ROCKY AMD-Sabine 15"

DB

2010/08/09

DATE	CHANGE NO.	REV

	EE	DATE	POWER	DATE
DRAWER	ALAN W		ALBERT	
DESIGN	VENS HUANG		ALBERT	
CHECK				
RESPONSIBLE				

SIZE = 3 VER :

FILE NAME : XXXX-XXXXXX-XX

P/N XXXXXXXXXXX

INVENTEC

TITLE *ROCKY-AMD*

Project Name

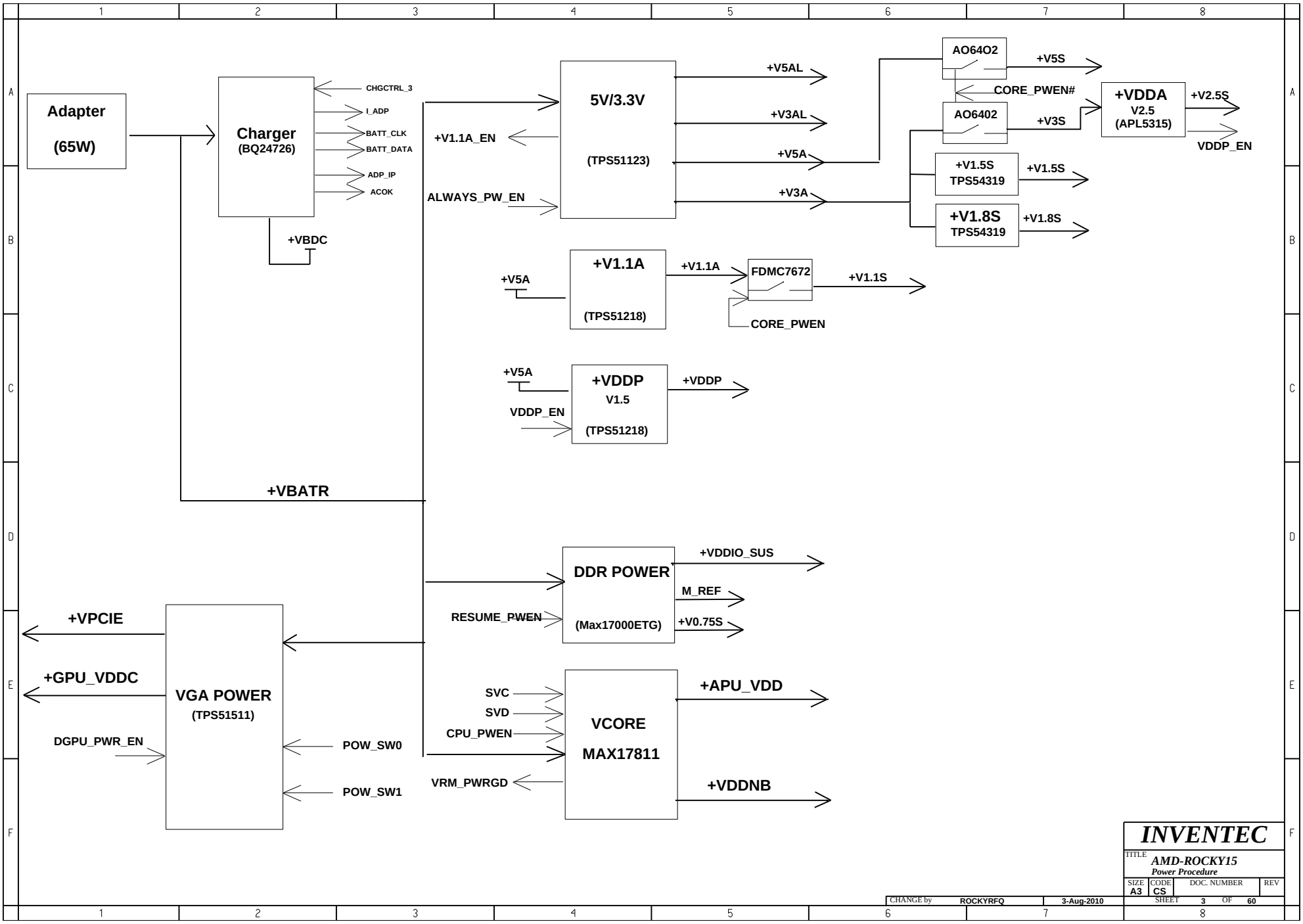
SIZE	CODE	DOC. NUMBER	REV
A3	CS	*1234*	*X01*

