

MAINTENANCE MANUAL
 POWER MONITOR MODULE
 FOR SIMULCAST
 19C852218G1

TABLE OF CONTENTS	
	Page
SPECIFICATIONS	1
DESCRIPTION	2
CIRCUIT ANALYSIS	2
OUTLINE DIAGRAM	5
SCHEMATIC DIAGRAM	6
PARTS LIST	7
WIRING LIST	8

SPECIFICATIONS*

FUNCTIONS

- Power Sensor Input Channels 1-20
 - TX## HI
 - TX## LO
- Auxiliary Analog Inputs (spares)
 - AIN+##
- Antenna Power Sensor Input
 - ANT0#F HI
 - ANT0#F LO
 - ANT0#R HI
 - ANT0#R LO
- Digital Control Output
 - DOUT##
- System Reset
 - RESET
- Digital Alarm Outputs
 - DOUT##

CONNECTORS

- J1, J2 and J5
 - Three 25 Pair Telco Connectors
- J3 and J4
 - Two 50 position connectors, double row.
- J6
 - 9-position receptacle assembly
- J7
 - Modular jack (RJ12): 6-position

* These specifications are intended primarily for the use of the service technician. Refer to the appropriate Specifications Sheet in the applicable maintenance manual for the complete specifications.

DESCRIPTION

Power Monitor Interface Module 19C852218G1 for SimulCast is used to collect and route a DC voltage relative to the RF power output for each transmitter of the Simulcast Station throughout an Enhanced Digital Access Communication System (**EDACS™**). This is done through a common 25 pair cable. This module mounts on EDACS Interface Panel 19D904009 (refer to Maintenance Manual LBI-38812) when associated with SimulCast TX Common Equipment cabinets. The Power Monitor Interface Module consists of three (3) 25 pair Telco connectors (J1, J2 and J5, two (2) 50 position connectors (J3 and J4), one (1) DB-9 connector (J6) and one telephone type modular (RJ12) jack (J7).

CIRCUIT ANALYSIS

Connector J1 is a 25 pair connector used for Power Sensor Inputs from transmit channels 1 through 12. On the Power Monitor Interface module circuit board it connects to connectors J2 and J3.

Connector J2 is a 25 pair connector used for Power Sensor Inputs from transmit channels 11-20. On the circuit board J2 connects to connectors J1 and J3 (refer to Schematic Diagram 19D03901).

Connector J3 is a 50 position connector used for the outputs to the Alarm System channels 1 -20. On the circuit board J3 connects to J1 and J2.

Connector J4 is a 50 position connector providing connections from the Power Sensor to the Alarm System. Connector J4 also provides antenna power sensor inputs, digital

control outputs and system reset from the alarm system. On the circuit board J4 connects to connectors J5, J6 and J7.

Connector J5 is a 25 pair connector used for external connections to Digital Alarm Digital outputs. On the circuit board J5 connects to J4, J6 and J7.

Connector J6 is a 9-position connector used for Antenna Power Sensor Inputs. On the circuit board it connects to J4 and J5.

Connector J7 is a 6-position modular jack used for the System Reset from the alarm system to General Electric Trunking Cards (**GETC's**). On the circuit board it connects to J4 and J5

The connecting cables to the Power Monitor Interface Module perform the functions as follows:

- P01** – Brings in transmitter inputs for channels 1 - 12.
- P02** – Brings in transmitter inputs for channels 11 - 20.
- P03** – Provides Power Sensor inputs to the Alarm System.
- P04** – Connects Alarm System antenna inputs and Digital output from the panel.
- P05** – Allows connections to the Digital output of the TX site Alarm System.

NOTE

The "P" numbers listed on the **WIRING LIST** (refer to the Table of Contents) refers to the connectors on the connecting cables, P01, P02, P03, etc.



