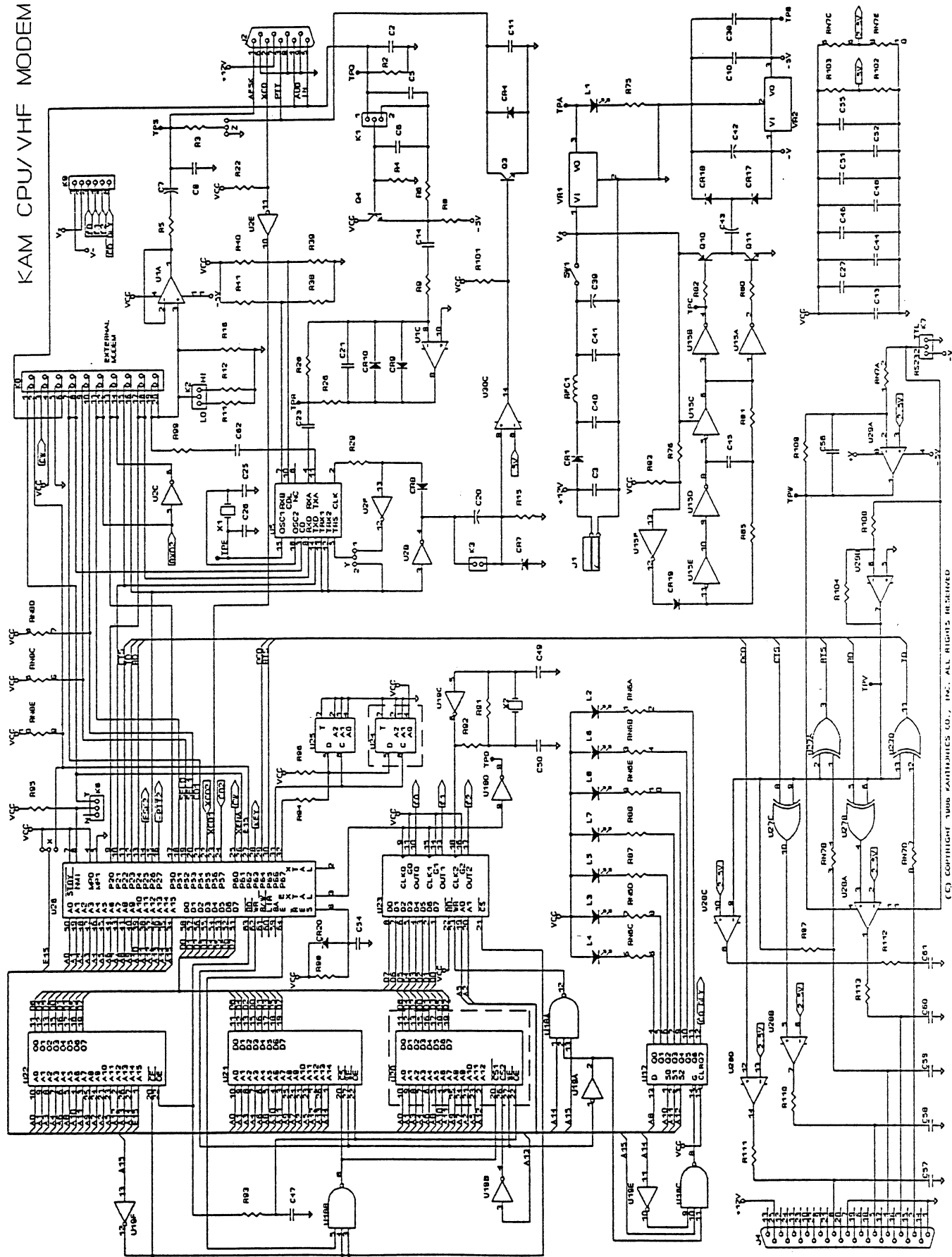