SHEET 1 OF 60

Index Of Content

CHANGE by	Ken, Chiang	6-Aug-2010

INVENTEC			
TITLE: ROCKY-AMD Index			
SIZE: A3	CODE: CS	DOC. NUMBER: 1234	REV: X01
SHEET 2 OF 60			



CHANGE by	ROCKYRFQ	3-Aug-2010	

INVENTEC

TITLE: *AMD-ROCKY15*
Power Procedure

SIZE	CODE	DOC. NUMBER	REV
A3	CS		

SHEET 3 OF 60

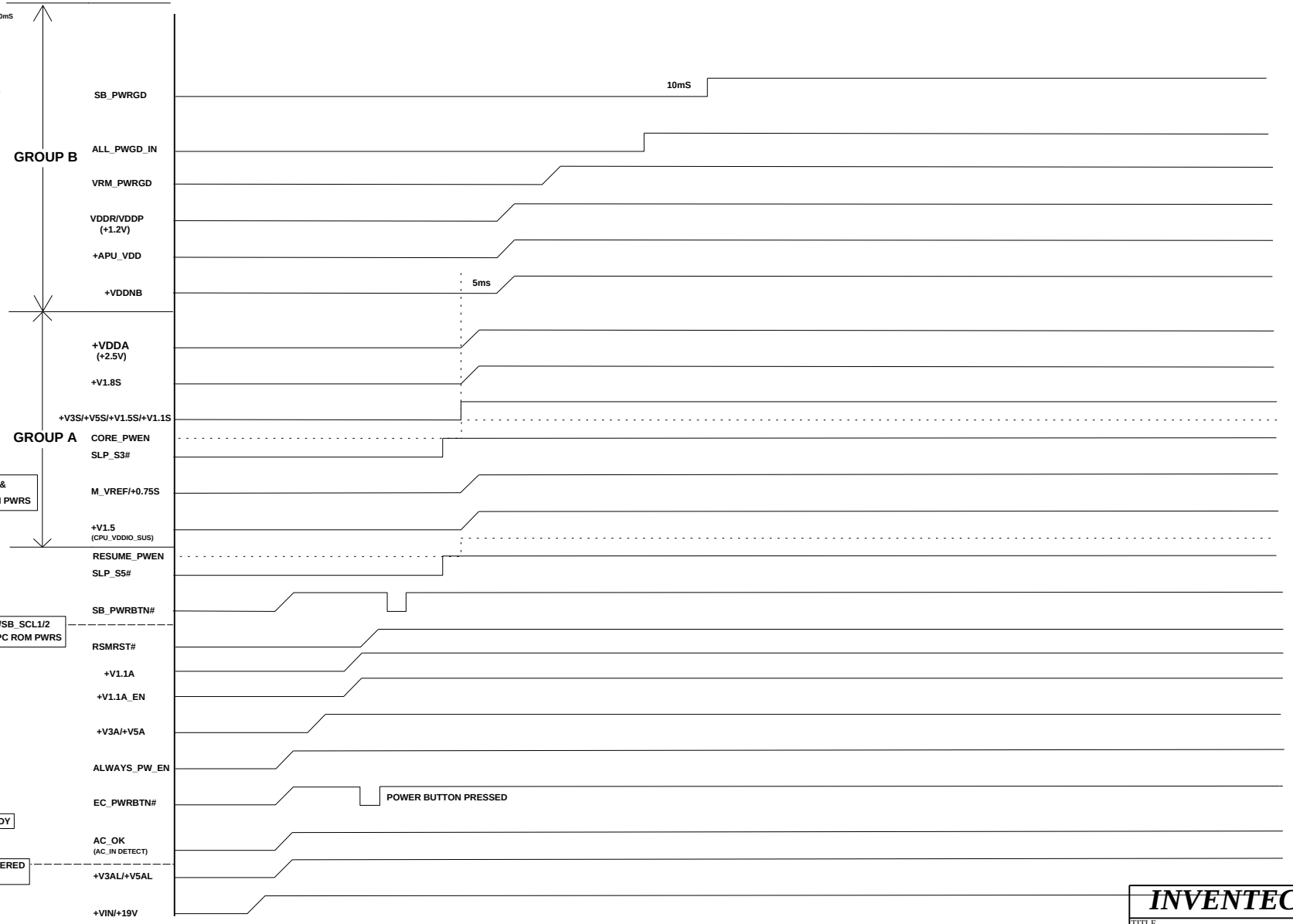
POWER ON SEQUENCW REQUIRED.

HUDSON-M2

1. +V3.3A RAMP BEFORE +V1.1A
2. +V3.3S RAMP BEFORE +V1.1S
3. +V3AL ramping down tima > 300uS
4. 50uS <= ALL POWER RAILS EXPECT V3AL <= 40mS
5. 100uS <= V3AL <= 40mS

