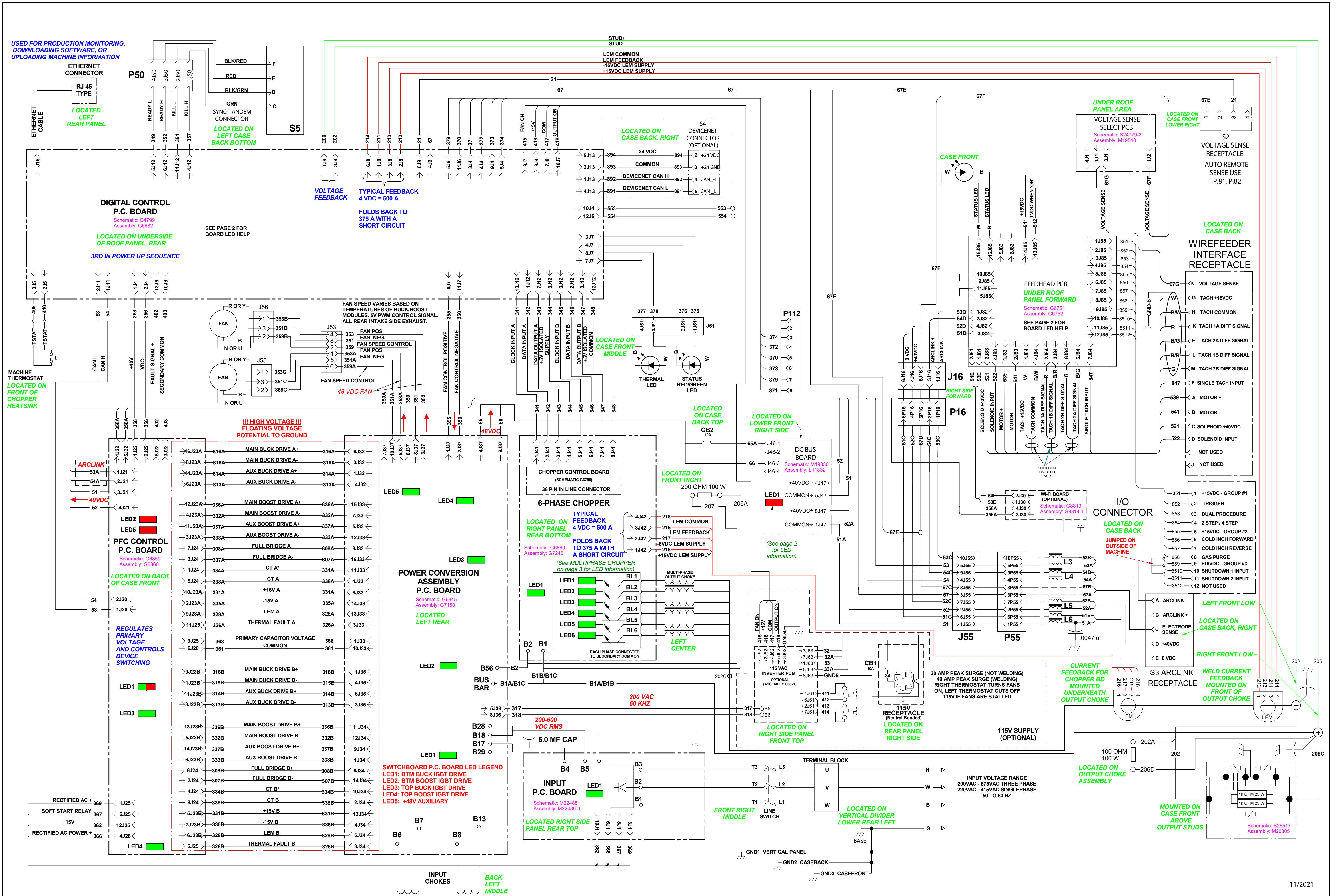
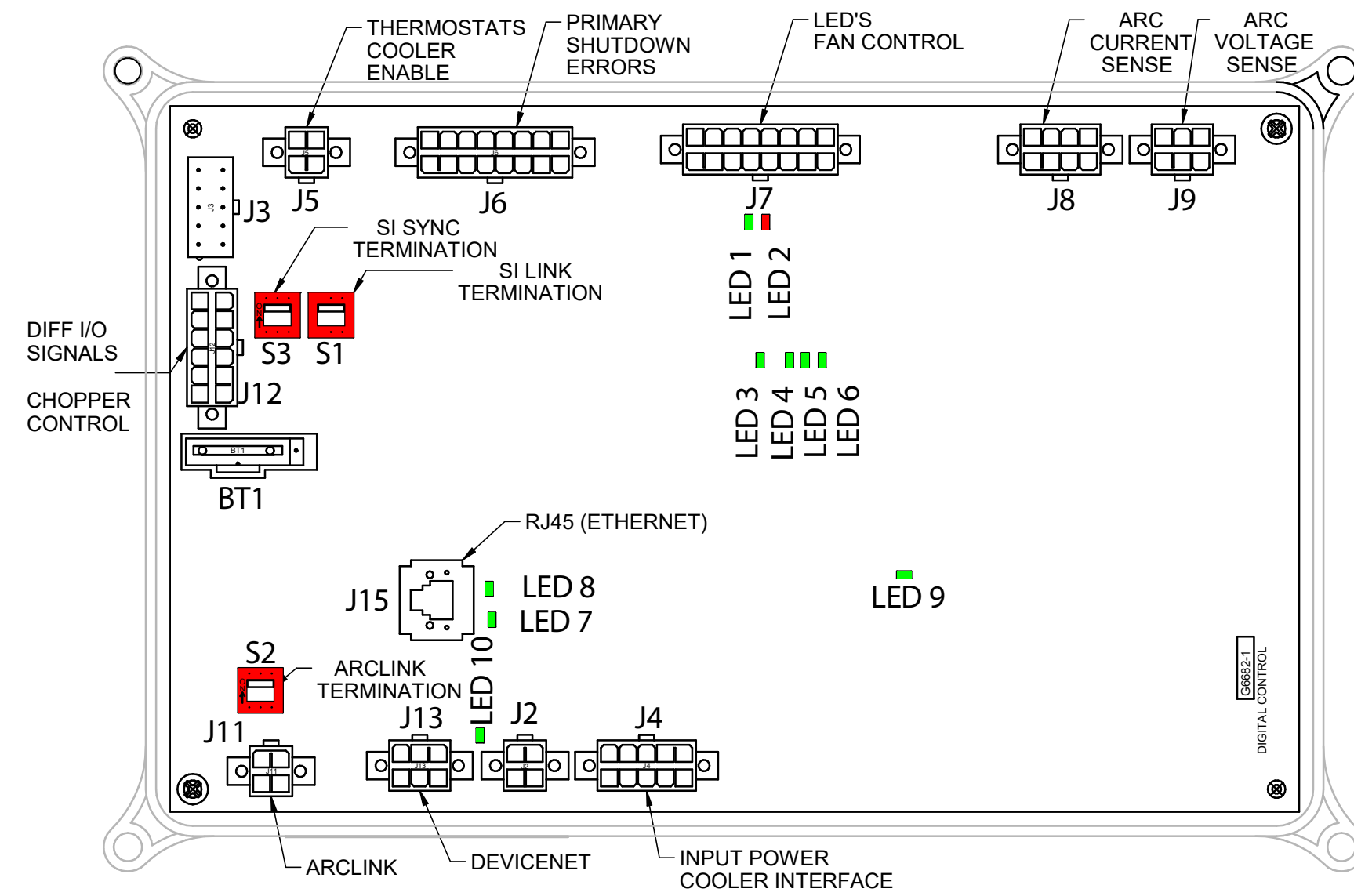


