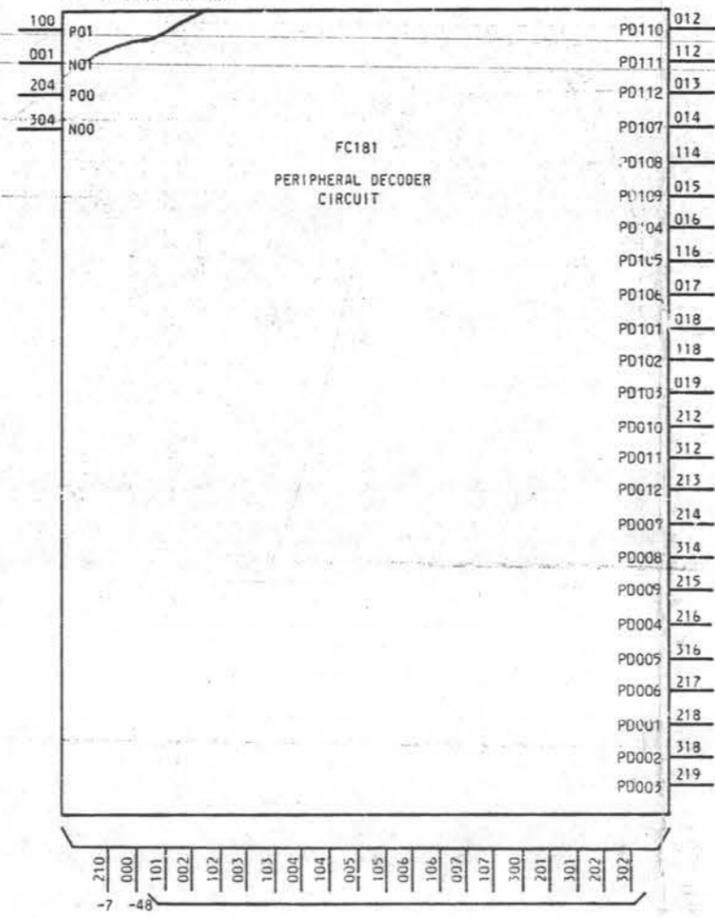


SHEET INDEX		
CONTENTS	SHEET NO.	SHEET ISSUE
SHEET INDEX SUPPORTING INFORMATION CURRENT DRAIN USED ON NOTES SYMBOL RECORD OF CHANGES	1	2
CIRCUIT SCHEMATIC	2	2
CIRCUIT SCHEMATIC	3	2
CIRCUIT SCHEMATIC COMPONENT LIST	4	2

SYMBOL



RECORD OF CHANGES				
DWG ISS	PREV FURN	STD	MFR DISC	SEE NOTE

SYMBOL
PERIPHERAL DECODER
ELEMENT IDENT
A

TERM. MOD	FUNCT	TERM.	LOC
N00	I	304	3E1
N01	I	001	2E1
P00	I	204	3D1
P01	I	100	2E1
PD010	Ø	212	3A8
PD011	Ø	312	3B8
PD012	Ø	213	3B8
PD007	Ø	214	3C8
PD008	Ø	314	3C8
PD009	Ø	215	3D8
PD004	Ø	216	3D8
PD005	Ø	316	3E8
PD006	Ø	217	3E8
PD001	Ø	218	3F8
PD002	Ø	318	3G8
PD003	Ø	219	3G8
PD110	Ø	012	2A8
PD111	Ø	112	2B8
PD112	Ø	013	2B8
PD107	Ø	014	2C8
PD108	Ø	114	2D8
PD109	Ø	015	2D8
PD104	Ø	016	2D8
PD105	Ø	116	2E8
PD106	Ø	017	2F8
PD101	P	018	2F8
PD102	L	118	2G8
PD103	Ø	019	2G8
-48	P	000	4E6
-7	P	210	4E5
GRD	G	002	4E6
GRD	G	003	4E6
GRD	G	004	4E6
GRD	G	005	4E7
GRD	G	006	4E7
GRD	G	007	4E7

SYMBOL
PERIPHERAL DECODER
ELEMENT IDENT
A

TERM. MOD	FUNCT	TERM.	LOC
GRD	G	101	4E6
GRD	G	102	4E6
GRD	G	103	4E6
GRD	G	104	4E7
GRD	G	105	4E7
GRD	G	106	4E7
GRD	G	107	4E7
GRD	G	201	4E8
GRD	G	202	4E8
GRD	G	300	4E8
GRD	G	301	4E8
GRD	G	302	4E8

NOTES:

1. UNLESS OTHERWISE SPECIFIED:
RESISTANCE VALUES ARE IN OHMS
CAPACITANCE VALUES ARE IN MICROFARADS
VALUES PRECEDED BY THE SYMBOL + (PLUS)
OR - (MINUS) ARE IN VOLTS.