APU

1. GRUOP A (VDDIO,VDDA) ramp before GROUP B (VDD_RUN, VDDNB_RUN, VDDP, VDDR)



CHANGE by	ROCKYRFQ	3-Aug-2010	

INVENTEC

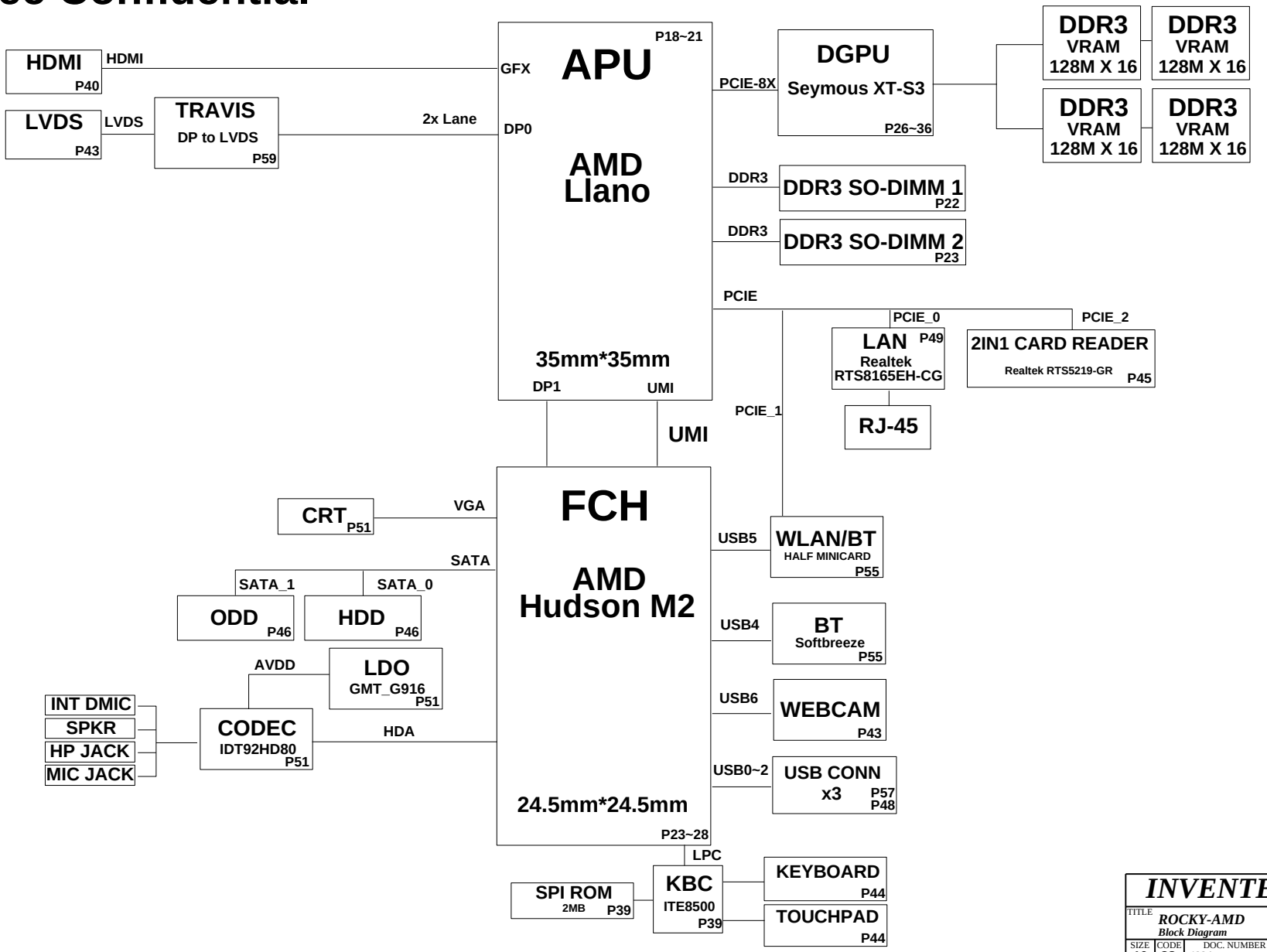
TITLE: *AMD-ROCKY15*
Power Sequence

SIZE	CODE	DOC. NUMBER	REV
A3	CS		

SHEET 4 OF 60

Inventec Confidential

Sabine - DIS



