MOTOROLA

STATION BACKPLANE

MODEL TRN7480A
(Quantar)

1 NET LIST

The listing on the following pages provides"Net List" information for the connectors on both sides of the station backplane board. The example in Figure 1 describes how to interpret the information.

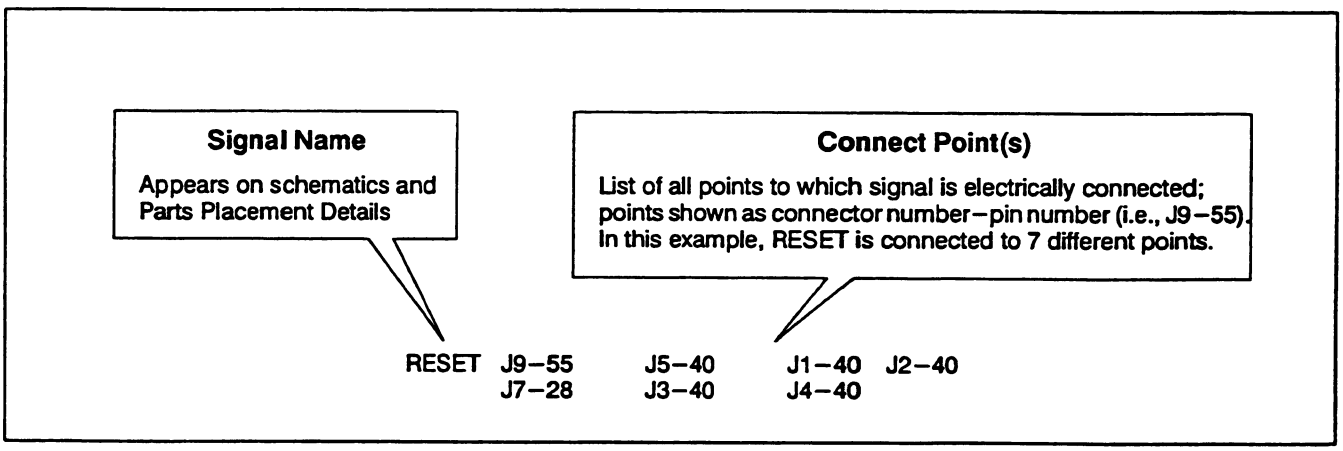

Figure 1. Interpreting Net List Information Example

Land Mobile Products Sector
1301 E. Algonquin Road, Schaumburg, IL 60196

Net List

RCLK3	J8	42	J15	17
LINE1–	J6	2J17	26	
GenTxData–	J6	26		
	J17	34		
AuxOut3	J6	30	J17	38
AuxOut1	J6	28	J17	36
LINE4–	J6	20	J17	29
LINE2–	J6	8	J17	27
AuxIn2(TxInh	J6	58	J17	12
AuxIn6	J6	54	J17	16
AuxOut7rla+	J6	52	J17	18
AuxOut9Rla+	J6	50	J17	20
AuxIn9–opto+	J6	48	J17	22
AuxIn11–opto+	J6	46	J17	24
AuxIn4(RxInh	J6	56	J17	14
RxD1	J8	50	J20	2
CTS1	J8	52	J20	8
LINE3–	J6	14	J17	28
Modem–	J8	1	J17	30
LinePTTDtGCC	J14	10	J8	16
ExtSpare#8	J31	3	J4	12
	J2	12	J5	12
	J3	12	J1	12
ExtSpare#2	J31	9	J4	6
	J2	6	J5	6
	J3	6	J1	6
DATA*1	J2	78	J7	78
DATA*2	J4	78	J7	70
ODC2	J4	75	J7	68
SBI1	J2	76	J7	76
5MHZREF	J4	70	J5	70
	J7	64	J30	1
Modem+	J8	2	J17	5
AGC1	J2	74	J7	74
1PPS	J8	74	J21	1
DLAN2–	J8	12	J18	5
	J18	9		
DLAN1–	J8	10	J19	5
	J19	9		
ETHERNET	J8	78	J22	1
WFI–	J8	8	J18	3
	J18	7	J19	3
	J19	7		
ExtSpare#4	J31	7	J4	8
	J2	8	J5	8
	J3	8	J1	8
ExtSpare#6	J31	5	J4	10
	J2	10	J5	10
	J3	10	J1	10
Async–	J8	56	J20	6
DCD1	J8	54	J20	1

