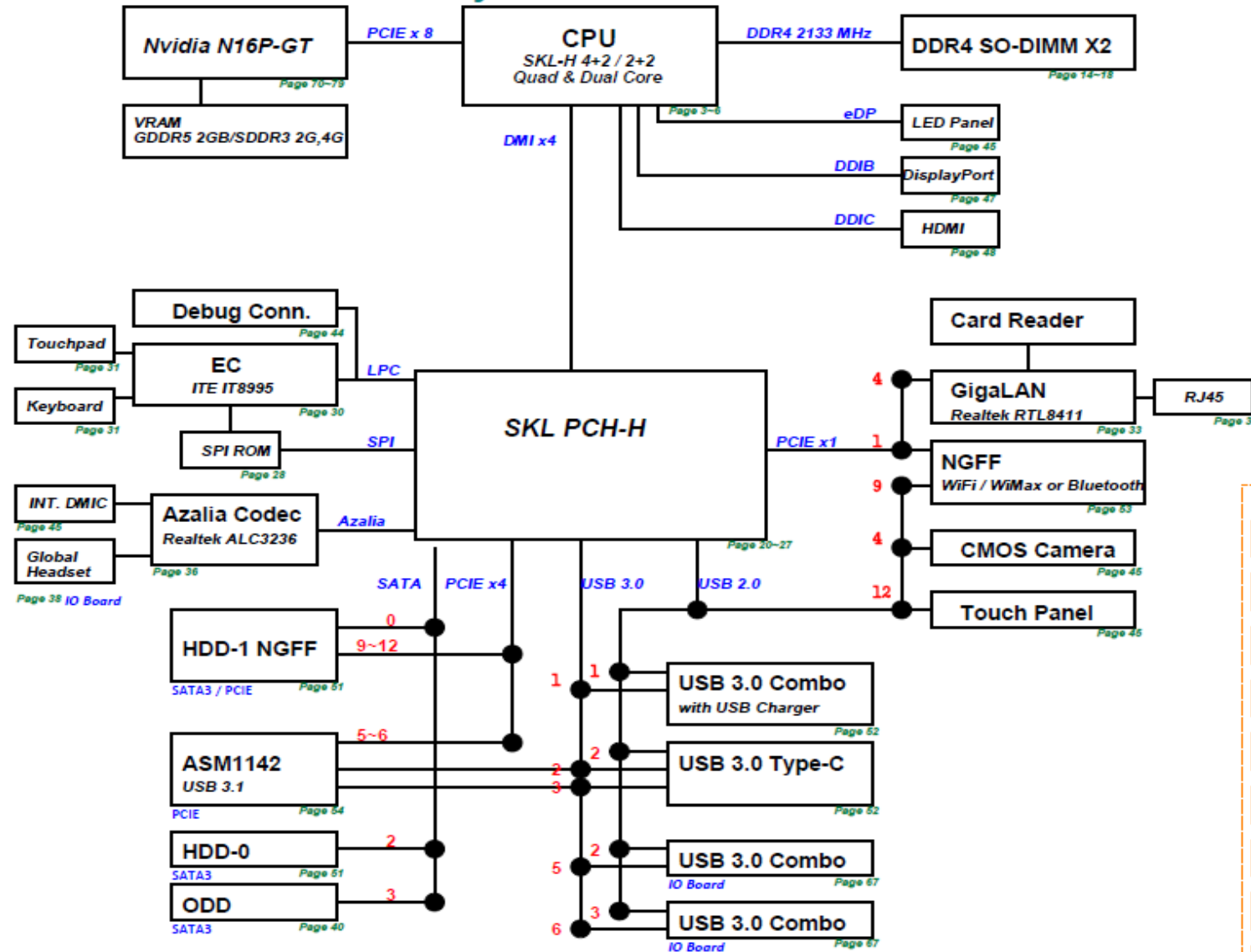


N552VX Repair Guide

BLOCK DIAGRAM

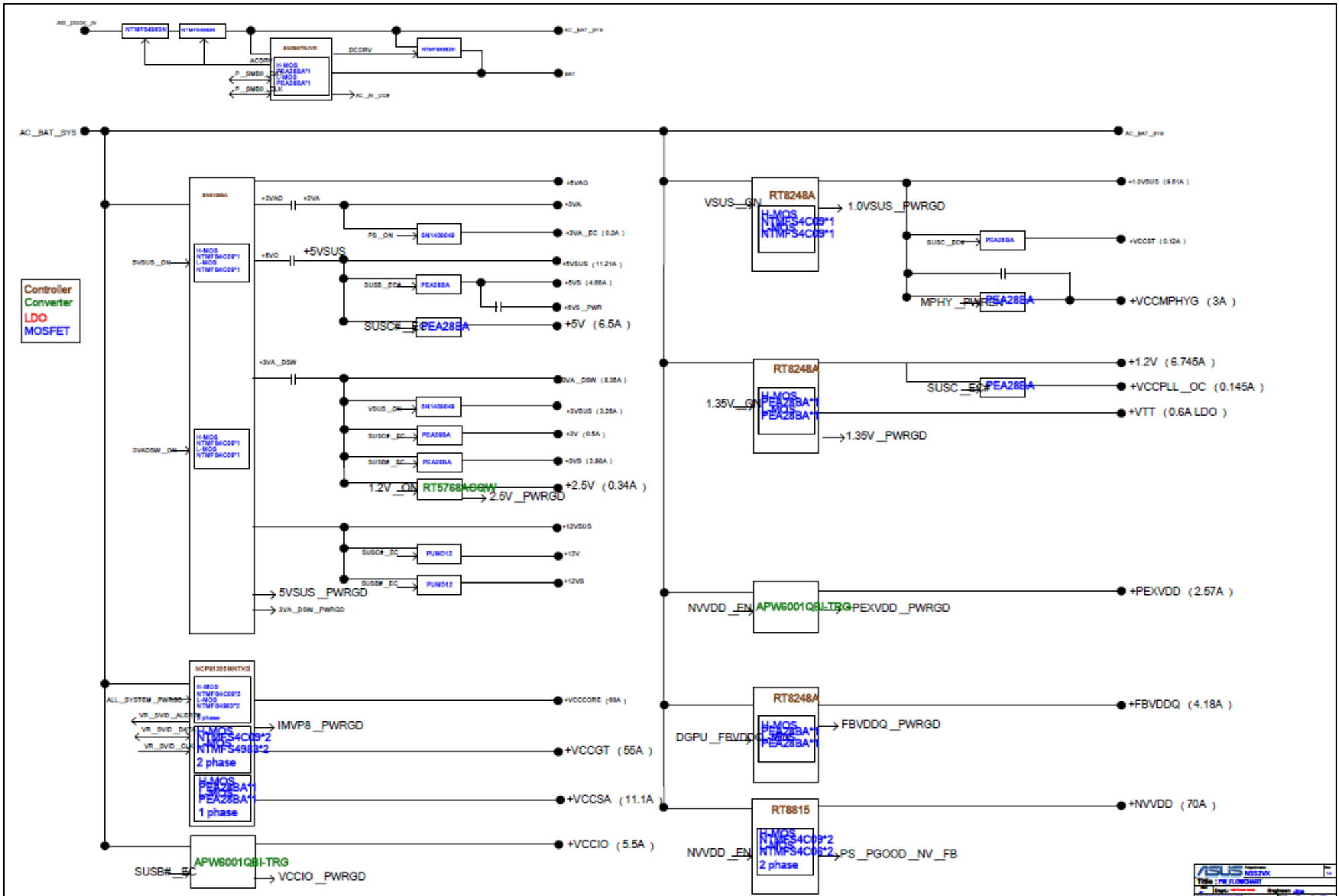