CHANGE by	*Ken, Chiang*	*3-Aug-2010*	

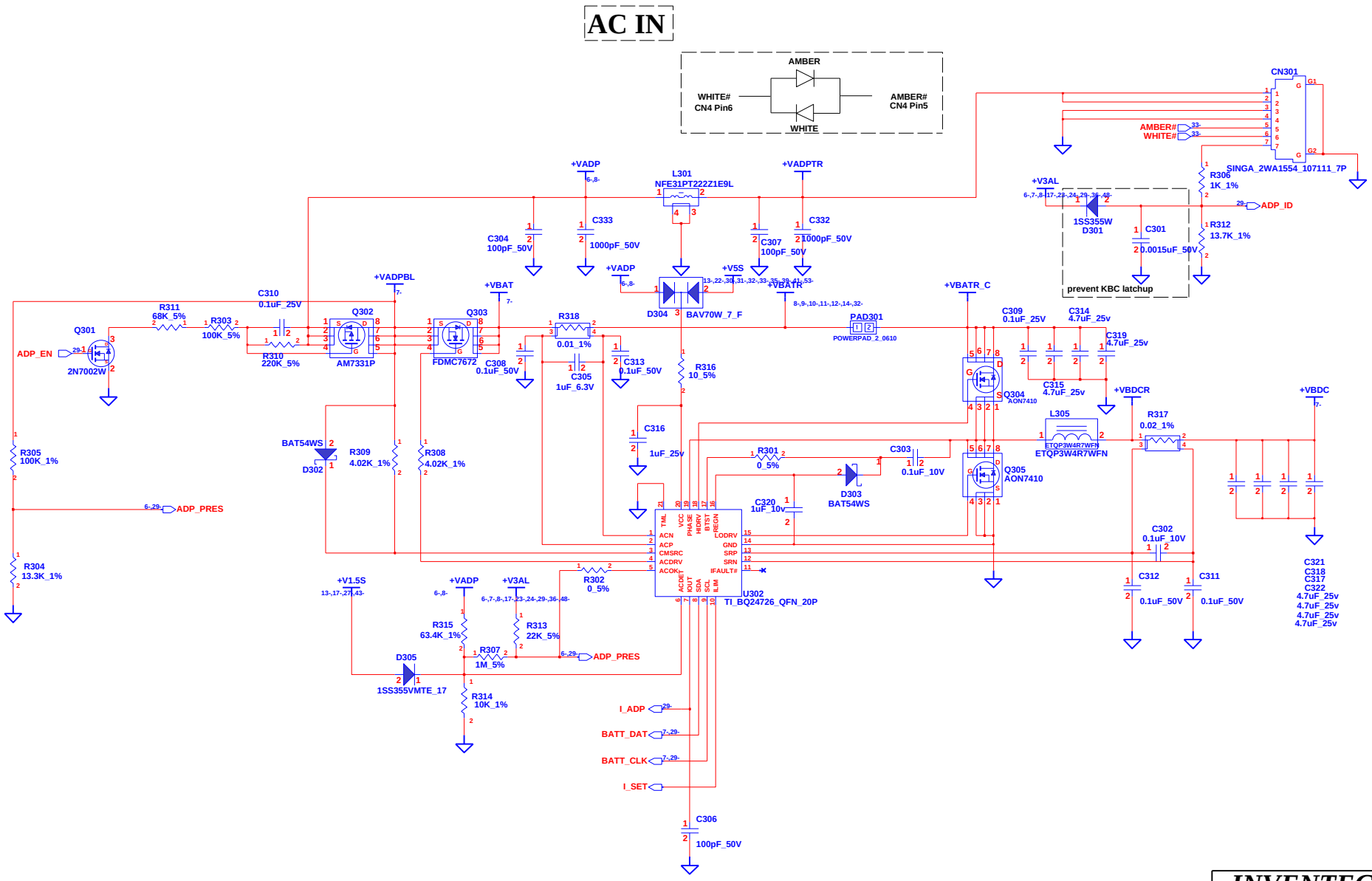
INVENTEC

TITLE: *ROCKY-AMD*
Block Diagram

SIZE	CODE	DOC. NUMBER	REV
A3	CS	*1234*	*X01*

SHEET 5 OF 60

AC IN



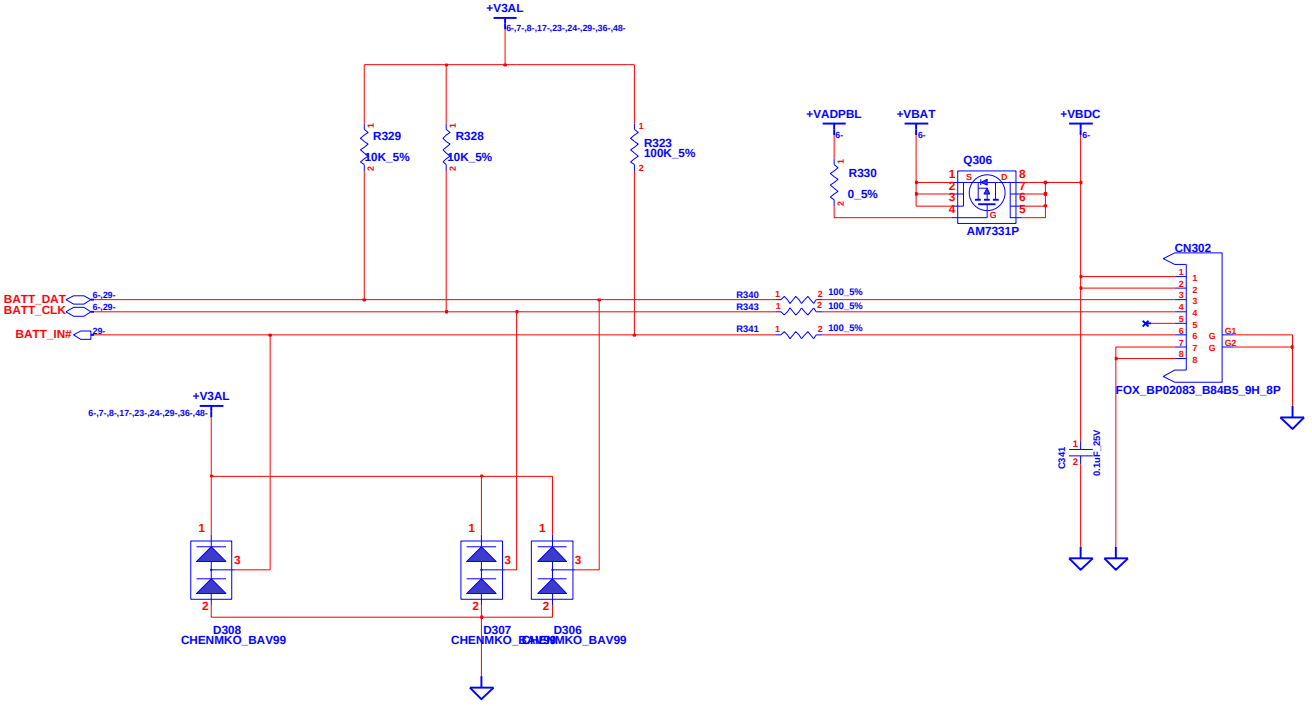
CHANGE by	Ken, Chiang
	9-Aug-2010

INVENTEC

TITLE: *ROCKY-AMD*