PTT	J14	11	J8	60
MonDet(GCC)	J14	8	J8	20
DataRx(GCC)	J14	7	J8	22
RSSI(GCC)	J14	6	J8	24
CTS3	J8	36	J15	5
RxD3	J8	34	J15	3
RemoteLpback3	J8	44	J15	21
ExtSpare#12	J31	4	J4	16
	J2	16	J5	16
	J3	16	J1	16
ExtSpare#10	J31	2	J4	14
	J2	14	J5	14
	J3	14	J1	14
AuxOut8–Rel–	J6	36	J17	44
AuxOut5	J6	32	J17	40
GenTxData+	J6	64	J17	9
AuxIn12–opto–	J6	44	J17	50
AuxIn1Siteoft	J6	60	J17	11
ExtSpare#16	J32	7	J6	72
ExtSpare#14	J32	9	J6	70
AuxIn8	J6	34	J17	42
AuxOut10–Rel–	J6	40	J17	46
CCI/Monitor	J14	24	J8	64
Mute/PLStrip	J14	23	J8	62
SerialID	U1	2	J8	58
AuxIn10–opto–	J6	42	J17	48
PL+In	J6	62	J17	10
TDMCLOCK	J4	46	J2	46
	J5	46	J7	34
RN1	8J3	46	J1	46
SPARE#4	J4	50	J2	50
	J5	50	J7	38
	J9	60	J3	50
	J1	50		
SPARE#6	J4	52	J2	52
	J5	52	J7	40
	J9	62	J3	52
	J1	52		
TDMFRAMESYNC	J4	44	J2	44
	J5	44	J7	32
RN16	J3	44	J1	44
HDLCBUSY	J4	42	J2	42
	J5	42	J7	30
RN13	J3	42	J1	42
A5	J4	56	J2	56
	J5	56	J7	44
	J3	56	J1	56
	J10	69		
A3	J4	60	J2	60
	J5	60	J7	46
	J3	60	J1	60
	J10	73		

A4	J4	58	J2	58
	J5	58	J7	45
	J3	58	J1	58
	J10	71		
A2	J4	62	J2	62
	J5	62	J7	47
	J3	62	J1	62
	J10	75		
SPIMOSI	J4	38	J2	38
	J5	38	J7	26
	J9	53	J3	38
	J1	38	J10	61
RESET	J4	40	J2	40
	J5	40	J7	28
	J9	55	J3	40
	J1	40	J10	63
SPARE#2	J4	48	J2	48
	J5	48	J7	36
	J9	57	J3	48
	J1	48	J10	65
	J11	61		
A1(CS2)	J4	54	J2	54
	J5	54	J7	42
	J3	54	J1	54
	J10	68		
SPARE#5	J4	51	J2	51
	J5	51	J7	39
	J9	61	J3	51
	J1	51		
XMITSPIREQ	J7	48	J9	65
HST_REQ	J7	50	J9	67
SPARE#1	J4	47	J2	47
	J5	47	J7	35
	J9	56	J3	47
	J1	47	J10	64
	J11	60		
SPARE#3	J4	49	J2	49
	J5	49	J7	37
	J9	58	J3	49
	J1	49	J10	66
	J11	62		
PTTREQ	J7	49	J9	66
SPICLK	J4	39	J2	39
	J5	39	J7	27
	J9	54	J3	39
	J1	39	J10	62
SPIMISO	J4	37	J2	37
	J5	37	J7	25
	J9	52	J3	37
	J1	37	J10	60
AMUXCTRL	J9	48	J11	58
X3MUX	J9	46	J11	56
X2MUX	J9	44	J11	54
X1MUX	J9	42	J11	52
FAN_ON	J9	38	J11	48
FINALA_TUNE1	J9	36	J11	46
DRIVERA_TUNE1	J9	34	J11	44

VfinalREFLEC	J9	22	J11	39
PATEMP	J9	20	J11	37
TX16.8MHZREF	J4	66	J5	66
	J7	56	J9	70
VCOAUDIO	J7	60	J9	78
28V	J9	4	J10	4
	J10	5	J10	6
	J10	7	J10	8
	J10	9	J10	10
	J10	11	J10	12
	J10	13	J10	14
	J10	15	J11	4
	J11	5		
28V	J11	6	J11	7
	J11	8	J11	9
	J11	10	J11	11
	J11	12	J11	13
	J11	14	J11	15
Vcontrol	J9	15	J9	16
	J9	17	J9	18
	J11	32	J11	33
	J11	34	J11	35
ANTRYKEYEDA+	J9	31	J23	2
	J27	8		
EXTWMVr	J9	26	J27	3
EXTCircTemp	J9	28	J27	5
EXTI/O1	J9	32	J27	6
RxAudio	J14	22	J4	17
	J2	17	J5	17
	J8	68	J3	17
	J1	17		
ETHERNETISOGD	J8	76	J8	80
	J22	2	J22	3
	J22	4	J22	5
5V	J31	8	J4	27
	J4	28	J4	29
	J4	30	J4	31
	J4	32	J4	33
	J4	34	J2	27
	J2	28	J2	29
	J2	30	J2	31
	J2	32		
5V	J2	33	J2	34
	J5	27	J5	28
	J5	29	J5	30
	J5	31	J5	32
	J5	33	J5	34
	J7	9	J7	10
	J7	11	J7	12
	J7	13		
5V	J7	14	J7	15
	J7	16	J7	17
	J7	18	J7	19
	J7	20	J7	21
	J7	22	J9	11
	J9	12	J17	8
	J3	27	J3	28
	J3	29		