N552VX Block Diagram

Skylake-H Platform



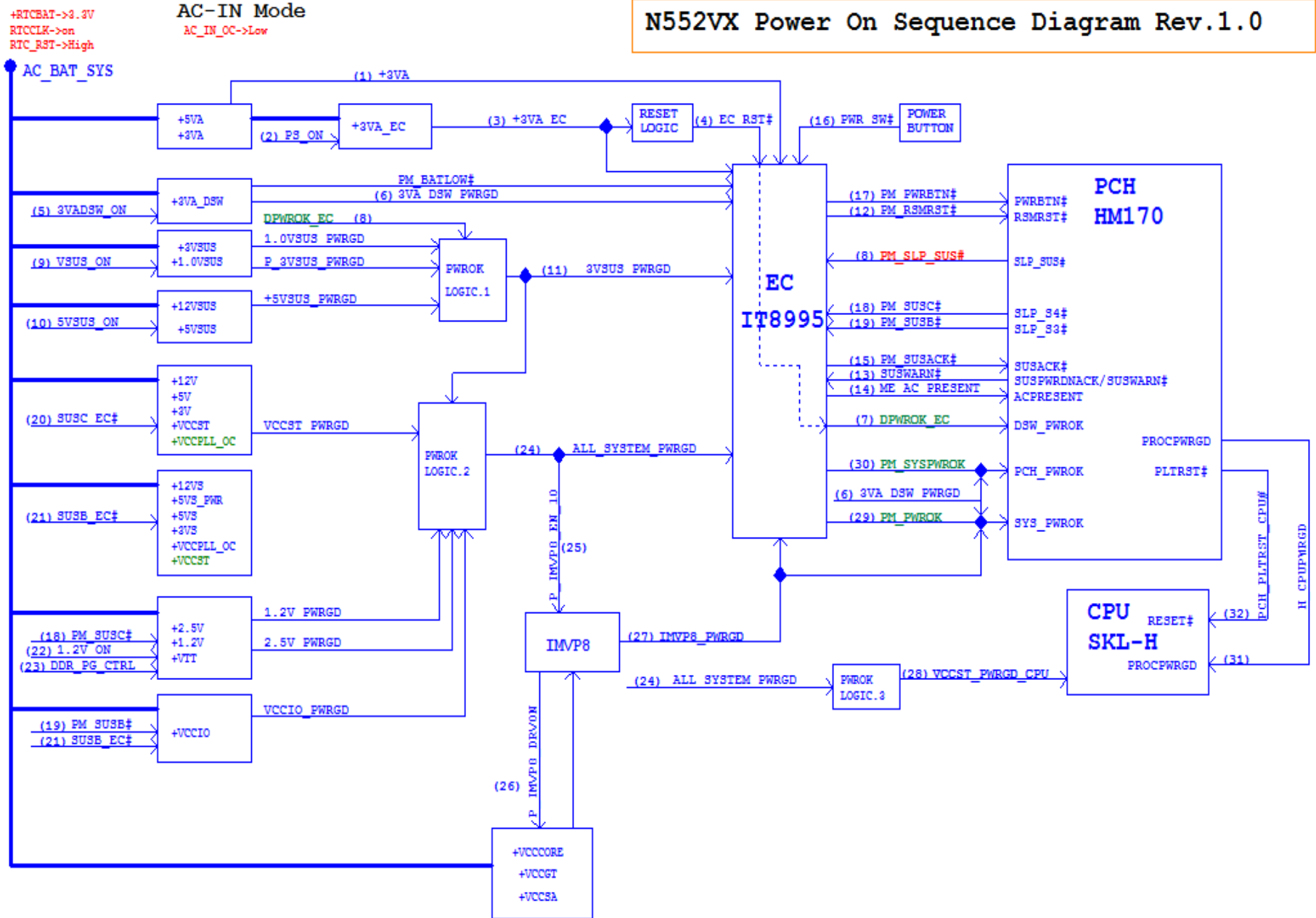
Power	
Power Skylake	Page 80-82
+1.0VSUS	Page 83
+VCCIO	Page 84
+1.2V/+VTT/+2.5V	Page 86
+3VADSW/+5VSUS	Page 87
Load Switch	Page 88
Charger	Page 89
Protection	Page 90
+NVVDD	