Power Procedure

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1234	X01

SHEET 6 OF 60



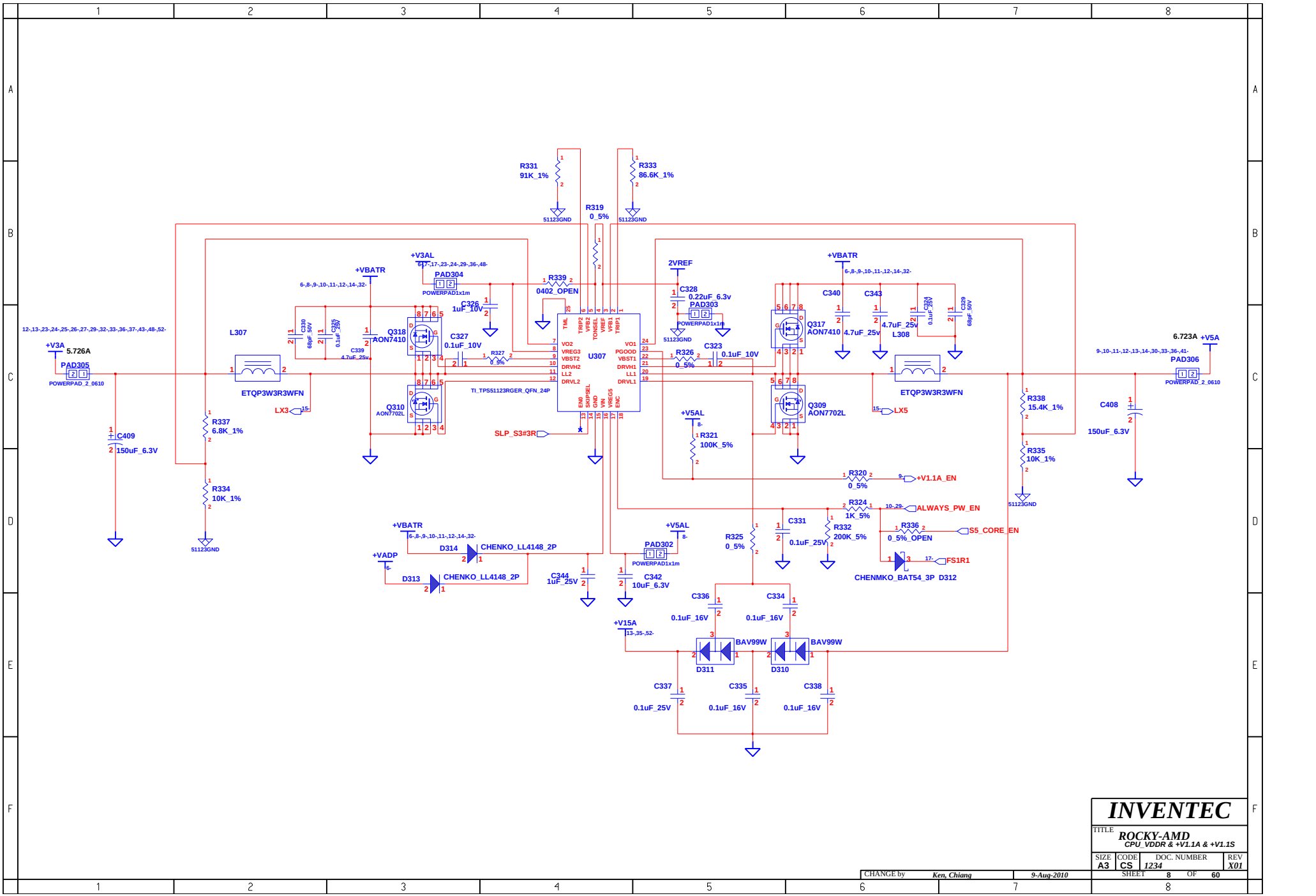
CHANGE by	*Ken, Chiang*	*9-Aug-2010*		

INVENTEC

TITLE: ***ROCKY-AMD***
Power Sequence

SIZE	CODE	DOC. NUMBER	REV
A3	CS	*1234*	*X01*

SHEET 7 OF 60