5V	J3	30	J3	31
	J3	32	J3	33
	J3	34	J1	27
	J1	28	J1	29
	J1	30	J1	31
	J1	32	J1	33
	J1	34	J10	24
	J10	25		
5V	J10	26	J10	27
	J10	28	J10	29
	J10	30	J10	31
	J11	24		
BATTERYTEMP	J24	2	J10	59
GND	J14	9	J14	16
	J14	17	J14	18
	J14	19	J14	20
	J31	1	J31	10
GND	J4	1	J4	2
	J4	3	J4	4
	J4	18	J4	19
	J4	20	J4	21
	J4	35	J4	36
	J4	57	J4	61
	J4	63	J4	64
	J4	67		
GND	J4	68	J4	71
	J4	72	J4	73
	J4	79	J4	80
	J2	1	J2	2
	J2	3	J2	4
	J2	18	J2	19
	J2	20	J2	21
	J2	35		
GND	J2	36	J2	59
	J2	61	J2	63
	J2	64	J2	67
	J2	68	J2	71
	J2	72	J2	73
	J2	79	J2	80
	J5	1	J5	2
	J5	3		
GND	J5	4	J5	18
	J5	19	J5	20
	J5	21	J5	35
	J5	36	J5	57
	J5	59	J5	63
	J5	64	J5	67
	J5	68	J5	71
	J5	72		
GND	J5	73	J5	79
	J5	80	J7	1
	J7	2	J7	3
	J7	4	J7	23
	J7	24	J7	51
	J7	52	J7	53
	J7	54	J7	57
	J7	58		

GND	J7	61	J7	62
	J7	65	J7	66
	J7	72	J7	73
	J7	79	J7	80
	J6	38	J6	53
	J6	79	J6	80
	J8	5	J8	6
	J8	13		
GND	J8	14	J8	26
	J8	27	J8	28
	J8	29	J8	30
	J8	31	J8	38
	J8	45	J8	46
	J8	47	J8	48
	J8	55	J8	65
	J8	66		
GND	J8	70	J8	71
	J8	72	J8	73
	J8	75	J8	77
	J8	79	J18	1
	J15	1	J15	7
	J9	1	J9	2
GND	J9	13	J9	14
	J9	23	J9	24
	J9	29	J9	30
	J9	39	J9	40
	J9	41	J9	50
	J9	51	J9	68
	J9	69	J9	71
	J9	72		
GND	J9	73	J9	74
	J9	75	J9	76
	J9	79	J9	80
	J19	1	J21	2
	J21	3	J21	4
	J21	5	J30	2
	J30	3	J30	4
	J30	5		
GND	J23	1	J23	3
	J17	7	J17	32
	J27	1	J27	9
	J24	1	J24	3
	J20	5	J3	1
	J3	2	J3	3
	J3	4	J3	18
	J3	19		
GND	J3	20	J3	21
	J3	35	J3	36
	J3	57	J3	63
	J3	64	J3	67
	J3	68	J3	71
	J3	72	J3	73
	J3	79	J3	80
	J1	1		
GND	J1	2	J1	3
	J1	4	J1	18
	J1	19	J1	20
	J1	21	J1	35
	J1	36	J1	59
	J1	63	J1	64
	J1	67	J1	68
	J1	71		

GND	J1	72	J1	73
	J1	79	J1	80
	J10	1	J10	2
	J10	3	J10	32
	J10	33	J10	34
	J10	35	J10	36
	J10	37	J10	38
	J10	39		
GND	J10	40	J10	41
	J10	42	J10	43
	J10	44	J10	45
	J10	46	J10	47
	J10	48	J10	49
	J10	50	J10	51
	J10	52	J10	53
	J10	74		
GND	J10	76	J10	77
	J10	78	J11	1
	J11	2	J11	3
	J11	25	J11	26
	J11	27	J11	28
	J11	29	J11	30
	J11	31	J11	40
	J11	41		
GND	J11	42	J11	43
	J11	49	J11	50
	J11	51	J11	63
	J11	64	J11	65
	J11	66	J11	67
	J11	68	J11	69
	J11	70	J11	71
	J11	72		
GND	J11	73	J11	74
	J11	75	J11	76
	J11	77	J11	78
13.8V	J31	6	J4	22
	J4	23	J4	24
	J4	25	J4	26
	J2	22	J2	23
	J2	24	J2	25
	J2	26	J5	22
	J5	23	J5	24
	J5	25		
13.8V	J5	26	J7	5
	J7	6	J7	7
	J7	8	J9	3
	J9	5	J9	6
	J9	7	J9	8
	J9	9	J9	10
	J17	33	J27	10
	J3	22		
13.8V	J3	23	J3	24
	J3	25	J3	26
	J1	22	J1	23
	J1	24	J1	25
	J1	26	J10	16
	J10	17	J10	18
	J10	19	J10	20
	J10	21		