POWER WAVE R450 MACHINE SCHEMATIC G8902 REV: C



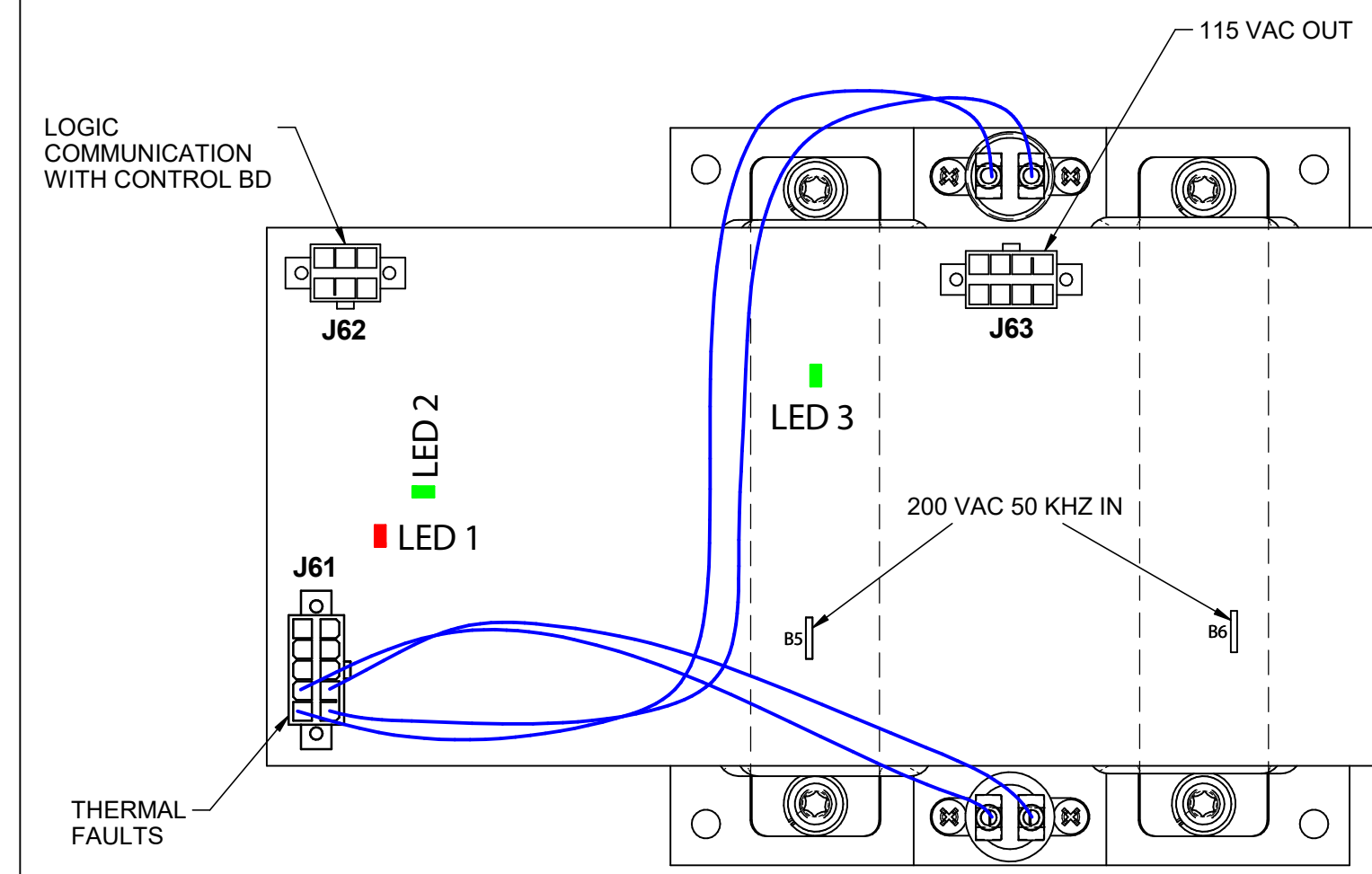
CONTROL P.C. BOARD



Description of LED functions on Power Wave R500 For reference only

G6682 CONTROL P.C. BOARD		
LED #	COLOR	FUNCTION
1	GREEN	STATUS "OK"
2	RED	STATUS "ERROR" (CHECK CODE FOR SPECIFIC ERROR)
3	GREEN	OUTPUT ENABLE
4	GREEN	SINGLE PHASE FAULT
5	GREEN	ELECTRODE SENSE
6	GREEN	WORK SENSE
7	GREEN	ETHERNET LINK/ACTIVITY STATUS
8	GREEN	ETHERNET SPEED STATUS
9	GREEN	INPUT SUPPLY 30 VDC TO 55 VDC
10	GREEN	DEVICENET EXTERNAL 24 VDC PRESENT