POWER FLOW



POWER ON SEQUENCE

N552VX Power On Sequence Diagram Rev.1.0

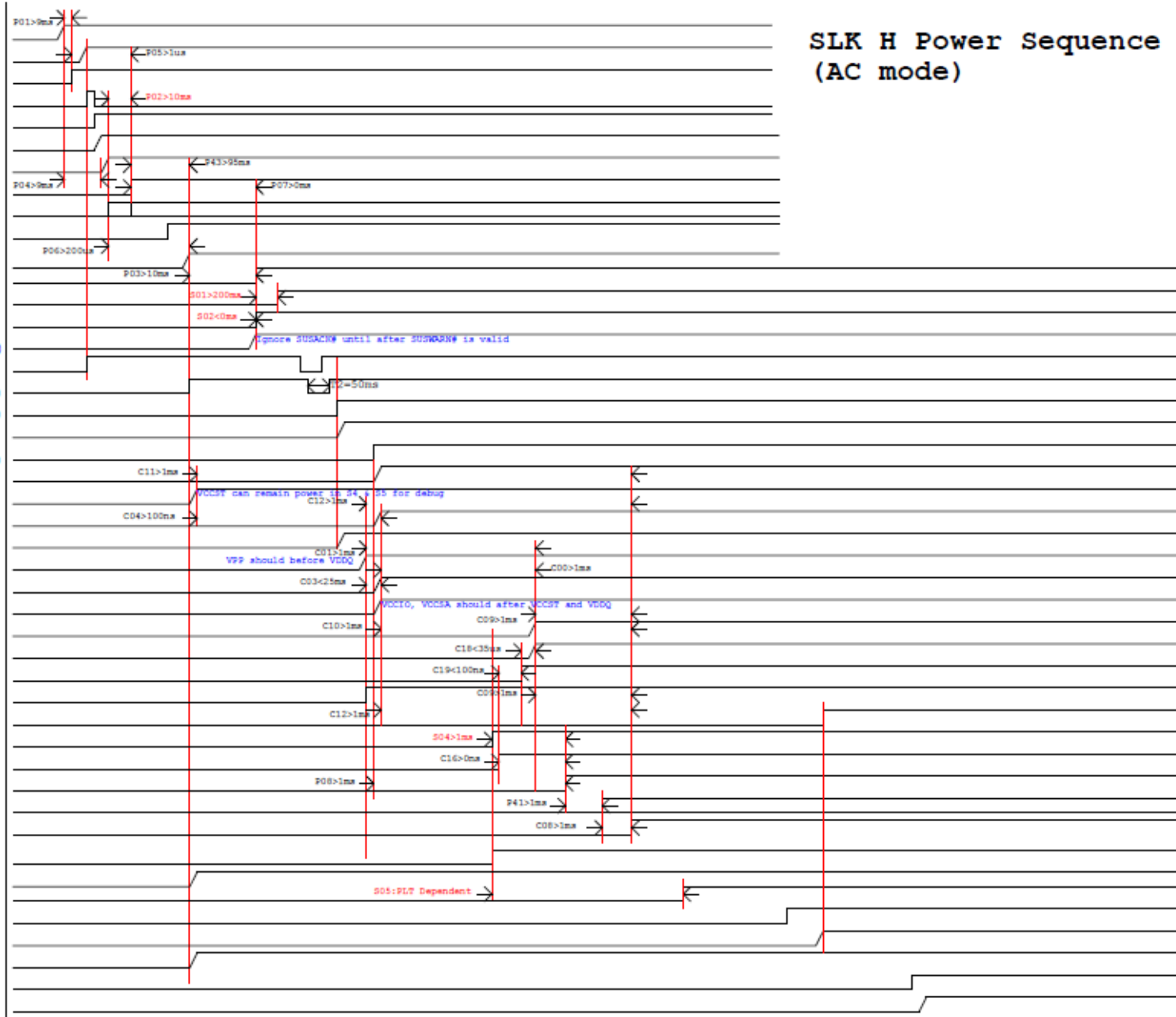


AC_IN POWER ON SEQUENCE

AC-IN Mode

C: CPU
P: PCH
S: PLT
Power
Signal

(+RTCBAT)+3VA_RTC
 (AC_BAT_SYS)+3VA/+5VA
 (+3VA_RTC)RTCRST#(PCH)
 (Power)AC_IN_OC#(EC)
 (EC)PS_ON(+3VA_EC)
 (PS_ON)+3VA_EC(EC)
 (3VADSW_ON)+3VA_DSW(3VA_DSW_PWRGD)
 (EC)DPWROK_EC(PCH)
 (+3VA_DSW)PM_BATLOW#(PCH)
 (PCH)PM_SLP_SUS#(EC)
 (VSUS_ON)+1.0VVSUS_VCCPRIM(1.0VVSUS_PWRGD)
 (EC)PM_RSMRST#_PCH(PCH)
 (PCH)SUSWRN#(EC)
 (EC)ME_AC_PRESENT_PCH(PCH)
 (EC)PCH_SUSACK#(PCH)
 (PWR_Switch)PWR_SW#(EC)
 (EC)PM_PWRBTN#(PCH)
 (EC)SUSC_EC#(Power)
 (SUSC_EC#)+12V/+5V/+3V
 (EC)SUSB_EC#(Power)
 (SUSB_EC#)+12V/+5V/+3V