13.8V	J10	22	J10	23
	J11	16	J11	17
	J11	18	J11	19
	J11	20	J11	21
	J11	22	J11	23
LocalIpback3	J8	40	J15	18
AuxIn10−opto+	J6	49	J17	23
AuxOut10R+	J6	51	J17	21
TxPLInhitGCC	J14	5	J8	15
ODC1	J2	75	J7	75
SBI2	J4	76	J7	69
ExtSpare#1	J32	5	J4	5
	J2	5	J5	5
	J3	5	J1	5
ExtSpare#5	J32	1	J4	9
	J2	9	J5	9
	J3	9	J1	9
ExtSpare#7	J32	2	J4	11
	J2	11	J5	11
	J3	11	J1	11
ExtSpare#15	J32	10	J6	71
ExtSpare#13	J32	8	J6	69
DATA2	J4	77	J7	71
AGC2***	J4	74	J7	67
DLAN1+	J8	9	J19	4
	J19	8		
ExtSpare#3	J32	3	J4	7
	J2	7	J5	7
	J3	7	J1	7
LINE4+	J6	19	J17	4
LINE3+	J6	13	J17	3
LINE2+	J6	7	J17	2
LINE1+	J6	1	J17	1
WFI+	J8	7	J18	2
	J18	6	J19	2
	J19	6		
DLAN2+	J8	11	J18	4
	J18	8		
RingIndicator	J8	49	J20	9
TxD1	J8	51	J20	3
RTS1	J8	53	J20	7
Async+	J8	57	J20	4
AUXCarrier	J14	14	J8	61
SeizeRelseGC	J14	4	J8	17
RxMute(GCC)	J14	3	J8	19
DataPTT(GCC)	J14	2	J8	21
DataTx(GCC)	J14	1	J8	23
RXPLDET	J14	15	J8	25
TXData−	J14	21	J8	69
TSTAT/RXCaie	J14	12	J8	59
TXData+/TXAio	J14	13	J8	67
TxD3	J8	33	J15	2
RTS3	J8	35	J15	4
DCD3	J8	39	J15	8
TCLK3	J8	41	J15	15

DTR3	J8	43	J15	20
ExtSpare#9	J32	4	J4	13
	J2	13	J5	13
	J3	13	J1	13
ExtSpare#11	J32	6	J4	15
	J2	15	J5	15
	J3	15	J1	15
PL–In	J6	27	J17	35
AuxOut2(RxCo	J6	29	J17	37
AuxOut4	J6	31	J17	39
AuxOut6	J6	33	J17	41
TXWIDEBANDAIO	J4	69	J2	69
	J5	69	J7	63
	J3	69	J1	69
RX16.8MHZREF	J4	65	J2	65
	J5	65	J7	55
	J3	65	J1	65
AuxOut8Rla+	J6	57	J17	19
AuxIn7	J6	59	J17	17
AuxIn5	J6	63	J17	15
AuxIn3(ExtTx	J6	65	J17	13
AuxIn9–opto–	J6	39	J17	47
AuxOut7–Rela–	J6	35	J17	43
AuxOut9–Rela–	J6	37	J17	45
DATA1	J2	77	J7	77
RSTAT/PahInh	J14	25	J8	63
DSR3	J8	37	J15	6

TDMDATA	J4	45	J2	45
	J5	45	J7	33
RN17	J3	45	J1	45
HDLCCLK	J4	43	J2	43
	J5	43	J7	31
RN1	4J3	43	J1	43
HDLCDATA	J4	41	J2	41
	J5	41	J7	29
RN1	2J3	41	J1	41
SPIGRANT	J7	43	J9	59
A0(CS1)	J4	53	J2	53
	J5	53	J7	41
	J3	53	J1	53
	J10	67		
REFAUDIO	J7	59	J9	77
BMUXCTRL	J9	49	J11	59
Y3MUX	J9	47	J11	57
Y2MUX	J9	45	J11	55
Y1MUX	J9	43	J11	53
FINALA_TUNE2	J9	37	J11	47
DRIVERA_TUNE2	J9	35	J11	45
VfinalFORWARD	J9	19	J11	36
VdriverFOARD	J9	21	J11	38
EXTWMVf	J9	25	J27	2
EXTWMRef	J9	27	J27	4
EXTI/O2	J9	33	J27	7
AuxIn11–opto–	J6	41	J17	49
AuxIn12–opto+	J6	43	J17	25

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2 CONNECTOR PINOUT INFORMATION

Figure 2 shows the backplane board viewed from the rear with all connectors labeled. The tables on the facing page provide pinout information for each corresponding connector.