2. POWER AND GROUND TERMINALS FOR
INTEGRATED CIRCUITS:

IC CODE	GRD TERM.	BAT TERM.
163E	5,7, 22,32	6,16

3. BATTERY AND GROUND TERMINALS FOR THIS
CIRCUIT PACK ARE AS FOLLOWS:

FUNCTION	TERMINAL
-7	210
-48	000
GRD	002,003,004, 005,006,007, 101,102,103, 104,105,106, 107,201,202, 300,301,302.

4. GROUND TERMINALS FOR THE CIRCUIT
MODULE ARE:

CM CODE	GRD TERM
176A	10,12,19,23,27

5. THE TERMINAL NUMBER ARRANGEMENT OF THE
51B, 51G AND 66AE TYPE TRANSISTOR IS:



6. GROUND RETURN

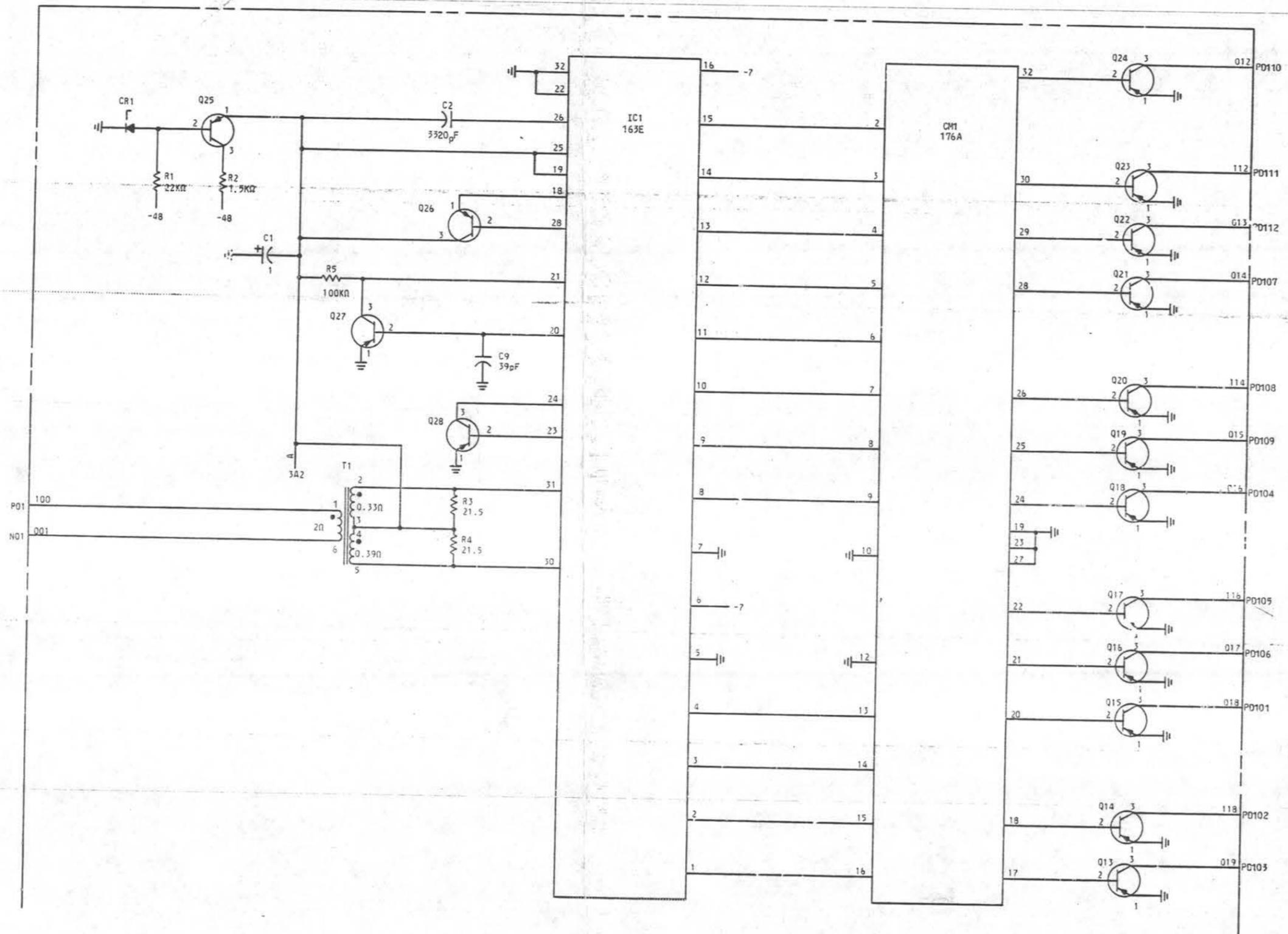
SYSTEM USED ON	DESIGN CONTROL
NO. 3 ESS	EH