 (VSUS_ON)+1.0V_VCCST,VCCPLL(VCCST_PWRGD)
 (+VCCIO)+VCCSTG
 (1.2V_ON)+2.5V(2.5V_PWRGD)
 (1.2V_ON)+VDDQ_CPU(1.2V_PWRGD)
 (+12VS)+VCCPLL_OC
 (SUSB_EC#)+VCCIO(VCCIO_PWRGD)
 (ALL_SYSTEM_PWRGD)+VCCSA(IMVP8_PWRGD)
 (DDR_VTT_CTRL)+0.6V
 (CPU)DDR_VTT_CTRL(Power)
 (Power)1.2V_PWRGD(AND)
 (Power)IMVP8_PWRGD
 (AND)ALL_SYSTEM_PWRGD(CPU/PCH/EC/Power)
 (ALL_SYSTEM_PWRGD)VCCST_PWRGD_CPU(CPU)
 (EC)PM_PWROK_PCH(PCH)
 (PCH)CLK_PCH_BCLK(CPU)
 (PCH)H_CFPUPWRGD(CPU)
 (ALL_SYSTEM_PWRGD)P_IMVP8_EN_10(Power)
 (CPU)P_SVID_DATA_X2(Power)
 (EC)PM_SYSPWROK_PCH(PCH)
 (PCH)PLT_RST#(CPU/EC/Device)
 (P_IMVP8_DRVON)+VCCCORE(IMVP8_PWRGD)
 (CPU)H_THERMTRIP#(PCH)
 (PCH)DDR4_DRAMRST#(Memory)
 +VCCGT