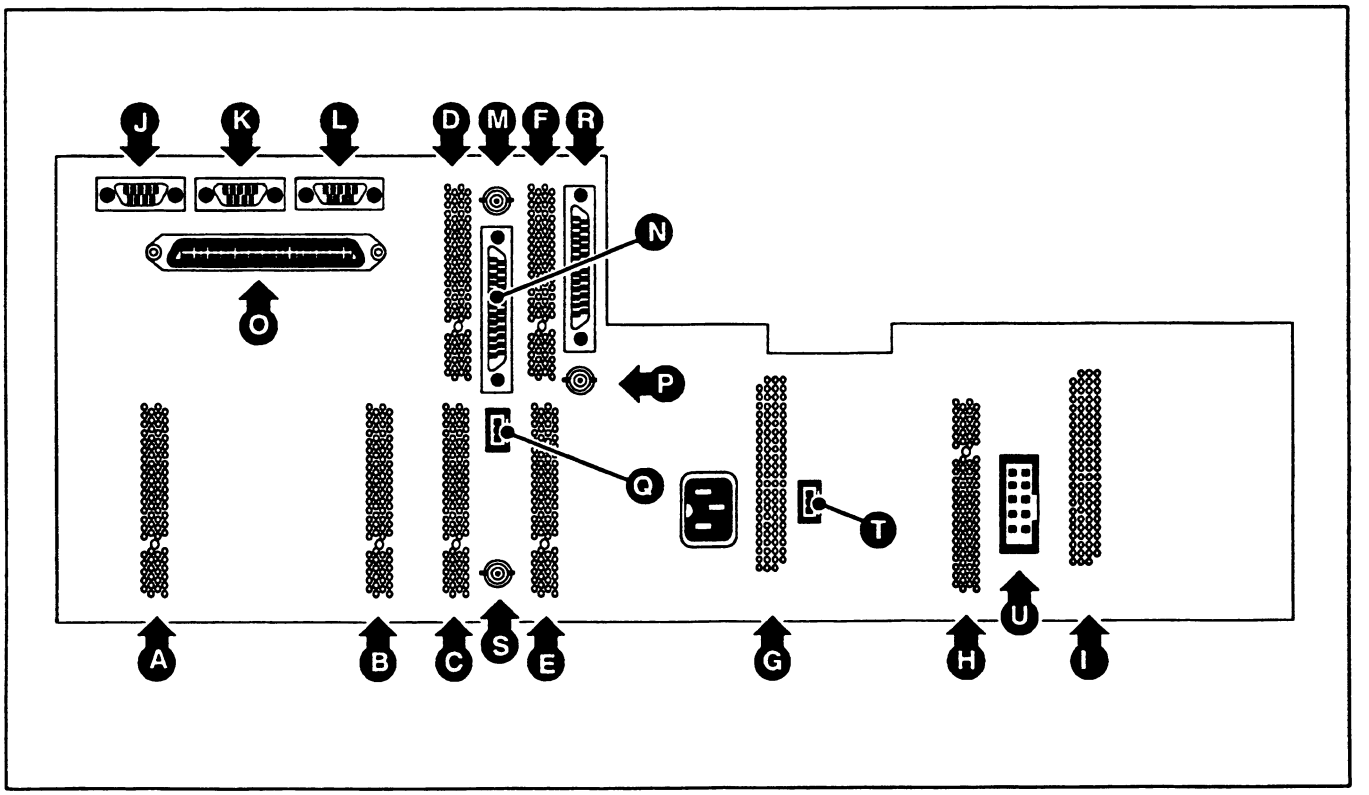

Figure 2. *Quantar* Backplane Connectors

A J2 RECEIVER #1

Pin #	Signal Name
1	GND
2	GND
3	GND
4	GND
5	External Spare #1
6	External Spare #2
7	External Spare #3
8	External Spare #4
9	External Spare #5
10	External Spare #6
11	External Spare #7
12	External Spare #8
13	External Spare #9
14	External Spare #10
15	External Spare #11
16	External Spare #12
17	Rx WIDEBAND AUDIO
18	GND
19	GND
20	GND
21	GND
22	14.2V
23	14.2V
24	14.2V
25	14.2V
26	14.2V
27	5V
28	5V
29	5V
30	5V
31	5V
32	5V
33	5V
34	5V
35	GND
36	GND
37	SPIMISO
38	SPIMOSI
39	SPICLK
40	ALT_RESET
41	HDLC DATA
42	HDLC BUSY
43	HDLC CLK
44	TDM FRAME SYNC
45	TDM DATA
46	TDM CLOCK
47	SPARE #1
48	SPARE #2
49	SPARE #3
50	SPARE #4
51	SPARE #5
52	SPARE #6
53	A0 (CS1)
54	A1 (CS2)
55	OPEN
56	A5
57	GND
58	A4
59	GND
60	A3
61	OPEN
62	A2
63	GND
64	GND
65	RX 2.1 MHZ REF
66	TX 2.1 MHZ REF
67	GND
68	GND
69	TX WIDEBAND AUDIO
70	5 MHZ REF
71	GND
72	GND
73	GND
74	AGC 1
75	ODC 1
76	SBI 1
77	DATA 1
78	DATA *1
79	GND
80	GND

B J4 RECEIVER #2/UHSO

Pin #	Signal Name
1	GND
2	GND
3	GND
4	GND
5	External Spare #1
6	External Spare #2
7	External Spare #3
8	External Spare #4
9	External Spare #5
10	External Spare #6
11	External Spare #7
12	External Spare #8
13	External Spare #9
14	External Spare #10
15	External Spare #11
16	External Spare #12
17	Rx WIDEBAND AUDIO
18	GND
19	GND
20	GND
21	GND
22	14.2V
23	14.2V
24	14.2V
25	14.2V
26	14.2V
27	5V
28	5V
29	5V
30	5V
31	5V
32	5V
33	5V
34	5V
35	GND
36	GND
37	SPIMISO
38	SPIMOSI
39	SPICLK
40	ALT_RESET
41	HDLC DATA
42	HDLC BUSY
43	HDLC CLK
44	TDM FRAME SYNC
45	TDM DATA
46	TDM CLOCK
47	SPARE #1
48	SPARE #2
49	SPARE #3
50	SPARE #4
51	SPARE #5
52	SPARE #6
53	A0 (CS1)
54	A1 (CS2)
55	OPEN
56	A5
57	GND
58	A4
59	GND
60	A3
61	OPEN
62	A2
63	GND
64	GND
65	RX 2.1 MHZ REF
66	TX 2.1 MHZ REF
67	GND
68	GND
69	TX WIDEBAND AUDIO
70	5 MHZ REF
71	GND
72	GND
73	GND
74	AGC 2 ***
75	ODC 2
76	SBI 2
77	DATA 2
78	DATA* 2
79	GND
80	GND