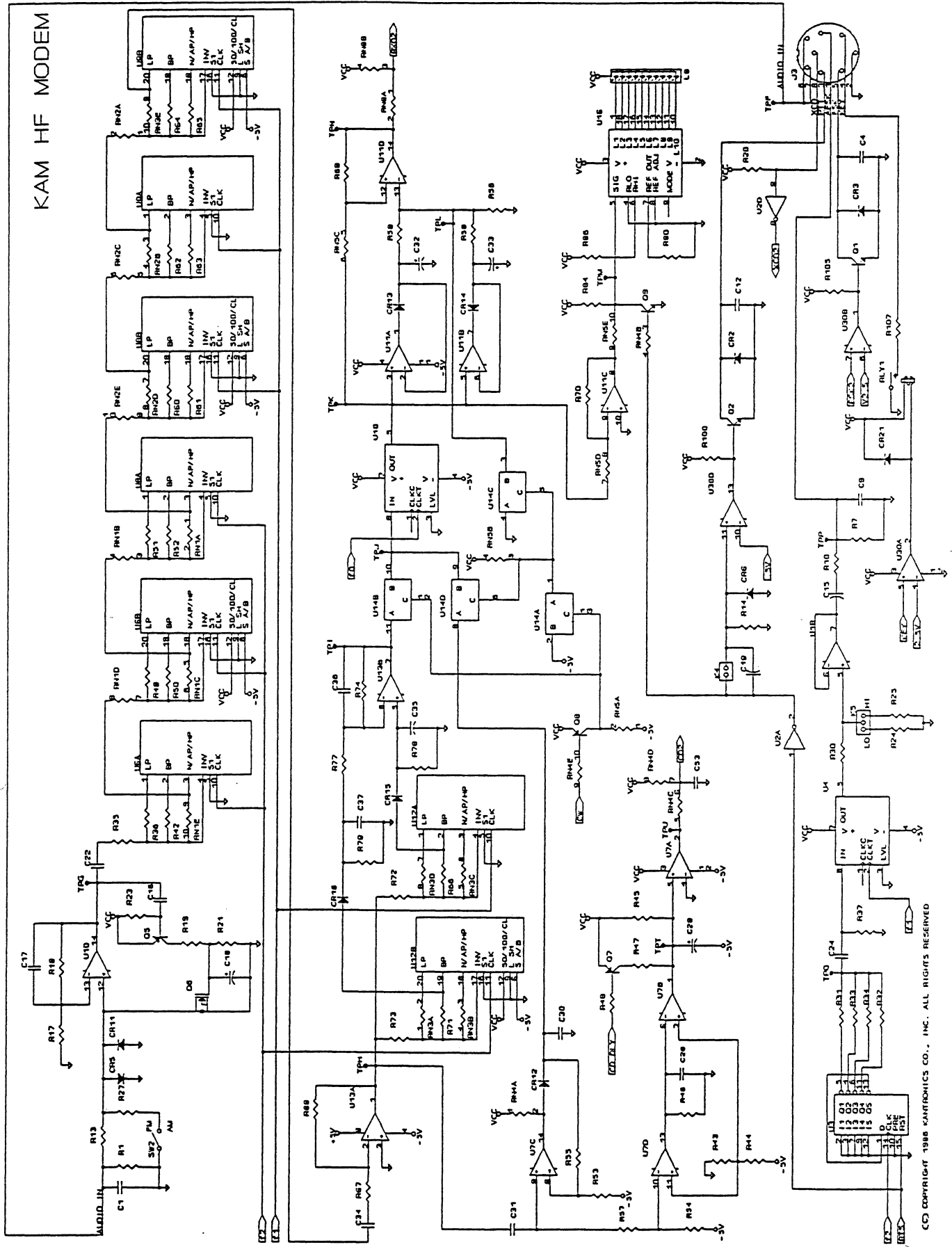