115VAC INVERTER P.C. BOARD

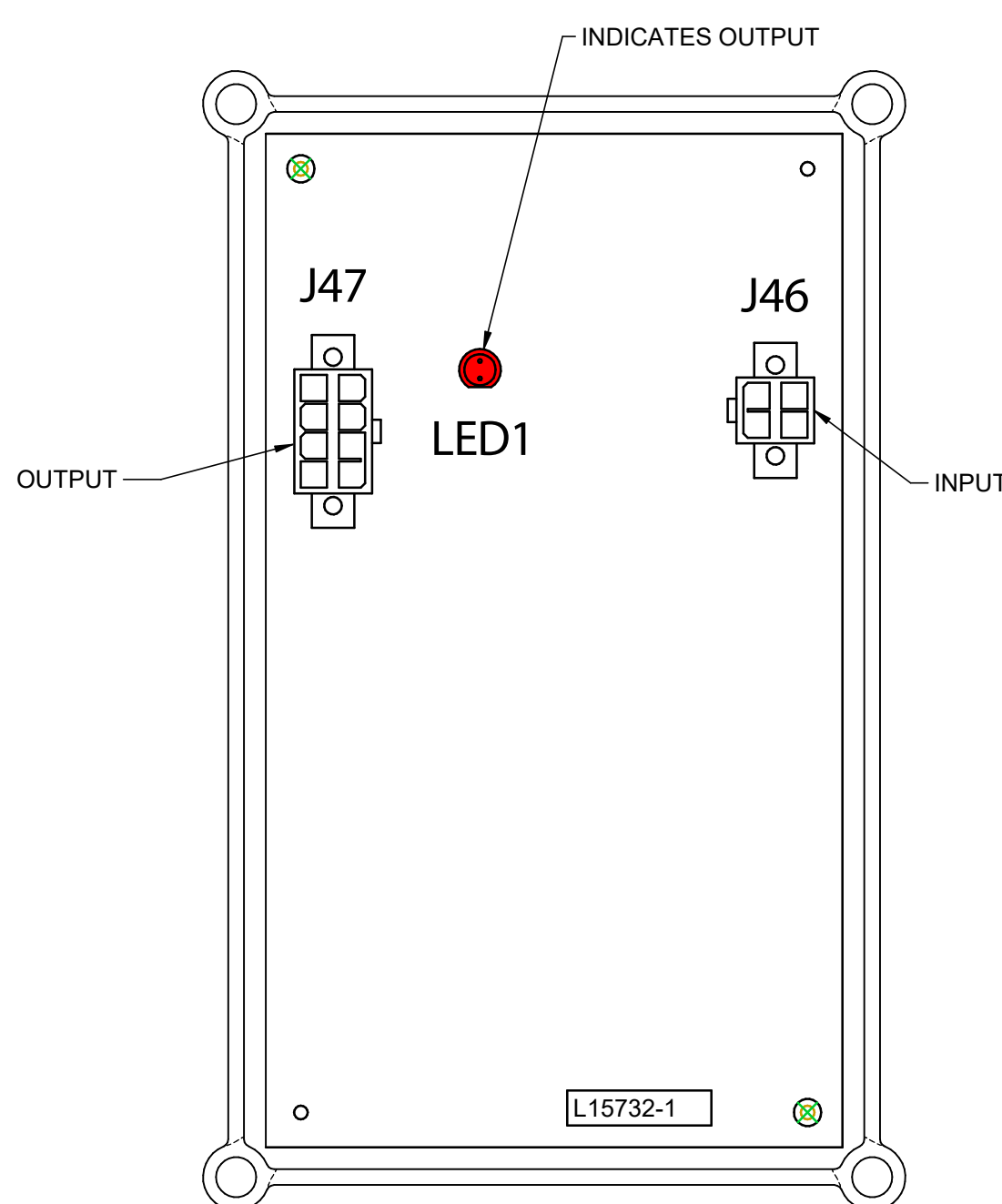


Description of LED functions on Power Wave R500 For reference only

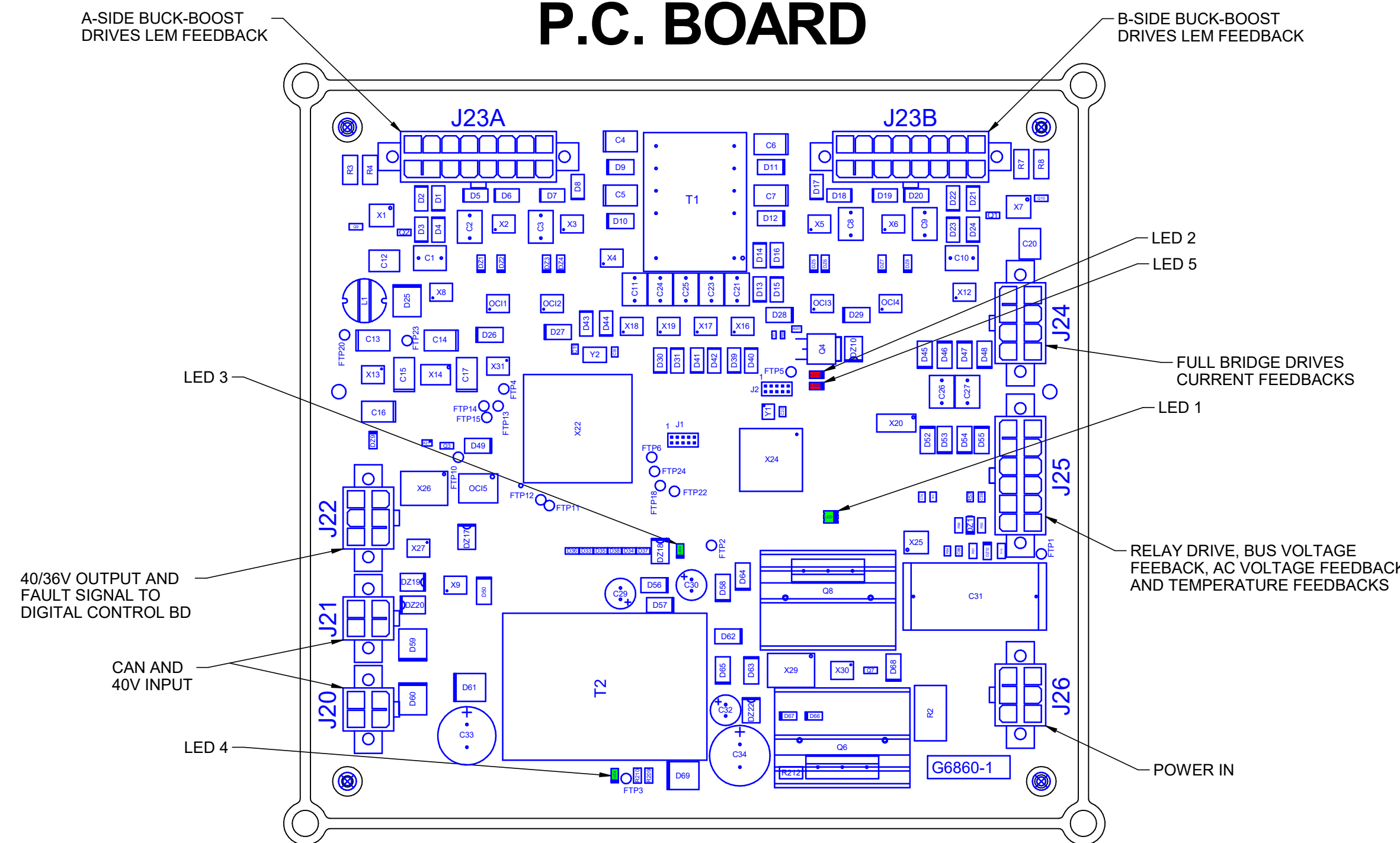
G6571 115 VAC INVERTER P.C. BOARD		
LED #	COLOR	FUNCTION
1	RED	ERROR CODE (LED WILL FLASH ERROR) SEE TABLE BELOW FOR DETAILS
2	GREEN	RECEPTACLE OUTPUT IS ON (115 VAC)
3	GREEN	INPUT POWER PRESENT. POWER SUPPLY ON