C J5 WIRELINE INTERFACE BOARD

Pin #	Signal Name
1	GND
2	GND
3	GND
4	GND
5	External Spare #1
6	External Spare #2
7	External Spare #3
8	External Spare #4
9	External Spare #5
10	External Spare #6
11	External Spare #7
12	External Spare #8
13	External Spare #9
14	External Spare #10
15	External Spare #11
16	External Spare #12
17	Rx WIDEBAND AUDIO
18	GND
19	GND
20	GND
21	GND
22	14.2V
23	14.2V
24	14.2V
25	14.2V
26	14.2V
27	5V
28	5V
29	5V
30	5V
31	5V
32	5V
33	5V
34	5V
35	GND
36	GND
37	SPIMISO
38	SPIMOSI
39	SPICLK
40	ALT_RESET
41	HDLC DATA
42	HDLC BUSY
43	HDLC CLK
44	TDM FRAME SYNC
45	TDM DATA
46	TDM CLOCK
47	SPARE #1
48	SPARE #2
49	SPARE #3
50	SPARE #4
51	SPARE #5
52	SPARE #6
53	A0 (CS1)
54	A1 (CS2)
55	OPEN
56	A5
57	GND
58	A4
59	GND
60	A3
61	OPEN
62	A2
63	GND
64	GND
65	RX 2.1 MHZ REF
66	TX 2.1 MHZ REF
67	GND
68	GND
69	TX WIDEBAND AUDIO
70	5 MHZ REF
71	GND
72	GND
73	GND
74	OPEN
75	OPEN
76	OPEN
77	OPEN
78	OPEN
79	GND
80	GND

D J6 WIRELINE INTERFACE BOARD

Pin #	Signal Name
1	LINE 1+
2	LINE 1–
3	OPEN
4	OPEN
5	OPEN
6	OPEN
7	LINE 2+
8	LINE 2–
9	OPEN
10	OPEN
11	OPEN
12	OPEN
13	LINE 3+
14	LINE 3–
15	OPEN
16	OPEN
17	OPEN
18	OPEN
19	LINE 4+
20	LINE 4–
21	OPEN
22	OPEN
23	OPEN
24	OPEN
25	OPEN
26	Gen Tx Data + PL–In
27	PL–In
28	Aux Out 1 (Fallsoft Ind)
29	Aux Out 2 (Rx Osc Det)
30	Aux Out 3
31	Aux Out 4
32	Aux Out 5
33	Aux Out 6
34	Aux In 8
35	Aux Out 7 –Relay
36	Aux Out 8 –Relay
37	Aux Out 9 –Relay
38	Gnd
39	Aux In 9 –opto–
40	Aux Out 10 –Relay
41	Aux In 11 –opto–
42	Aux In 10 –opto–
43	Aux In 12 –opto–
44	Aux In 12 –opto–
45	OPEN
46	Aux In 11 –opto+
47	OPEN
48	Aux In 9 –opto+ (Ext PTT)
49	Aux In 10 –opto+
50	Aux Out 9 –Relay
51	Aux Out 10 –Relay
52	Aux Out 7 –Relay
53	GND
54	Aux In 6
55	OPEN
56	Aux In 4 (Rx Inh)
57	Aux Out 8 –Relay
58	Aux In 2 (Tx Inhibit)
59	Aux In 7
60	Aux In 1 (Site Fallsoft)
61	OPEN
62	PL+ In
63	Aux In 5
64	Gen Tx Data–
65	Aux In 3 (Ext Tx Code Det)
66	OPEN
67	OPEN
68	OPEN
69	External Spare #13
70	External Spare #14
71	External Spare #15
72	External Spare #16
73	OPEN
74	OPEN
75	OPEN
76	OPEN
77	OPEN
78	OPEN
79	GND
80	GND

E J7 STATION CONTROL

Pin #	Signal Name
1	GND
2	GND
3	GND
4	GND
5	14.2V
6	14.2V
7	14.2V
8	14.2V
9	5V
10	5V
11	5V
12	5V
13	5V
14	5V
15	5V
16	5V
17	5V
18	5V
19	5V
20	5V
21	5V
22	5V
23	GND
24	GND
25	SPIMISO
26	SPIMOSI
27	SPI CLK
28	ALT_RESET
29	HDLC DATA
30	HDLC BUSY
31	HDLC CLK
32	TDM FRAME SYNC
33	TDM DATA
34	TDM CLOCK
35	SPARE #1
36	SPARE #2
37	SPARE #3
38	SPARE #4
39	SPARE #5
40	SPARE #6
41	A0 (CS1)
42	A1 (CS2)
43	SPI GRANT
44	A5
45	A4
46	A3
47	A2
48	XMIT SPIREQ
49	PTT REQ
50	HOST_REQ
51	GND
52	GND
53	GND
54	GND
55	RX 2.1 MHZ REF
56	TX 2.1 MHZ REF
57	GND
58	GND
59	REF AUDIO
60	VCO AUDIO
61	GND
62	GND
63	TX WIDEBAND AUDIO
64	5 MHZ REF
65	GND
66	GND
67	AGC 2 ***
68	ODC 2
69	SBI 2
70	DATA* 2
71	DATA 2
72	GND
73	GND
74	GND
75	GND
76	SBI 1
77	DATA 1
78	DATA* 1
79	GND
80	GND