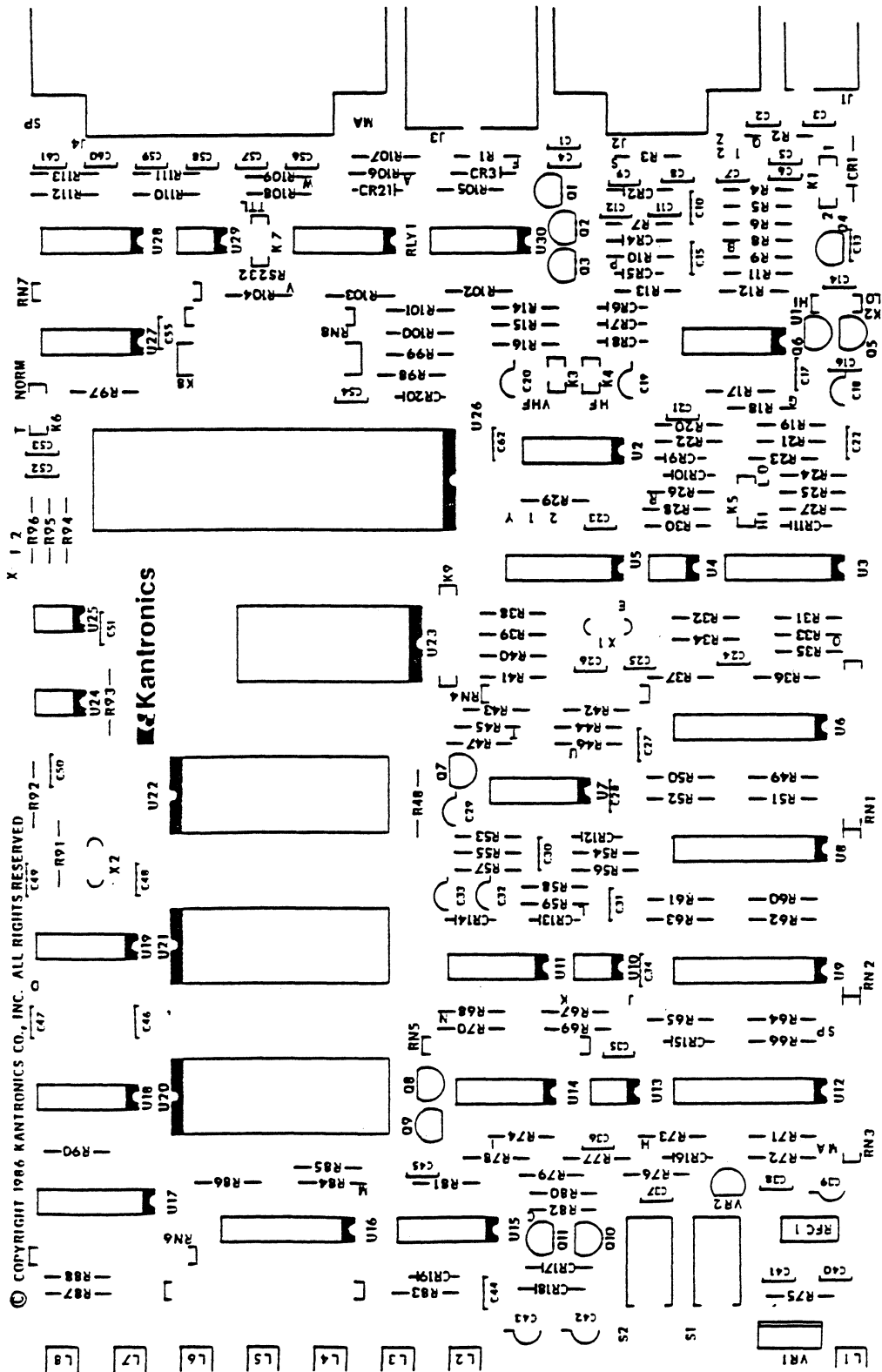