Ericsson GE Mobile Communications Inc.
Mountain View Road • Lynchburg, Virginia

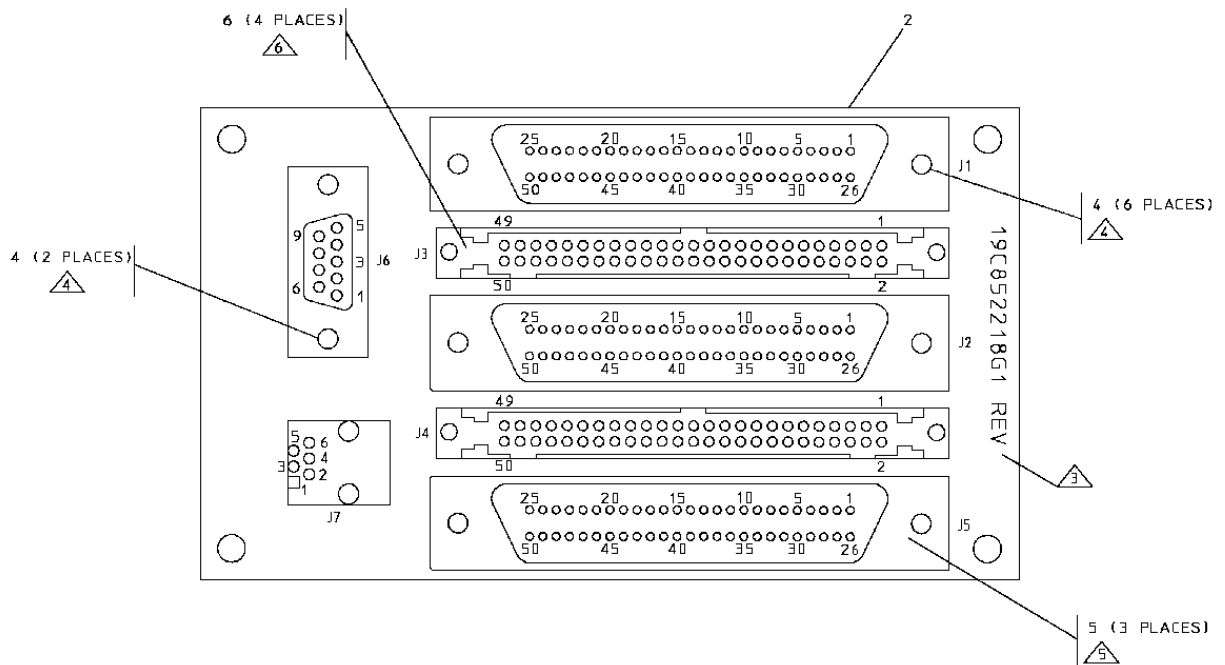
TABLE OF POWER MODULE FOR SIMULCAST CONNECTIONS

FROM	TO	FUNCTION
DC Voltage From The Transmit Sensors		
J1-1	J3-1	TX01-HI
J1-26	J3-2	TX01 LO
J1-3	J3-3	TX02 HI
J1-20	J3-4	TX02 LO
J1-5	J3-5	TX03 HI
J1-30	J3-6	TX03 LO
J1-7	J3-7	TX04 HI
J1-32	J3-8	TX04 LO
J1-9	J3-9	TX05 HI
J1-34	J3-10	TX05 LO
J1-11	J3-11	TX06 HI
J1-36	J3-12	TX06 LO
J1-13	J3-13	TX07 HI
J1-38	J3-14	TX07 LO
J1-15	J3-15	TX08 HI
J1-40	J3-16	TX08 LO
J1-17	J3-17	TX09 HI
J1-42	J3-18	TX09 LO
J1-19	J3-19	TX10 HI
J1-44	J3-20	TX10 LO
J1-21	J3-21	TX11 HI
J1-46	J3-22	TX11 LO
J1-23	J3-23	TX12 HI
J1-48	J3-24	TX12 LO
J2-1	J3-21	TX11 HI
J2-16	J3-22	TX11 LO
J2-3	J3-23	TX12 HI
J2-28	J3-24	TX12 LO
J2-5	J3-25	TX13 HI
J2-30	J3-26	TX13 LO
J2-7	J3-27	TX14 HI
J2-32	J3-28	TX14 LO
J2-9	J3-29	TX15 HI
J2-34	J3-30	TX15 LO
J2-11	J3-31	TX16 HI
J2-36	J3-32	TX16 LO
J2-13	J3-33	TX17 HI
J2-38	J3-34	TX17 LO
J2-15	J3-35	TX18 HI
J2-40	J3-36	TX18 LO
J2-17	J3-37	TX19 HI
J2-42	J3-38	TX19 LO
J2-19	J3-39	TX20 HI
J2-44	J3-40	TX20 LO
Auxiliary Analog Inputs (Spares)		
J4-1	J5-1	AIN+25
J4-2	J5-26	AIN+26
J4-3	J5-2	AIN+27
J4-4	J5-27	AIN+28
J4-5	J5-3	AIN-25
J4-6	J5-28	AIN-26
J4-7	J5-4	AIN-27
J4-8	J5-29	AIN-28