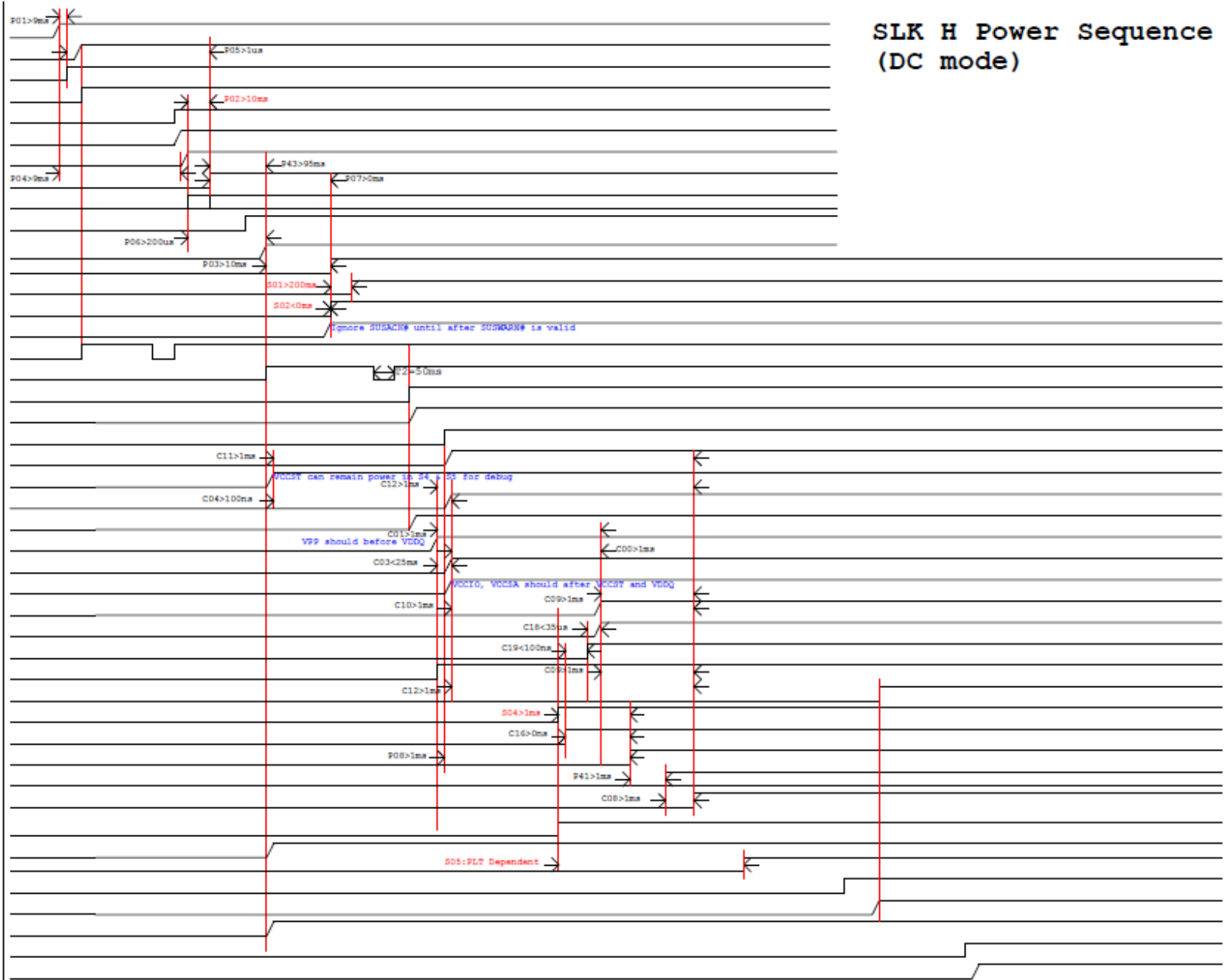


SLK H Power Sequence (AC mode)

