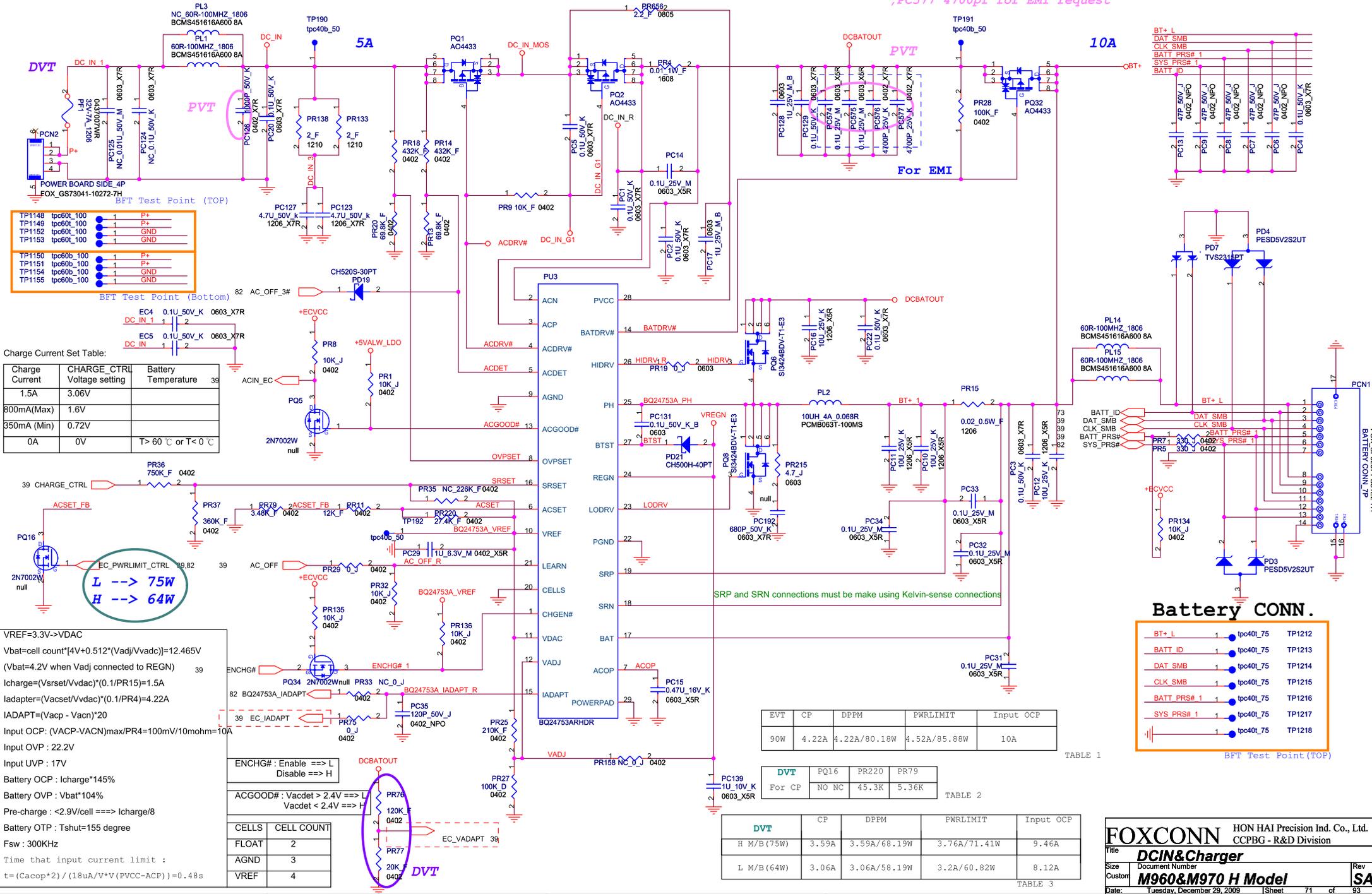


ACP and ACN connections must be make using Kelvin-sense connections

09/11/21 Dcbatout Add PC574 0.1uF,PC575 0.1uF,PC576 4700pF,PC577 4700pF for EMI request



