS 100K. R59 WAS 20K. 2-23-87	
G	U33 WAS EH0004 4-7-87	

CTA
(COMPUTER TERMINATION
& AMPLIFICATION)

RAULAND-BORG CORP.
CHICAGO, ILL

KC 1471 G