

Function of RF Semiconductors & Other Active Devices (Continued)

<u>Schematic Key</u>	<u>Device Type</u>	<u>Circuit Application</u>	<u>Operation Frequency</u>
CONTROL BOARD			
<u>Power Request</u>			
Q14	MMBT3904	TEMP FEEDBACK	DC
Q16	MMBT3904	CUTBCK Switch	DC
U100	MC33074AD	Power LIMITING Threshold	DC
U101	MC33072AD	TEMP FEEDBACK	DC
<u>Alarms</u>			
Q1	MTD2955ET4	FAN Power Switch	DC
Q7	MJD350	Pin Diode Drive	DC
U127	MC33072AD	FAN Control/EEPOT set	DC
U131	74HC132	FAN_ON & VSWR ALARM	DC
U138	LM2901DR2	Pin Diode Drive	DC
U139	LM2901DR2	Circulator Overload/DC	DC
<u>Power Control</u>			
U102	74HC4053	IDLE LOOP CONTROL	DC
U103	MC1495BP	Feedback Loop Gain Control	DC
U104	MC33072AD	Final Gate Control	DC
U106	MC33202D	OVERCURRENT Threshold	DC
U132	74HC02	LATCH Enable OR, SHUTDOWN OR	DC
U133	74HC132	MAJOR / FAN ALARM INVERTER	DC
<u>Gates Drive</u>			
Q13	MMBT3906	+14V Bias Enable Switch	DC
U107	MC33072AD	RF Driver Bias Controller	DC
U111	TL431BID	Regulation of -2.5V reference	DC
<u>EEPOTS and Buffers</u>			
U112	DS1867	V forward & V reverse Gain Adjust	DC
U113	DS1867	RF drive & Power Set Adjust	DC
U114	DS1867	Adjust Gate Bias RF Device 1 & 2	DC
U115	DS1867	Adjust Gate Bias RF Device 3 & 4	DC
U116	DS1867	Adjust Gate Bias RF Device 5 & 6	DC
U117	DS1867	Adjust Gate Bias RF Driver & Thermometer Zero	DC
U118	MC33072AD	VF & VR AMP	DC
U120	MC33072AD	RF_DRIVE AMP	DC
<u>Current Monitoring</u>			
Q5	MMBT3904	Force Over current	DC
Q31	MMBT3906	Overcurrent Alarm OR	DC
U122	MC33204D	Current Sense1	DC
U123	MC33204D	Current Sense Reference	DC
U125	TL431BID	Current Sensors Floating Regulator	DC

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Schematic Key	Device Type	Circuit Application	Operation Frequency
<u>Squaring and VSWR</u>			
U105	MC33072AD	RF_DRIVE SQUARER	DC
U128	MC33072AD	VF & VR SQUARED	DC
U129	MC33074AD	VF & VR SQUARER Break1 & 2	DC
<u>UIP-LED</u>			
Q17	MMBT3904	Battery Alarm	DC
Q19	MMBT3904	LED Driver	DC
Q20	MMBT3904	LED Driver	DC
Q21	MMBT3904	LED Driver	DC
Q22	MMBT3904	LED Driver	DC
Q23	MMBT3904	LED Driver	DC
Q25	MMBT3904	LED Driver	DC
Q26	MMBT3904	LED Driver	DC
Q27	MMBT3904	LED Driver	DC
Q28	MMBT3904	LED Driver	DC
Q29	MMBT3904	Fan Alarm	DC
Q30	MMBT3904	Major Alarm	DC
U108	LM2901DR2	LED Driver	DC
U124	74HC86	Alarm Logic Inverter	DC
U130	MC14025	MAJOR ALARM OR	DC
U141	74HC573ADWR2	LATCH CIRCUIT	DC
U140	74HC08	KEY_UP BUFFER	DC
<u>Thermometer and RF Threshold</u>			
U119	MC33072AD	CELSIUS (Thermometer)	DC
U135	74HC4053	Thermometer Calibration & Divider Bias Selector	DC
U158	LM2901DR2	PIN	DC
<u>Alarm Latch and Fan Alarm</u>			
U134	74HC132	SHUTDOWN Circuit	DC
U136	74HC74	CUTBACK / SHUTDOWN Latch	DC
<u>BIAS</u>			
Q2	MMBT3904	-150V Enable	DC
Q3	MMBT3906	-150V Driver	DC
Q4	MJD350	-150V Switching	DC
U126	MC33076D	-11V CHARGE PUMP	DC
U142	MC33269D-5.0	5V REGULATOR	DC