ERROR CODE	
ERROR	EXPLANATION
1	GROUND FAULT
2	THERMAL FAULT
3	15V CONTROL UNDERVOLTAGE
4	200V BUS UNDERVOLTAGE
5	OUTPUT OVER CURRENT
6	OUTPUT OVER VOLTAGE

+40 VDC BUS P.C. BOARD



PFC CONTROL P.C. BOARD



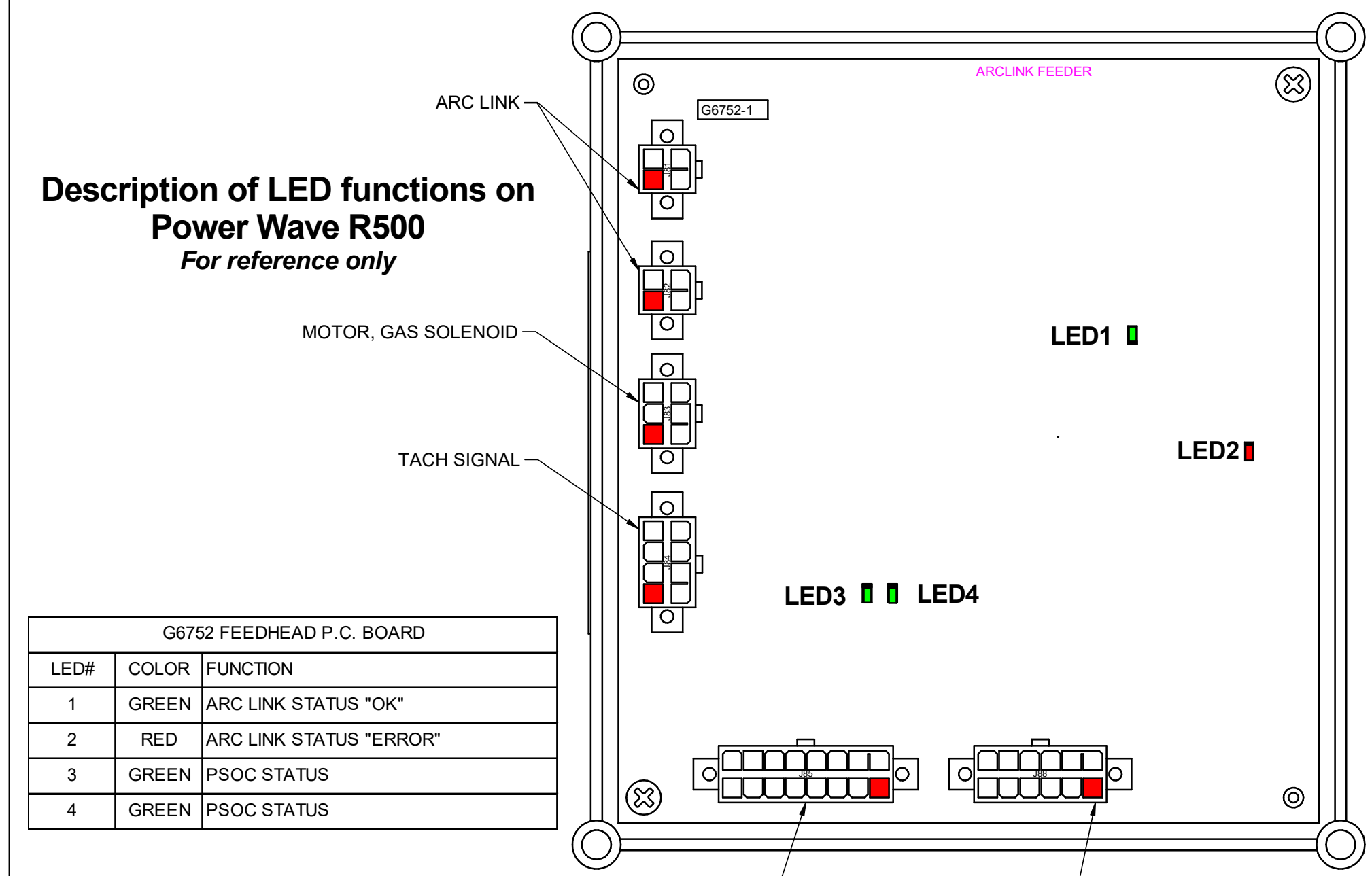
Description of LED functions on Power Wave R500 For reference only