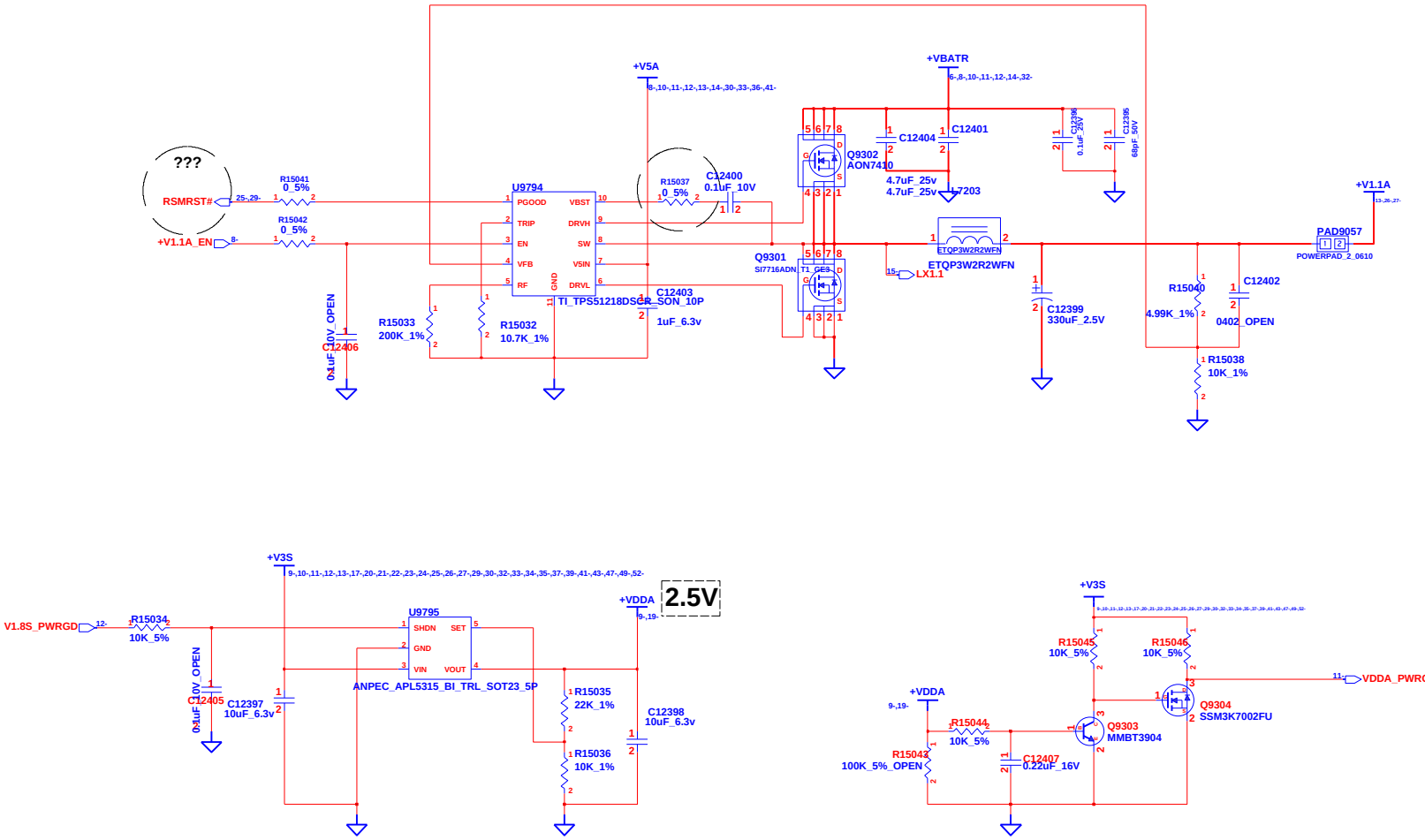
CHANGE by	Ken, Chiang
	9-Aug-2010

INVENTEC

TITLE: ROCKY-AMD
CPU_VDDR & +V1.1A & +V1.1S

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1234	X01

SHEET 8 OF 60



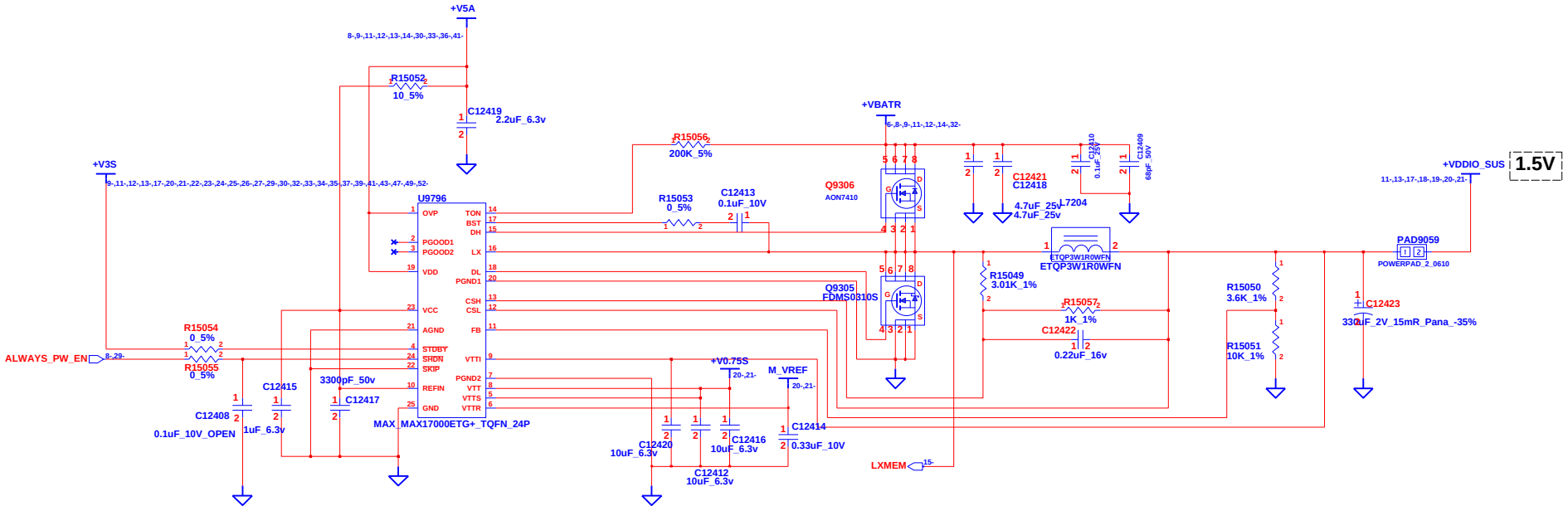
CHANGE by	Ken, Chiang	9-Jun-2010	

INVENTEC

TITLE: *ROCKY-AMD*