7. CLOSEST RECOMMENDED
HORIZONTAL MOUNTING CENTERS
IS 0.750 INCH.

CURRENT DRAIN: ON -48V -36mA MAX

SHEET INDEX NOTES		SUPPORTING INFORMATION		NOTICE - NOT FOR USE OR DISCLOSURE OUTSIDE THE BELL SYSTEM EXCEPT UNDER WRITTEN AGREEMENT.	
1. FOR SINGLE REISSUES, A CHANGED OR NEW SHEET WILL BE ASSIGNED THE SAME ISSUE NUMBER AS SHEET 1. 2. FOR CONCURRENT REISSUES, A CHANGED OR NEW SHEET WILL BE ASSIGNED THE HIGHEST ISSUE NUMBER AFFECTING THAT SHEET. 3. THE ISSUE NUMBER OF SHEET 1 IS RECOGNIZED AS THE ISSUE NUMBER OF THE WHOLE DRAWING.	CATEGORY	NUMBER	IT11 FC181 CIRCUIT PACK PERIPHERAL DECODER CIRCUIT AT&TCO STANDARD DWG SIZE 6S ISSUE 2A1 4 SHEETS		
	CONNECTOR ON FRAME	947A, 947C OR 947E			
	CIRCUIT PACK INFORMATION DRAWING				
	SERIES FOR LATEST CLASS "A" CHANGE				
	ACCEPTABLE SERIES	1-3/5, 3/5, 5, 6	BELL LABORATORIES CPS-FC181		