G6860-1 PFC CONTROL P.C. BOARD		
LED #	COLOR	FUNCTION
1	GREEN / RED	STATUS LIGHT AND ERROR CODE (LED WILL FLASH ERROR) SEE TABLE FOR DETAILS
2	RED	FAULT SIDE B
3	GREEN	-15 VOLT PRESENT
4	GREEN	+15 VOLT PRESENT
5	RED	FAULT SIDE A

ERROR CODE	
ERROR	EXPLANATION
331	PEAK INPUT CURRENT LIMIT
334	START UP CURRENT CHECK FAILURE
335	START UP VOLTAGE CHECK FAILURE
336	THERMAL FAULT (NO FIRST STAGE FAN)
337	PRECHARGE TIMEOUT
338	INPUT POWER LIMIT
341	INPUT VOLTAGE DROPOUT
346	TRANSFORMER PRIMARY OVERCURRENT
347	AVERAGE INPUT CURRENT LIMIT
349	BUS UNDERVOLTAGE

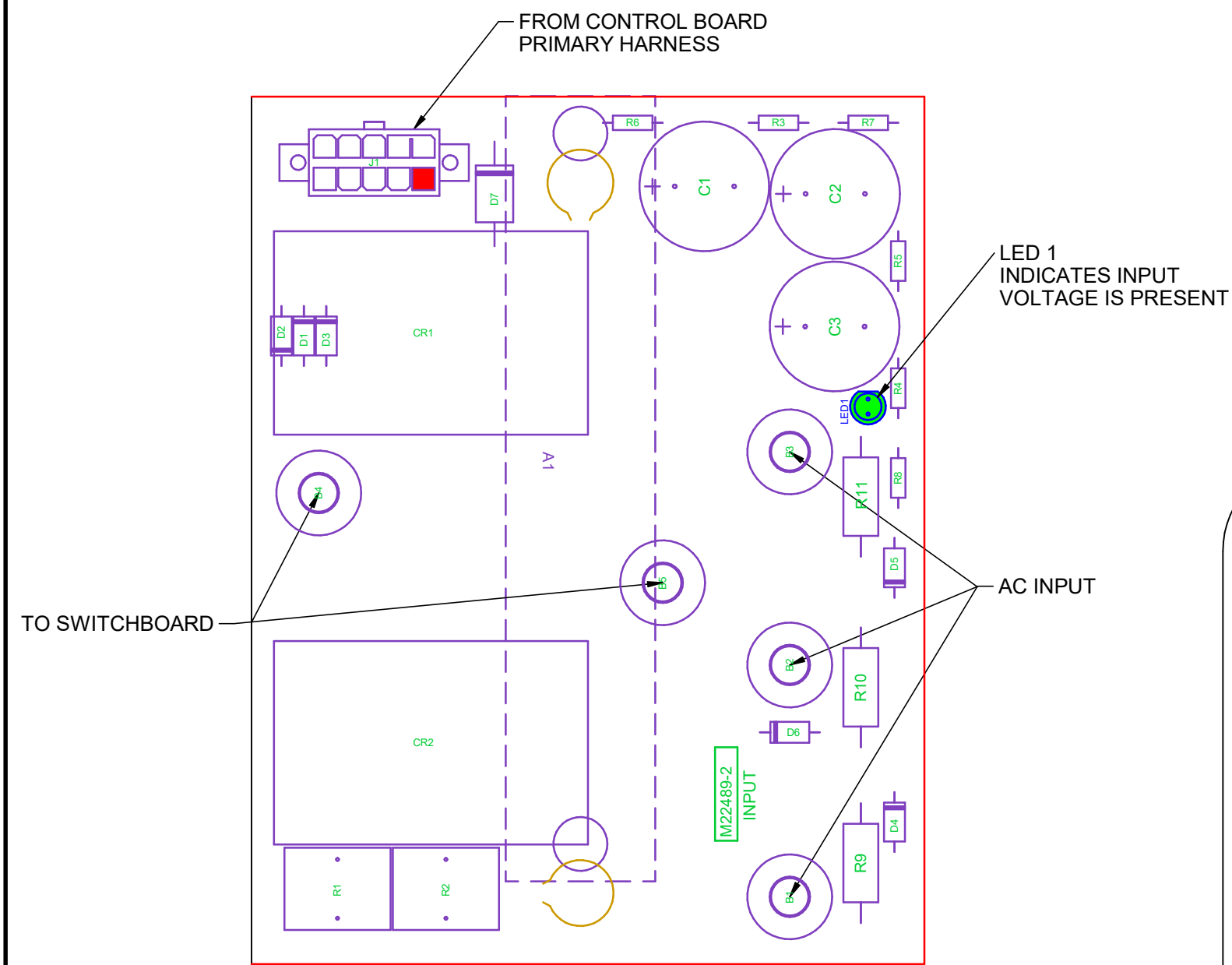
ROBOTIC FEEDHEAD P.C. BOARD

Description of LED functions on Power Wave R500 For reference only

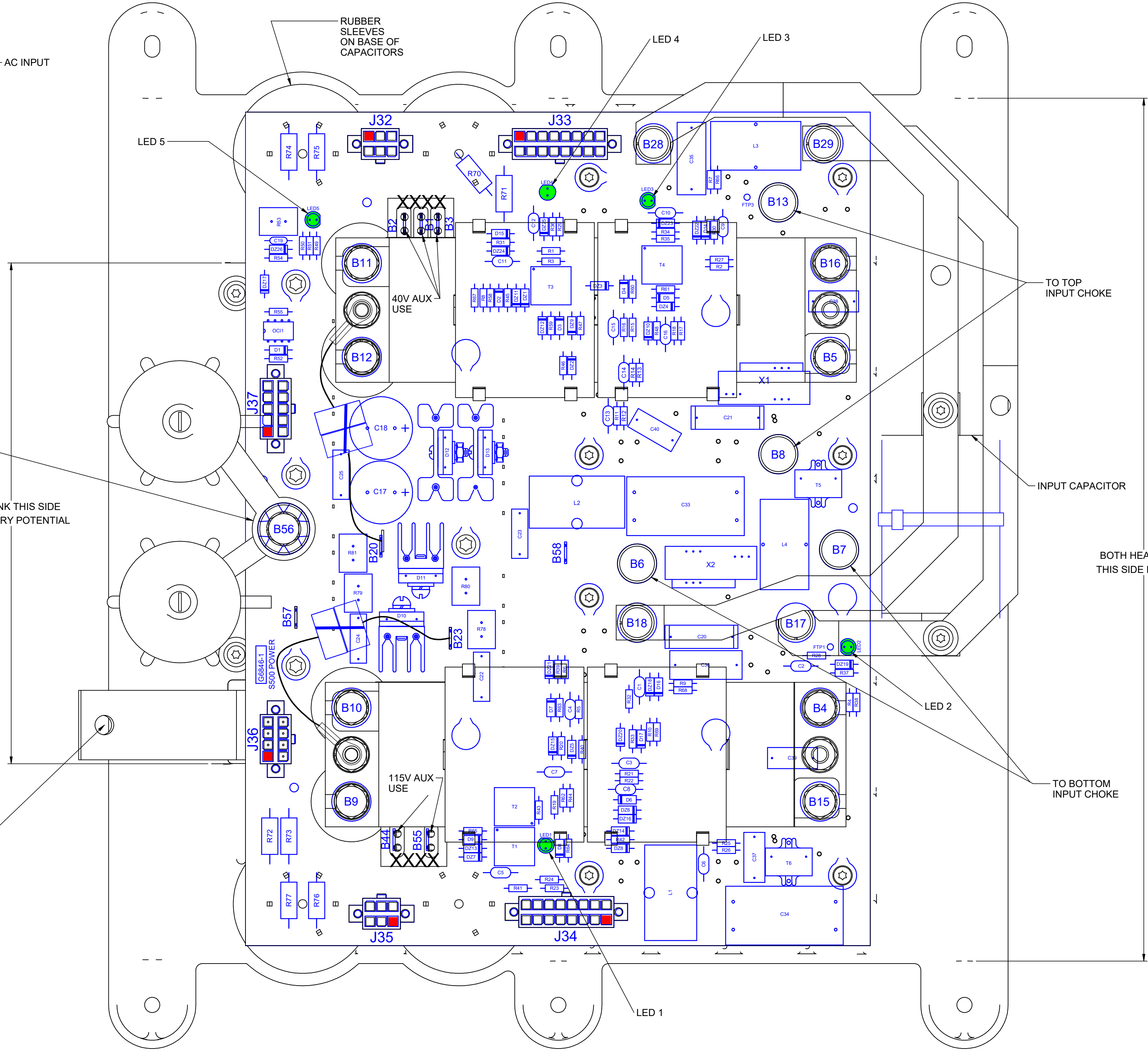


G6752 FEEDHEAD P.C. BOARD		
LED#	COLOR	FUNCTION
1	GREEN	ARC LINK STATUS "OK"
2	RED	ARC LINK STATUS "ERROR"
3	GREEN	PSOC STATUS
4	GREEN	PSOC STATUS