DC_IN POWER ON SEQUENCE

DC-IN Mode

C:CPU (+RTCBAT)+3VA_RTC
P:PCH (AC_BAT_SYS)+3VA/+5VA
S:PLT (+3VA_RTC) RTCRST# (PCH)
Power (Power) AC_IN_OC# (EC)
Signal (EC) PS_ON (+3VA_EC)
 (PS_ON)+3VA_EC (EC)
 (3VADSW_ON)+3VA_DSW (3VA_DSW_PWRGD)
 (EC) DPWROK_EC (PCH)
 (+3VA_DSW) PM_BATLOW# (PCH)
 (PCH) PM_SLP_SUS# (EC)
 (VSUS_ON)+1.0VSUS_VCCPRIM (1.0VSUS_PWRGD)
 (EC) PM_RST#_PCH (PCH)
 (PCH) SUSWARN# (EC)
 (EC) ME_AC_PRESENT_PCH (PCH)
 (EC) PCH_SUSACK# (PCH)
 (PWR_Switch) PWR_SW# (EC)
 (EC) PM_PWRBTN# (PCH)
 (EC) SUSC_EC# (Power)
 (SUSC_EC#)+12V/+5V/+3V
 (EC) SUSB_EC# (Power)
 (SUSB_EC#)+12VS/+5VS/+3VS
 (VSUS_ON)+1.0V_VCCST,VCCPLL (VCCST_PWRGD)
 (+VCCIO)+VCCSTG
 (1.2V_ON)+2.5V (2.5V_PWRGD)
 (1.2V_ON)+VDDQ_CPU (1.2V_PWRGD)
 (+12VS)+VCCPLL_OC
 (SUSB_EC#)+VCCIO (VCCIO_PWRGD)
 (ALL_SYSTEM_PWRGD)+VCCSA (IMVP8_PWRGD)
 (DDR_VTT_CTRL)+0.6V
 (CPU) DDR_VTT_CTRL (Power)
 (Power) 1.2V_PWRGD (AND)
 (Power) IMVP8_PWRGD
 (AND) ALL_SYSTEM_PWRGD (CPU/PCH/EC/Power)
 (ALL_SYSTEM_PWRGD) VCCST_PWRGD_CPU (CPU)
 (EC) EM_PWROK_PCH (PCH)
 (PCH) CLK_PCH_BCLK (CPU)
 (PCH) H_CFPUPWRGD (CPU)
 (ALL_SYSTEM_PWRGD) P_IMVP8_EN_10 (Power)
 (CPU) P_SVID_DATA_X2 (Power)
 (EC) PM_SYSPWROK_PCH (PCH)
 (PCH) PLT_RST# (CPU/EC/Device)
 (P_IMVP8_DRVON)+VCCCORE (IMVP8_PWRGD)
 (CPU) H_THERMTRIP# (PCH)
 (PCH) DDR4_DRAMRST# (Memory)
 +VCCGT



SLK H Power Sequence (DC mode)