# KAM CPU/VHF MODEM



# KAM HF MODEM





**Kantronics**

# KAM Parts List

C1 - .01uf	C54 - .1uf	L6 - GREEN
C2 - .01uf	C55 - .1uf	L7 - GREEN
C3 - .1uf	C56 - .01uf	L8 - RED
C4 - .001uf	C57 - .001uf	
C5 - .001uf	C58 - .001uf	Q1 - PN2222
C6 - .001uf	C59 - .001uf	Q2 - PN2222
C7 - 1uf Alum	C60 - .001uf	Q3 - PN2222
C8 - .001uf	C61 - .001uf	Q4 - PN2222
C9 - .001uf	C62 - .1uf	Q5 - PN2907A
C10 - .1uf		Q6 - 2N7000
C11 - .001uf	CR1 - 1N4003	Q7 - PN2907A
C12 - .001uf	CR2 - 1N4003	Q8 - PN2907A
C13 - .1uf	CR3 - 1N4003	Q9 - PN2222
C14 - .1uf	CR4 - 1N4003	Q10 - PN2907A
C15 - 1uf Alum	CR5 - 1N914	Q11 - PN2222
C16 - .1uf	CR6 - 1N914	
C17 - .001uf	CR7 - 1N914	R1 - 620
C18 - 1 uf Alum	CR8 - 1N914	R2 - 620
C19 - 47uf Alum	CR9 - 1N914	R3 - 10K
C20 - 47uf Alum	CR10 - 1N914	R4 - 100K
C21 - .001uf	CR11 - 1N914	R5 - 620
C22 - .1uf	CR12 - 1N914	R6 - 47K
C23 - .1uf	CR13 - 1N914	R7 - 10K
C24 - .01uf	CR14 - 1N914	R8 - 4.7K
C25 - 20pf	CR15 - 1N914	R9 - 6.8K
C26 - 20pf	CR16 - 1N914	R10 - 620
C27 - .1uf	CR17 - 1N4003	R11 - 220
C28 - .1uf	CR18 - 1N4003	R12 - 1K
C29 - 1uf Alum	CR19 - 1N914	R13 - 100K
C30 - .01uf	CR20 - 1N914	R14 - 1M
C31 - .01uf	CR21 - 1N914	R15 - 1M
C32 - 4.7uf Alum		R16 - 1M
C33 - 4.7uf Alum	J1 - 2.5 mm Barrel	R17 - 470
C34 - .01uf	J2 - 9 Pin - D	R18 - 47K
C35 - .01uf	J3 - 8 Pin Din	R19 - 2.2K
C36 - 330pf	J4 - 25 Pin - D	R20 - 10K
C37 - .01uf		R21 - 1M
C38 - .1uf	K1 - 3 Pin	R22 - 10K
C39 - 10uf Tant	K2 - 3 Pin	R23 - 10K
C40 - .1uf	K3 - 2 Pin	R24 - 1.5K
C41 - .1uf	K4 - 2 Pin	R25 - 10K
C42 - 10uf 50V Alum	K5 - 3 Pin	R26 - 6.8K
C43 - 10uf 50V Alum	K6 - 3 Pin	R27 - 15K
C44 - .1uf	K7 - 3 Pin	R28 - 15K
C45 - .001uf	K8 - 20 Pin	R29 - 10K
C46 - .1uf	K9 - 6 Pin	R30 - 22K
		R31 - 150K
C48 - .1uf	L1 - GREEN	R32 - 150K
C49 - 25pf	L2 - GREEN	R33 - 100K
C50 - 33pf	L3 - GREEN	R34 - 100K
C51 - .1uf	L4 - GREEN	R35 - 2.7K
C52 - .1uf	L5 - RED	R36 - 1.2K

## KAM PARTS LIST

R37 - 15K  
 R38 - 10K MF  
 R39 - 33K  
 R40 - 9.1K  
 R41 - 8.45K MF  
 R42 - 2.7K  
 R43 - 22K  
 R44 - 10K  
 R45 - 680K  
 R46 - 620K  
 R47 - 220K  
 R48 - 10K  
 R49 - 5.1K  
 R50 - 15K  
 R51 - 9.53K MF  
 R52 - 82K  
 R53 - 220K  
 R54 - 100K  
 R55 - 150K  
 R56 - 150K  
 R57 - 150K  
 R58 - 33K  
 R59 - 33K  
 R60 - 2.7K  
 R61 - 1.2K  
 R62 - 15K  
 R63 - 5.1K  
 R64 - 82K  
 R65 - 9.53K MF  
 R66 - 68K  
 R67 - 47K  
 R68 - 100K  
 R69 - 150K  
 R70 - 22K  
 R71 - 68K  
 R72 - 100K  
 R73 - 100K  
 R74 - 1M  
 R75 - 220  
 R76 - 180K  
 R77 - 100K  
 R78 - 100K  
 R79 - 100K  
 R80 - 2.2K  
 R81 - 22K  
 R82 - 2.2K  
 R83 - 100K  
 R84 - 9.1K  
 R85 - 100K  
 R86 - 2.2K  
 R87 - 220  
 R88 - 220  
  