BFT Test Point (TOP)

TP1148	tpc60L_100	1	P+
TP1149	tpc60L_100	1	P+
TP1152	tpc60L_100	1	GND
TP1153	tpc60L_100	1	GND

BFT Test Point (Bottom)

TP1150	tpc60b_100	1	P+
TP1151	tpc60b_100	1	P+
TP1154	tpc60b_100	1	GND
TP1155	tpc60b_100	1	GND

Charge Current Set Table:

Charge Current	CHARGE_CTRL Voltage setting	Battery Temperature
1.5A	3.06V	
800mA(Max)	1.6V	
350mA (Min)	0.72V	
0A	0V	T > 60 °C or T < 0 °C

VREF=3.3V->VDAC
 $V_{bat} = \text{cell count} * [4V + 0.512 * (V_{adj}/V_{vdc})] = 12.465V$
 $(V_{bat} = 4.2V \text{ when } V_{adj} \text{ connected to REGN})$
 $I_{charge} = (V_{rsrset}/V_{vdc}) * (0.1/PR15) = 1.5A$
 $I_{adapter} = (V_{vacset}/V_{vdc}) * (0.1/PR4) = 4.22A$
 $IADAPT = (V_{vacp} - V_{vacn}) * 20$
 Input OCP: $(V_{acp} - V_{vacn}) / \text{max}(PR4) = 100mV / 10m\Omega = 10A$
 Input OVP: 22.2V
 Input UVP: 17V
 Battery OCP: $I_{charge} * 145\%$
 Battery OVP: $V_{bat} * 104\%$
 Pre-charge: $< 2.9V / \text{cell} ==> I_{charge} / 8$
 Battery OTP: $T_{shut} = 155 \text{ degree}$
 Fsw: 300KHz
 Time that input current limit: $t = (C_{acop} * 2) / (18\mu A / V * (V_{PVCC} - ACP)) = 0.48s$

ENCHG#:	Enable ==> L
	Disable ==> H
ACGOOD#:	Vacdet > 2.4V ==> L
	Vacdet < 2.4V ==> H
CELLS	CELL COUNT
FLOAT	2
AGND	3
VREF	4

TABLE 1

EVT	CP	DPPM	PWRLIMIT	Input OCP
90W	4.22A	4.22A/80.18W	4.52A/85.88W	10A

TABLE 2

DVT	CP	DPPM	PWRLIMIT	Input OCP
H M/B(75W)	3.59A	3.59A/68.19W	3.76A/71.41W	9.46A
L M/B(64W)	3.06A	3.06A/58.19W	3.2A/60.82W	8.12A

TABLE 3

DVT	CP	DPPM	PWRLIMIT	Input OCP
H M/B(75W)	3.59A	3.59A/68.19W	3.76A/71.41W	9.46A
L M/B(64W)	3.06A	3.06A/58.19W	3.2A/60.82W	8.12A

Battery CONN.

BT+ L	1	tpc40L_75	TP1212
BATT_ID	1	tpc40L_75	TP1213
DAT SMB	1	tpc40L_75	TP1214
CLK SMB	1	tpc40L_75	TP1215
BATT_PRS#_1	1	tpc40L_75	TP1216
SYS_PRS#_1	1	tpc40L_75	TP1217
	1	tpc40L_75	TP1218

BFT Test Point (TOP)

FOXCONN HON HAI Precision Ind. Co., Ltd.
 CCPBG - R&D Division

Title: **DCIN&Charger**
 Size: Document Number
 Custom: **M960&M970 H Model**
 Date: Tuesday, December 29, 2019 1 Sheet 71 of 93

Rev: **SA**