DC & BATTERY CHARGER

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1234	X01

SHEET 9 OF 60



NOTE: DDR3 REGULATOR

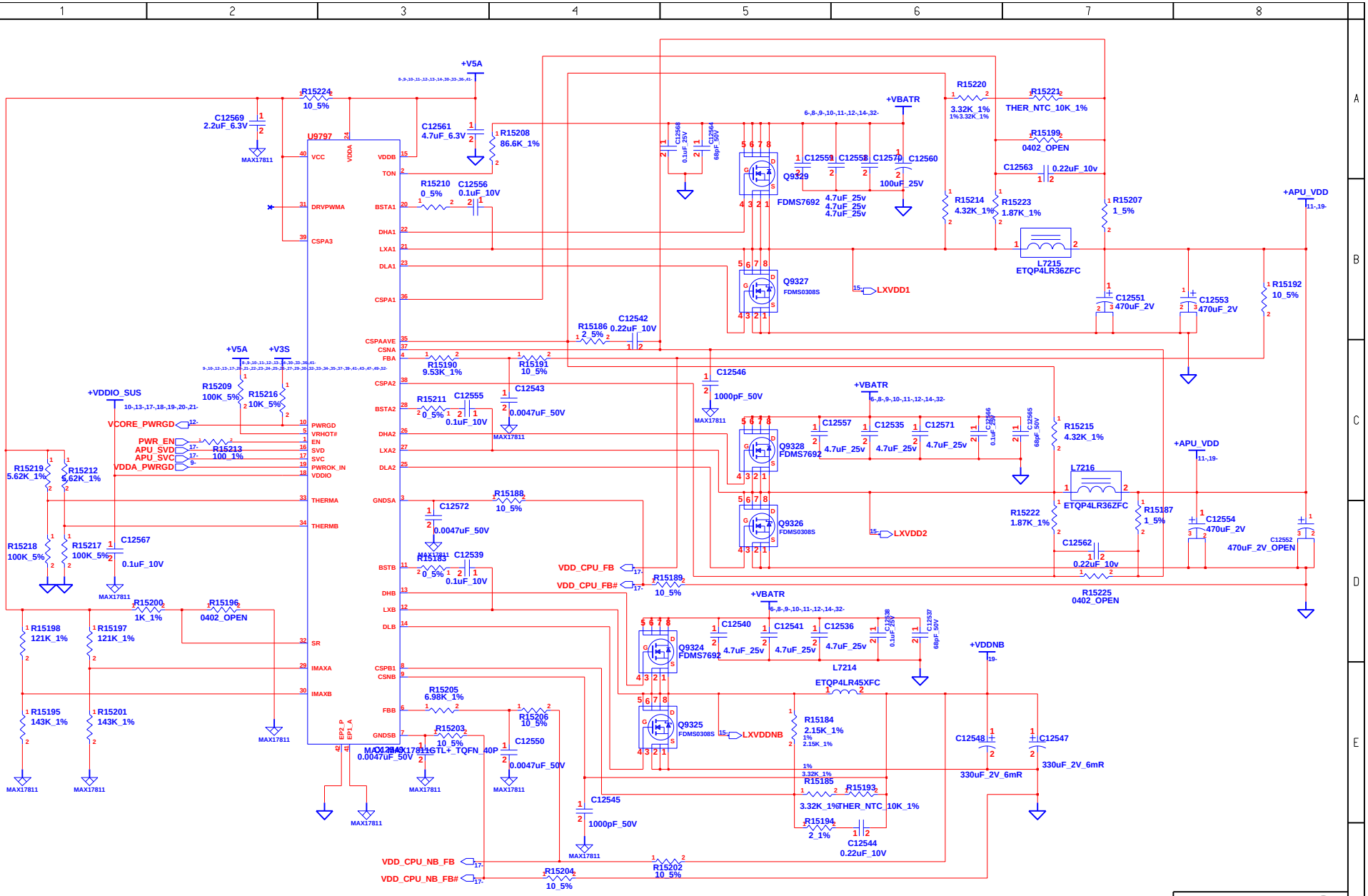
CHANGE by	*Ken, Chiang*	*9-Jun-2010*	

INVENTEC

TITLE: *ROCKY-AMD*
BATTERY CONN

SIZE	CODE	DOC. NUMBER	REV
A3	CS	*1234*	*X01*