Continued

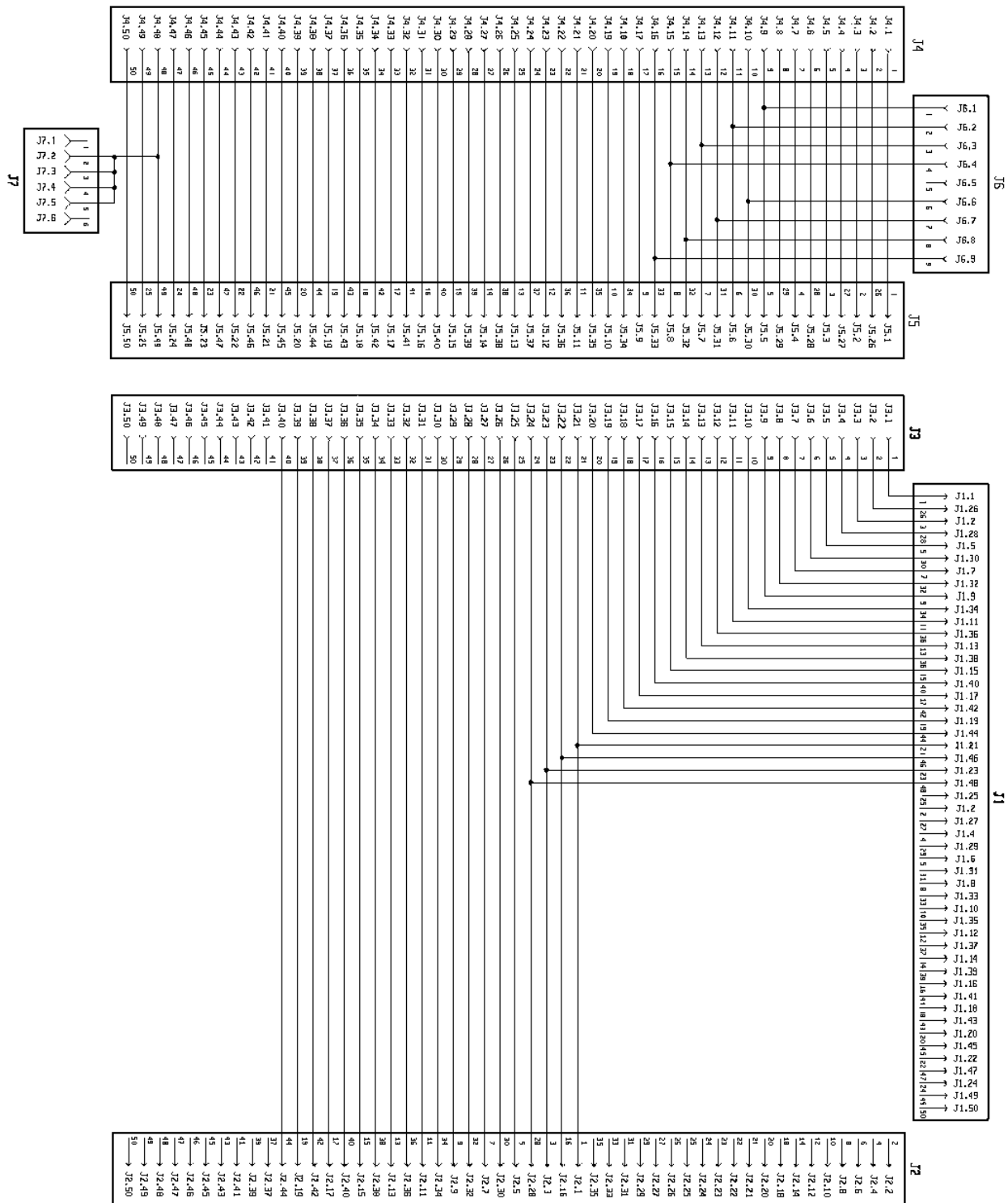
Continued

FROM	TO		FUNCTION
DC Voltage Forward and Reverse Power HI and LO From Antenna			
J4-9 J4-10 J4-11 J4-12 J4-13 J4-14 J4-15 J4-16	J5-5 J5-30 J5-6 J5-31 J5-7 J5-32 J5-8 J5-33	J6-1 J6-6 J6-2 J6-7 J6-3 J6-8 J6-4 J6-9	ANT01F HI ANT01F LO ANT01R HI ANT01R LO ANT02F HI ANT02F HI ANT02R HI ANT02R LO
Digital Outputs From the Alarm System			
J4-17 J4-18 J4-19 J4-20 J4-21 J4-22 J4-23 J4-24 J4-25 J4-26 J4-27 J4-28 J4-29 J4-30 J4-31 J4-32 J4-33 J4-34 J4-35 J4-36 J4-37 J4-38 J4-39 J4-40 J4-41 J4-42 J4-43 J4-44 J4-45 J4-46 J4-47 J4-48 J4-49 J4-50	J5-9 J5-34 J5-10 J5-35 J5-11 J5-36 J5-12 J5-37 J5-13 J5-38 J5-14 J5-39 J5-15 J5-40 J5-16 J5-41 J5-17 J5-42 J5-18 J5-43 J5-19 J5-44 J5-20 J5-45 J5-21 J5-46 J5-22 J5-47 J5-23 J5-48 J5-24 J5-49 J5-25 J5-50	 	



POWER MONITOR MODULE

(19C852218, Rev. 4)
 (19C852217, Component Side, Rev. 2)
 19C852217, Solder Side, Rev. 2)



POWER MONITOR MODULE

(19D903901, Rev. 2)

**POWER MONITOR MODULE
19C852218G1****ISSUE 1**

SYMBOL	PART NUMBER	DESCRIPTION
		— — — — — JACKS — — — — —
J1 and J2	19B800935P14	Two 25 Pair Telco Connectors with Bail Lock
J3 and J4	19B235546P1	Two 50 position connectors, double row; sim to AMP 1-102154-0
J5	19B800935P14	25 Pair Telco Connector with Bail Lock
J6	19B209727P52	9 position receptacle assembly with screw-locks
J7	344A3288P1	Modular jack: 6-position; sim to AMP 520425-3.
		— — — MISCELLANEOUS — — —
2	19C852217P1	Printed Wire Board
4	N80P9004B6	Machine screw: No. 4-40 x 1/4.
5	19B800935P15	Bail Clip
6	19B235546P3	Latch for P1