Signal Measure Point-Bottom

43 PL9300 +FBVDDQ 61

27.PSL8007 P_IMVP8_EN_10 574

47 PL8901 P_CHG_LX_30 484

26.PSL8011 P_IMVP8_DRVON 577

38,PL8100 VCCCORE 6

33.R0606 PCH_PLTRST_CPU# 411

44 PL9100 +NVVDD 11

39,PL8104 VCCGT 7

34 C0680 H_CPUPWRGD 410

45 PL9200 P_PEXVDDO 152

40 PL8105 +VCCSA 47

35 R0650 DDR_PG_CTRL 552

36. PSE870L +3VADSWO 382

16 D2002 ME_AC_PRESENT 751

35 PSL3301 P_1.0VSUS_VO 41

37 PSL8700 +5VSUS0 168

29 D2004 IMVP8_PWRGD 571

28 SL2002 PM_SUSC# 564

46 PL8600 P_1V2_VO 269

17 R2040 PM_SUSACK# 544

15 SL2004 SUSWARN# 573

43 PL8601 P_2.5VO 380

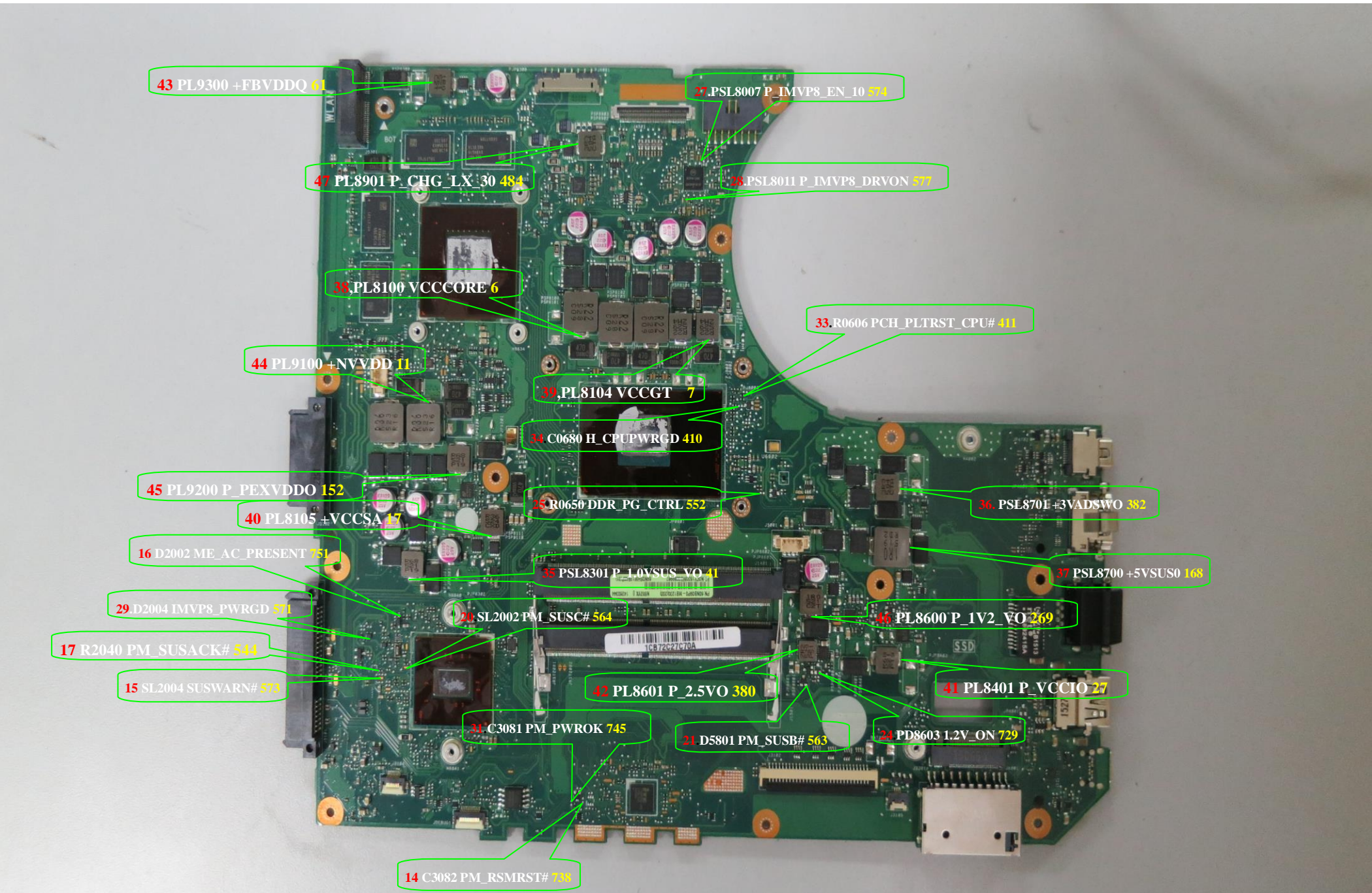
41 PL8401 P_VCCIO 27

31 C3081 PM_PWROK 745

21 D5801 PM_USB# 563

24 PD8603 1.2V_ON 729

14 C3082 PM_RSMRST# 738



Signal Measure Point-Top