F J8 STATION CONTROL

Pin #	Signal Name
1	FUNCTION
2	Modem +
3	Modem –
4	OPEN
5	OPEN
6	GND
7	GND
8	WR+
9	WR–
10	DLAN1+
11	DLAN1–
12	DLAN2+
13	DLAN2–GND
14	GND
15	PL Strip
16	AUX Indicate
17	Monitor
18	OPEN
19	OPEN
20	Patch INH
21	MRTI PTT
22	MRTI Rx Audio
23	MRTI Audio
24	OPEN
25	Rx Carrier
26	GND
27	GND
28	GND
29	GND
30	GND
31	GND
32	Modem Rst
33	TxD3
34	RxD3
35	RTS3
36	CTS3
37	DSR3
38	GND
39	DCD3
40	Local loopback 3
41	TCLK3
42	RCLK3
43	DTR3
44	Remote Loopback 3
45	GND
46	GND
47	GND
48	GND
49	Ring Indicator
50	RxD1
51	TxD1
52	CTS1
53	RTS1
54	DCD1
55	GND
56	DSR1
57	DTR1
58	Serial ID
59	TSTAT
60	PTT
61	SPI MOSI
62	SPI CLK
63	RSTAT
64	CCI
65	GND
66	GND
67	TX Data
68	Rx WIDEBAND AUDIO
69	TX DATA –
70	GND
71	GND
72	GND
73	GND
74	1PPS
75	GND
76	ETHERNET ISOLATED GND
77	GND
78	ETHERNET
79	GND
80	ETHERNET ISOLATED GND

G J10 POWER SUPPLY

Pin #	Signal Name
1	GND
2	GND
3	GND
4	28V
5	28V
6	28V
7	28V
8	28V
9	28V
10	28V
11	28V
12	28V
13	28V
14	28V
15	28V
16	14.2V
17	14.2V
18	14.2V
19	14.2V
20	14.2V
21	14.2V
22	14.2V
23	14.2V
24	5V
25	5V
26	5V
27	5V
28	5V
29	5V
30	GND
31	5V
32	GND
33	GND
34	GND
35	GND
36	GND
37	GND
38	GND
39	GND
40	GND
41	GND
42	GND
43	GND
44	GND
45	GND
46	GND
47	GND
48	GND
49	GND
50	GND
51	GND
52	GND
53	GND
54	OPEN
55	OPEN
56	OPEN
57	OPEN
58	OPEN
59	BATTERY TEMP
60	S/N MISO
61	S/N MOSI
62	SPI CLK
63	ALT RESET
64	SPARE #1
65	SPARE #2
66	SPARE #3
67	A0 (CS1)
68	A1 (CS2)
69	A5
70	OPEN
71	A4
72	OPEN
73	GND
74	GND
75	GND
76	GND
77	REF AUDIO
78	VCO AUDIO
79	GND
80	GND

H J9 Exciter

Pin #	Signal Name
1	GND
2	GND
3	14.2V
4	28V
5	14.2V
6	14.2V
7	14.2V
8	14.2V
9	14.2V
10	14.2V
11	5V
12	5V
13	GND
14	GND
15	V control
16	V control
17	V control
18	V control
19	V Final FORWARD
20	PA TEMP
21	V Driver FORWARD
22	V Final REFLECTED
23	GND
24	GND
25	EXT WM Vf
26	EXT WM Vr
27	EXT WM Ref
28	EXT Circ Temp
29	GND
30	GND
31	ANT RY KEYED A+
32	EXT I/O 1
33	EXT I/O 2
34	DRIVER A_TUNE 1
35	DRIVER A_ TUNE 2
36	FINAL A_ TUNE 1
37	FINAL A_ TUNE 2
38	FAN_ON
39	GND
40	GND
41	GND
42	X1 MUX
43	Y1 MUX
44	X2 MUX
45	Y2 MUX
46	X3 MUX
47	Y3 MUX
48	A MUX CTRL
49	B MUX CTRL
50	GND
51	GND
52	SPIMISO
53	SPIMOSI
54	SPICLK
55	ALT_RESET
56	SPARE #1
57	SPARE #2
58	SPARE #3
59	SPI GRANT
60	SPARE #4
61	SPARE #5
62	SPARE #6
63	OPEN
64	OPEN
65	XMIT SPIREQ
66	PTT REQ
67	HOST_REQ
68	GND
69	GND
70	TX 2.1 MHZ REF
71	GND
72	GND
73	GND
74	GND
75	GND
76	GND
77	GND
78	GND
79	GND
80	GND