PERIPHERAL DECODER CIRCUIT

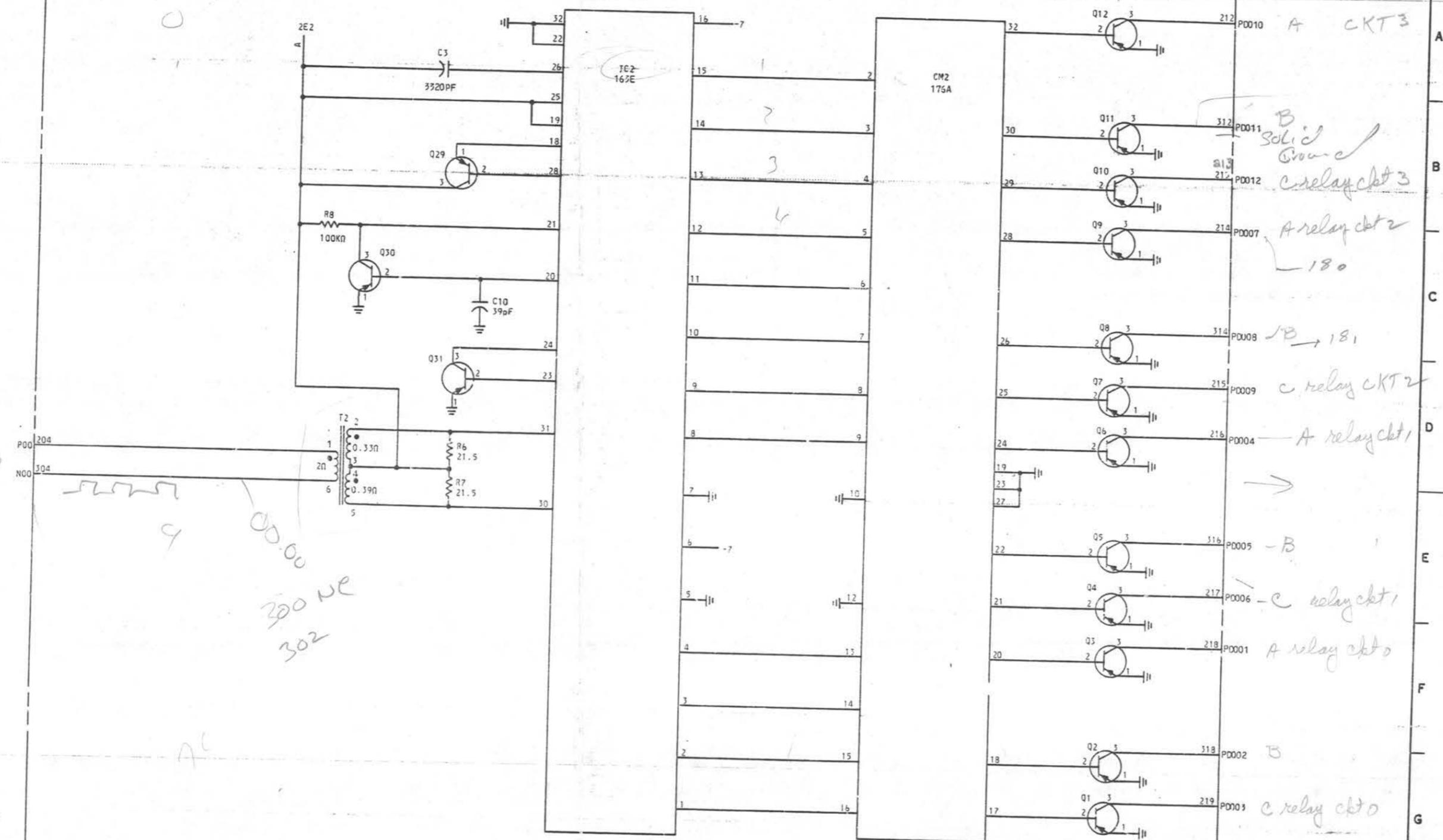


ISSUE
2A1

PERIPHERAL DECODER CIRCUIT

0 1 2 3 4 5 6 7 8 9

A
B
C
D
E
F
G
H

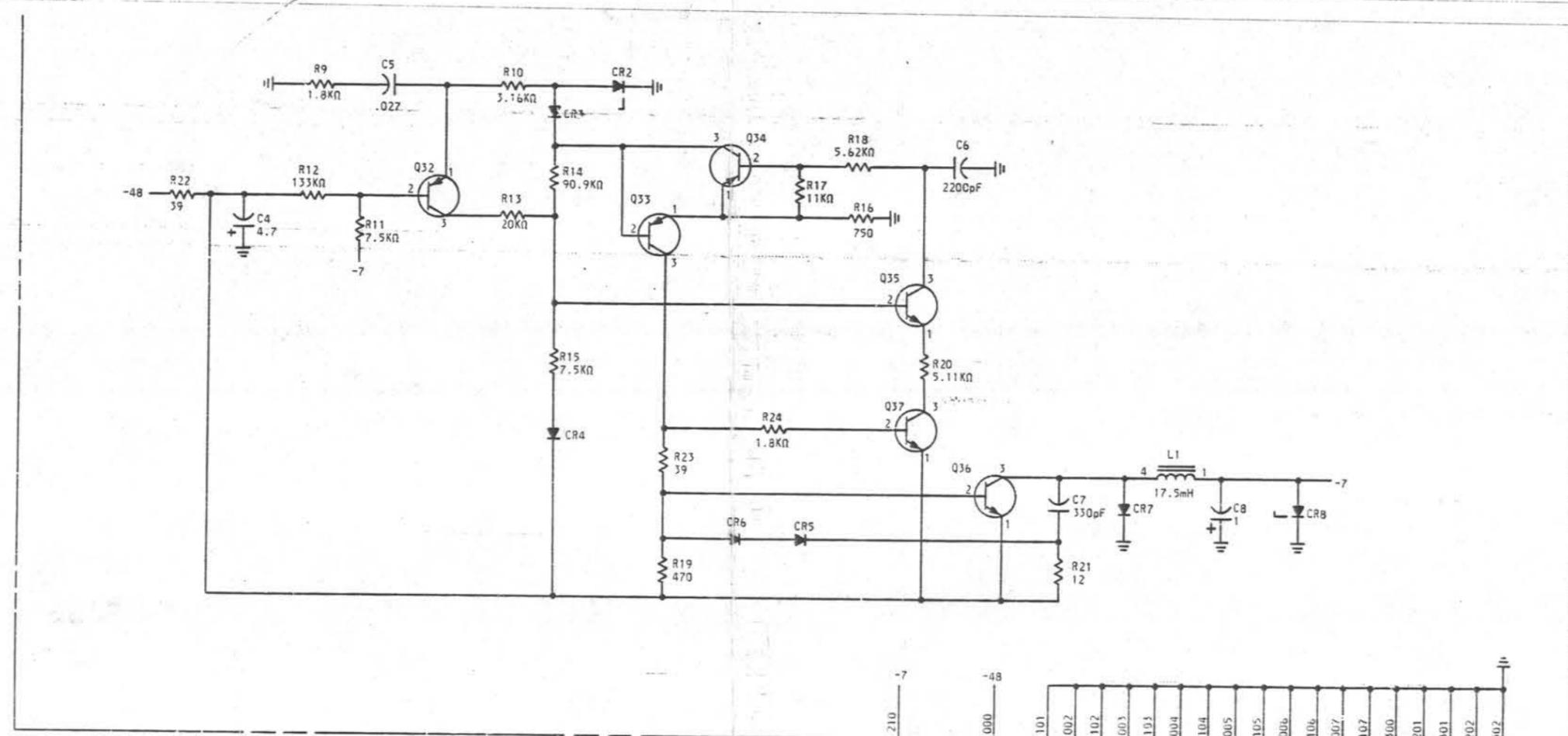


9
00.00
300 NE
302

A CKT 3
Solid State
c relay ckt 3
A relay ckt 2
180
B → 181
c relay ckt 2
A relay ckt 1
→
- B
- c relay ckt 1
A relay ckt 0
B
c relay ckt 0

ISSUE
2A1

PERIPHERAL DECODER CIRCUIT



COMPONENT LIST

CAPACITOR

DESIG	CODE	QTY	VALUE
C1	600A	1	
[2] C2, C3	KS-16742, L27	3320PF	
C4	601J	4.7	
C5	KS-19774, L05	.027	
C6	KS-20300, L02	2200pF	
C7	KS-19774, L02	330pF	
C8	600A	1	
[2] C9, C10	KS-19774, L7	39pF	

CIRCUIT MODULE

DESIG	CODE	QTY	VALUE
[2] CM1, CM2	FIC 176A		

DIODE

DESIG	CODE	QTY	VALUE
CR1	459G	1	
CR2	459B	1	
CR3	458A	1	
CR4	449A	1	
[3] CR5-CR7	458A	3	
CR8	808E	1	

INDUCTOR

DESIG	CODE	QTY	VALUE
L1	1628AA	1	17.5mH

INTEGRATED CIRCUIT

DESIG	CODE	QTY	VALUE