★ COMPONENTS, ADDED, DELETED OR CHANGED BY PRODUCTION CHANGES

**POWER MODULE FOR SIMULCAST APPLICATION
19C852218G1**

P01 - P02 - P05 25 PAIR CHAMP
P03 - P04 50 PIN HEADERS
P06 DB-9
P07 RJ11 SIX CKTS FOUR LOADED

P04-01	P05-01		AIN+25
P04-03	P05-02		AIN+26
P04-05	P05-03		AIN+27
P04-07	P05-04		AIN+28
P04-02	P05-26		AIN-25
P04-04	P05-27		AIN-26
P04-06	P05-28		AIN-27
P04-08	P05-29		AIN-28
P04-09	P05-05	P06-01	ANT01F HI
P04-10	P05-30	P06-06	ANT01F LO
P04-11	P05-06	P06-02	ANT01R HI
P04-12	P05-31	P06-07	ANT01R LO
P04-13	P05-07	P06-03	ANT02F HI
P04-14	P05-32	P06-08	ANT02F LO
P04-15	P05-08	P06-04	ANT02R HI
P04-16	P05-33	P06-09	ANT02R LO
P04-31	P05-16		DOUT01
P04-32	P05-41		DOUT02
P04-33	P05-17		DOUT03
P04-34	P05-42		DOUT04
P04-35	P05-18		DOUT05
P04-36	P05-43		DOUT06
P04-37	P05-19		DOUT07
P04-38	P05-44		DOUT08
P04-39	P05-20		DOUT09
P04-40	P05-45		DOUT10
P04-41	P05-21		DOUT11
P04-42	P05-46		DOUT12
P04-43	P05-22		DOUT13
P04-44	P05-47		DOUT14
P04-45	P05-23		DOUT15
P04-46	P05-48		DOUT16
P04-17	P05-09		DOUT17
P04-18	P05-34		DOUT18
P04-19	P05-10		DOUT19
P04-20	P05-35		DOUT20
P04-21	P05-11		DOUT21
P04-22	P05-36		DOUT22
P04-23	P05-12		DOUT23
P04-24	P05-37		DOUT24
P04-25	P05-13		DOUT25
P04-26	P05-38		DOUT26
P04-27	P05-14		DOUT27
P04-28	P05-39		DOUT28
P04-29	P05-15		DOUT29
P04-30	P05-40		DOUT30
P04-47	P05-24		DOUT31
P04-49	P05-25		GNDOUT
P04-50	P05-30		GNDOUT

Continued

		P04-48		P07-2	RESET
		P04-48		P07-3	RESET
		P04-48		P07-4	RESET
		P04-48	P05-49	P07-5	RESET
P01-01	P03-01				TX01 HI
P01-26	P03-02				TX01 LO
P01-03	P03-03				TX02 HI
P01-28	P03-04				TX02 LO
P01-05	P03-05				TX03 HI
P01-30	P03-06				TX03 LO
P01-07	P03-07				TX04 HI
P01-32	P03-08				TX04 LO
P01-09	P03-09				TX05 HI
P01-34	P03-10				TX05 LO
P01-11	P03-11				TX06 HI
P01-36	P03-12				TX06 LO
P01-13	P03-13				TX07 HI
P01-38	P03-14				TX07 LO
P01-15	P03-15				TX08 HI
P01-40	P03-16				TX08 LO
P01-17	P03-17				TX09 HI
P01-42	P03-18				TX09 LO
P01-19	P03-19				TX10 HI
P01-44	P03-20				TX10 LO
P01-21	P03-21		P02-01		TX11 HI
P01-46	P03-22		P02-26		TX11 LO
P01-23	P03-23		P02-03		TX12 HI
P01-48	P03-24		P02-28		TX12 LO
	P03-25		P02-05		TX13 HI
	P03-26		P02-30		TX13 LO
	P03-27		P02-07		TX14 HI
	P03-28		P02-32		TX14 LO
	P03-29		P02-09		TX15 HI
	P03-30		P02-34		TX15 LO
	P03-31		P02-11		TX16 HI
	P03-32		P02-36		TX16 LO
	P03-33		P02-13		TX17 HI
	P03-34		P02-38		TX17 LO
	P03-35		P02-15		TX18 HI
	P03-36		P02-40		TX18 LO
	P03-37		P02-17		TX19 HI
	P03-38		P02-42		TX19 LO
	P03-39		P02-19		TX20 HI
	P03-40		P02-44		TX20 LO