I J11 POWER AMPLIFIER

Pin #	Signal Name
1	GND
2	GND
3	GND
4	28V
5	28V
6	28V
7	28V
8	28V
9	28V
10	28V
11	28V
12	28V
13	28V
14	28V
15	28V
16	14.2V
17	14.2V
18	14.2V
19	14.2V
20	14.2V
21	14.2V
22	14.2V
23	14.2V
24	5V
25	GND
26	GND
27	GND
28	GND
29	GND
30	GND
31	GND
32	V CONTROL
33	V CONTROL
34	V CONTROL
35	V CONTROL
36	V FINAL FORWARD
37	PA TEMP
38	V DRIVER FORWARD
39	V FINAL REFLECTED
40	GND
41	GND
42	GND
43	GND
44	DRIVER A TUNE 1
45	DRIVER A TUNE 2
46	FINAL A TUNE 1
47	FINAL A TUNE 2
48	FAN ON
49	GND
50	GND
51	GND
52	X1 MUX
53	Y1 MUX
54	X2 MUX
55	Y2 MUX
56	X3 MUX
57	Y3 MUX
58	A MUX CTRL
59	B MUX CTRL
60	SPARE #1
61	SPARE #2
62	SPARE #3
63	GND
64	GND
65	GND
66	GND
67	GND
68	GND
69	GND
70	GND
71	GND
72	GND
73	GND
74	GND
75	GND
76	GND
77	GND
78	GND

J J20 Async RS232/485

Pin #	Signal Name
1	DCD1
2	GNDRxD1
3	TxD1
4	Async +
5	Signal Gnd
6	Async –
7	RTS1
8	CTS1
9	Ring Indicator

K J18 DLAN1

Pin #	Signal Name
1	Shield Gnd
2	GNDWF1+
3	WR1–
4	DLAN2+
5	DLAN2–
6	WR1+
7	WR1–
8	DLAN2+
9	DLAN2–

L J19 DLAN2

Pin #	Signal Name
1	Shield Gnd
2	GNDWF1+
3	WR1–
4	DLAN1+
5	DLAN1–
6	WR1+
7	WR1–
8	DLAN1+
9	DLAN1–

M J21 1PPS INPUT

Pin #	Signal Name
1	1PPS
2	GND
3	GND
4	GND
5	GND

N J14 6809/MRTI

Pin #	Signal Name
1	MRTI Audio
2	MARTI PTT
3	OPEN
4	Monitor
5	PL Strip
6	Down
7	MRTI Rx Audio
8	Patch INH
9	Gnd
10	AUX Indicate
11	PTT
12	TSTAT
13	Tx Data+
14	OPEN
15	Rx Carrier
16	GND
17	GND
18	GND
19	GND
20	GND
21	Tx Data–
22	Rx WIDEBAND AUDIO
23	MUTE
24	CCI
25	RSTAT

O J17 System 50–Pin Telco

Pin #	Signal Name
1	Line 1 +
2	Line 2+
3	Line 3+
4	Line 4+
5	Modem +
6	Open
7	GND
8	5 VDC Out
9	Gen TX Data +
10	PL + In
11	Aux In 1 (Site Fallsoft)
12	Aux In 2 (TX Inhibit)
13	Aux In 3 (Ext TX Code Det)
14	Aux In 4 (RX Inh)
15	Aux In 5 (Duplex Enable)
16	Aux In 6 (In Cabinet Repeat)
17	Aux In 7 (Channel 4)
18	Aux Out 7
19	Aux Out 8
20	Aux Out 9
21	Aux Out 10
22	Aux In 9 (Ext PTT)
23	Aux In 10 (Channel 1)
24	Aux In 11 (Channel 2)
25	Aux In 12 (Channel 3)
26	Line 1 –
27	Line 2 –
28	Line 3 –
29	Line 4 –
30	Modem –
31	Open
32	GND
33	14.2 VDC Out
34	Gen TX Data –
35	PL IN
36	Aux Out 1 (Fallsoft Ind)
37	Aux Out 2 (RX Code Det)
38	Aux Out 3
39	Aux Out 4
40	Aux Out 5
41	Aux Out 6
42	Aux In 8
43	Aux Out 7 (RD Stat)
44	Aux Out 8
45	Aux Out 9
46	Aux Out 10
47	Aux In 9
48	Aux In 10
49	Aux In 11
50	Aux In 12

*** Isloated from chassis ground**

P J22 ETHERNET In/Out

Pin #	Signal Name
1	ETHERNET
2	gnd*
3	gnd*
4	gnd*
5	gnd*

Q J23 ANTENNA RELAY

Pin #	Signal Name
1	GND
2	ANT RY KEYED A+
3	GND

R J15 SYNC RS232

Pin #	Signal Name
1	Shield Gnd
2	TxD3
3	RxD3
4	RTS3
5	CTS3
6	DSR3
7	Signal Ground
8	DCD3
9	OPEN
10	OPEN
11	OPEN
12	OPEN
13	Local Loopback 3
14	OPEN
15	TCLK3
16	OPEN
17	RCLK3
18	OPEN
19	OPEN
20	DTR3
21	OPEN
22	OPEN
23	OPEN
24	OPEN
25	Remote Loopback 3

S J30 5 MHz REF INPUT

Pin #	Signal Name
1	5 MHz REF
2	GND
3	GND
4	GND
5	GND

T J24 BATTERY TEMPERATURE

Pin #	Signal Name
1	GND
2	BATTERY TEMP
3	GND

U J27 PERIPHERAL TRAY

Pin #	Signal Name
1	14.2V
2	GND
3	ANT RY KEYED A+
4	EXT I/O 2
5	EXT I/O 1
6	EXT CIRC TEMP
7	EXT VWM REF
8	EXT WM VR
9	EXT WM VF
10	GND