[2] IC1, IC2	163E	2	

RESISTOR

DESIG	CODE	QTY	VALUE
R1	KS-16645, L2	1	22KΩ
R2	KS-19150, L2	1	1.5KΩ
[2] R3, R4	KS-20616, L1A	2	21.5KΩ
R5	KS-16645, L2	1	100KΩ
[2] R6, R7	KS-20616, L1A	2	21.5KΩ
R8	KS-16645, L2	1	100KΩ
R9	KS-16645, L2	1	1.8KΩ
R10	KS-20616, L1A	1	3.16KΩ
R11	KS-20616, L1A	1	7.5KΩ
R12	KS-20616, L1A	1	133KΩ
R13	KS-16645, L1	1	20KΩ
R14	KS-20616, L1A	1	90.9KΩ
R15	KS-20616, L1A	1	7.5KΩ
R16	KS-20616, L1A	1	750Ω
R17	KS-20616, L1A	1	11KΩ
R18	KS-20616, L1A	1	5.62KΩ
R19	KS-16645, L2	1	470Ω
R20	KS-20616, L1A	1	5.11KΩ
R21	KS-16645, L2	1	12Ω
[2] R22, R23	KS-16645, L2	2	39Ω
R24	KS-16645, L2	1	1.8KΩ

TRANSFORMER

DESIG	CODE	QTY	VALUE
[2] T1, T2	2594B	2	

TRANSISTOR

DESIG	CODE	QTY	VALUE
[25] Q1-Q25	518	25	
[6] Q26-Q31	518	6	
[3] Q32-Q34	518	3	
[3] Q35-Q37	664E	3	

FC181 CIRCUIT PACK

BELL TELEPHONE LABORATORIES INCORPORATED

CPS-FC181 SHEET 4

ISSUE 2A1

DATE 65