 R90 - 620  
 R91 - 1M

R92 - 2.2K  
 R93 - 1K  
 R94 - 2.2K  
 R95 - 10K  
 R96 - 100K  
 R97 - 6.8K  
 R98 - 100K  
 R99 - 33K  
 R100 - 1K  
 R101 - 1K  
 R102 - 10K  
 R103 - 100K  
 R104 - 51K  
 R105 - 10K  
 R106 - 6.8K  
 R107 - 100  
 R108 - 100K  
 R109 - 120K  
 R110 - 270  
 R111 - 270  
 R112 - 6.8K  
 R113 - 270

RFC1- 10uh

S1 - PUSH PUSH  
 S2 - PUSH PUSH

U1 - MC34074  
 U2 - 74HC04  
 U3 - 4018  
 U4 - MF4CN  
 U5 - TCM3105  
 U6 - MF10CN  
 U7 - LM339  
 U8 - MF10CN  
 U9 - MF10CN  
 U10 - MF4CN  
 U11 - LM324  
 U12 - MF10CN  
 U13 - LM358  
 U14 - 4066  
 U15 - 4069  
 U16 - LM3914  
 U17 - 74HC259  
 U18 - 74HC10  
 U19 - 74HC04  
 U20 - SPARE  
 U21 - 42832  
 U22 - 27C256  
 U23 - 71054  
 U24 - SPARE  
 U25 - X2404  
 U26 - 63B03X  
 U27 - 4070

U28 - MC34074  
 U29 - LM358  
 U30 - LM339  
  
 VR1 - 78M05 +5v Reg  
 VR2 - 79L05 -5v Reg  
  
 RN1 - 10K  
 RN2 - 10K  
 RN3 - 10K  
 RN4 - 10K  
 RN5 - 10K  
 RN6 - 220K  
 RN7 - 100K  
 RN8 - 10K

# Specifications

KAM, KPC-4, KPC-2, KPC-2400, KPC-1

Size: KAM: 1-3/4" x 6" x 9"  
KPC-4, KPC-2, KPC-2400, KPC-1: 1-3/4" x 6" x 8"

Weight: KAM: 2-1/2 lbs.  
KPC-4, KPC-2, KPC-2400, KPC-1: 2-1/4 lbs.

Power Requirements: KAM: 11 VDC to 14 VDC < 300 ma  
KPC-4: 11 VDC to 14 VDC < 200 ma  
KPC-2: 9 VDC to 14 VDC < 250 ma  
KPC-2400: 10 VDC to 15 VDC < 330 ma  
KPC-1: 10 VDC to 14 VDC < 330 ma

Power Plug Polarity: All units: Center pin positive

Watch Dog Timer: KAM, KPC-4, KPC-2400: ~2-1/2 minutes  
(Optional board for other units)

External Carrier Detect (XCD): KAM, KPC-4: Pulldown to ground

External Reset: KPC-4: Pulldown to ground

PTT Output: All units: Open collector, +40 VDC max

FSK Output: KAM HF: Open collector, +40VDC max

Key Output: KAM HF: Reed relay contact rated 0.5A and 300 VDC max  
(100Ω series resistance)

Audio Output:	KAM HF	All Others
Output Drive:	100 mvpp (LO) 500 mvpp (HI) 1.6 vpp (no jump)	10 mvpp (LO) 50 mvpp (HI) 1.7 vpp (no jump) (does not apply to KPC-1)
Output Impedance: (ac coupled)	600 Ω	600 Ω
Audio Input:	KAM HF	All Others
Input Sensitivity:	20 mvpp (FM) 100 mvpp (AM)	20 mvpp
Dynamic Range:	>60 dB	>60 dB
Input Impedance: (unbalanced)	600 Ω	600 Ω
Max Input Voltage:	±12 VDC	±12 VDC

Modes of Operation:  
KAM: Packet, CW, RTTY, ASCII, AMTOR (CCIR 476 and CCIR 625),  
WEFAX, KISS, NAVTEX/AMTEX, Host  
All Others: Packet, WEFAX, KISS, Host

Other Features:  
All units: PBBS, KA-NODE  
KAM, KPC-4: Dual-port with gateway and cross-connect