INPUT BOARD

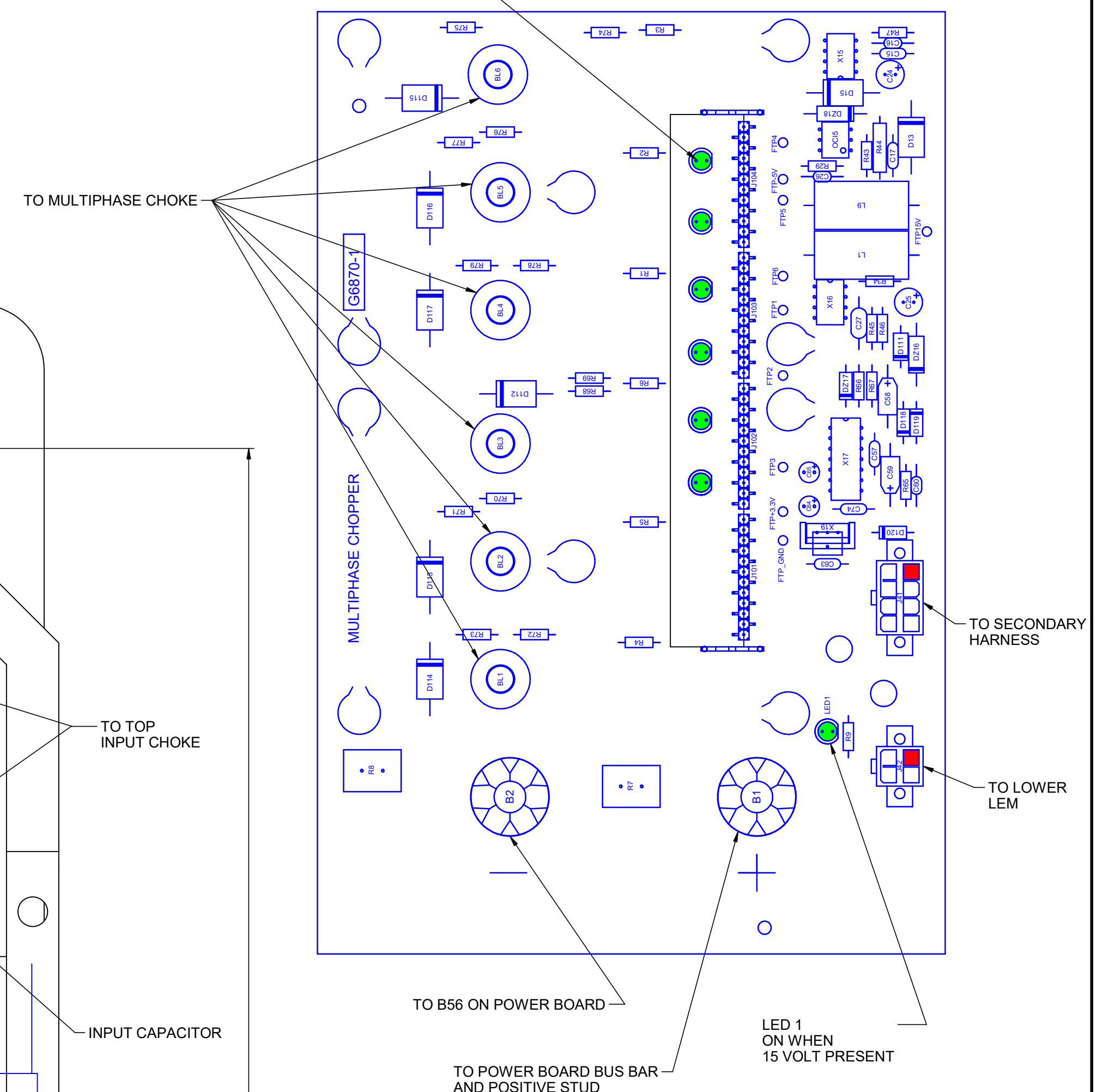


3 STAGE INVERTER SWITCHBOARD P.C. BOARD



MULTIPHASE CHOPPER

LEDS 1-6 ARE LOCATED ON DAUGHTER BOARD, WHICH IS MOUNTED ON AND PERPENDICULAR TO THE CHOPPER, SHOW EACH PHASE THAT IS ACTIVE



Description of LED functions on Power Wave S500
For reference only

G7150 SWITCHBOARD P.C. BOARD		
LED #	COLOR	FUNCTION
1	GREEN	BTM BUCK IGBT DRIVE FUNCTIONING WHEN ON
2	GREEN	BTM BOOST IGBT DRIVE FUNCTIONING WHEN ON
3	GREEN	TOP BUCK IGBT DRIVE FUNCTIONING WHEN ON
4	GREEN	TOP BOOST IGBT DRIVE FUNCTIONING WHEN ON
5	GREEN	48 VDC AUXILIARY POWER FUNCTIONING WHEN ON

■ = MOLEX PIN 1