SHEET 10 OF 60



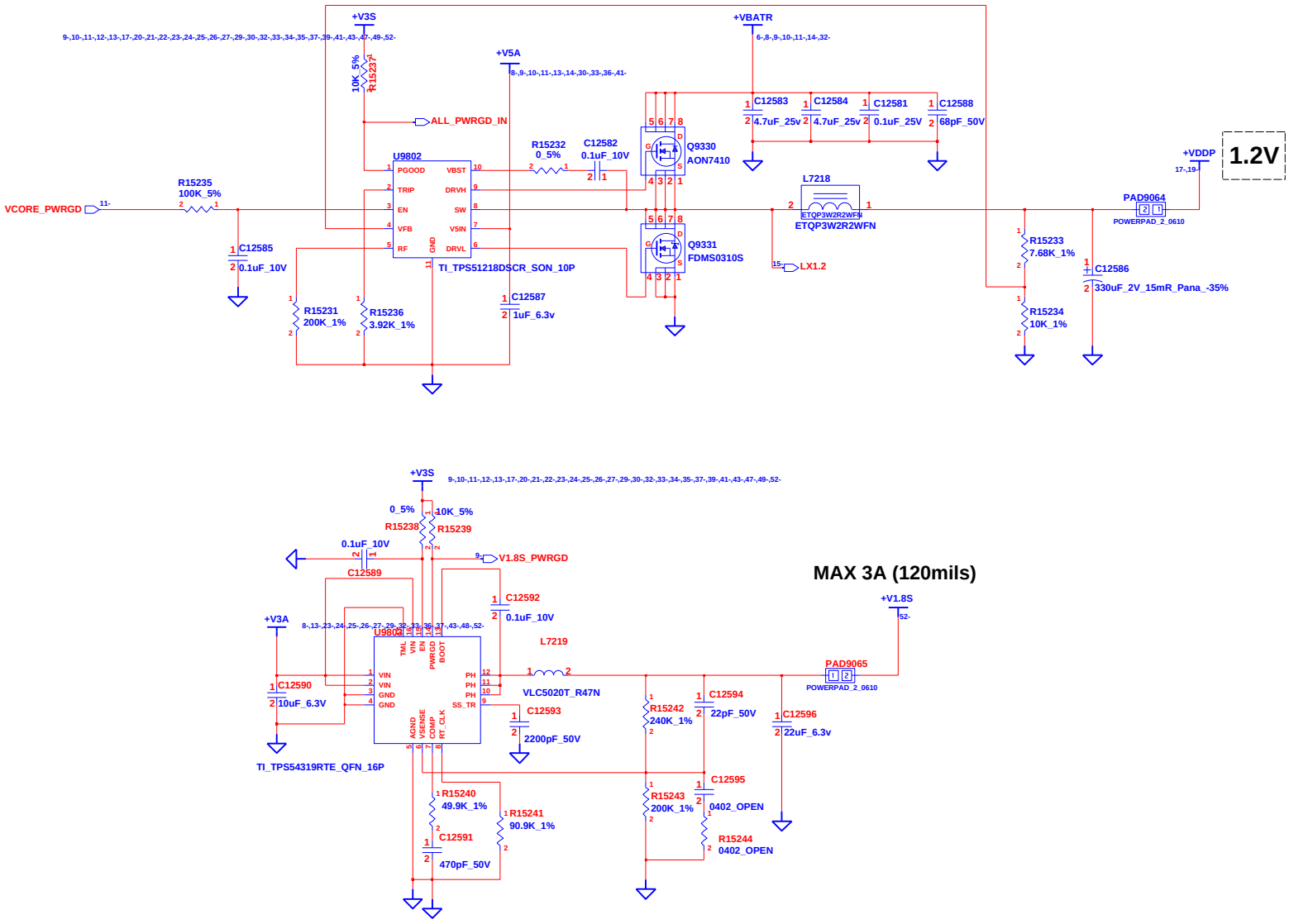
CHANGE by	Ken, Chiang	9-Jun-2010	

INVENTEC

TITLE: *ROCKY-AMD*
+V3.3A & +V5A & +V2.5S

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1234	X01

SHEET 11 OF 60



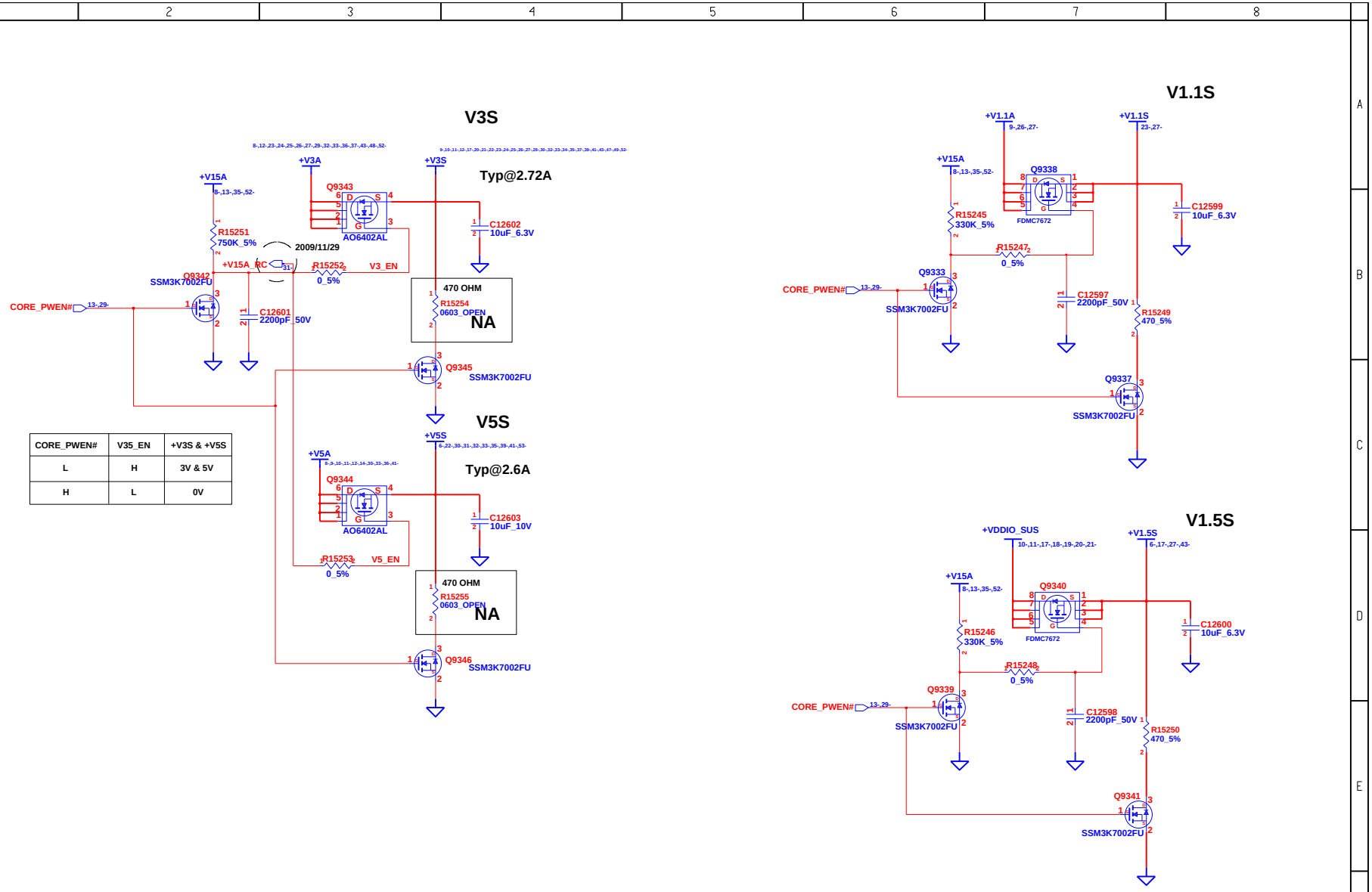
CHANGE by	Ken, Chiang
	9-Jun-2010

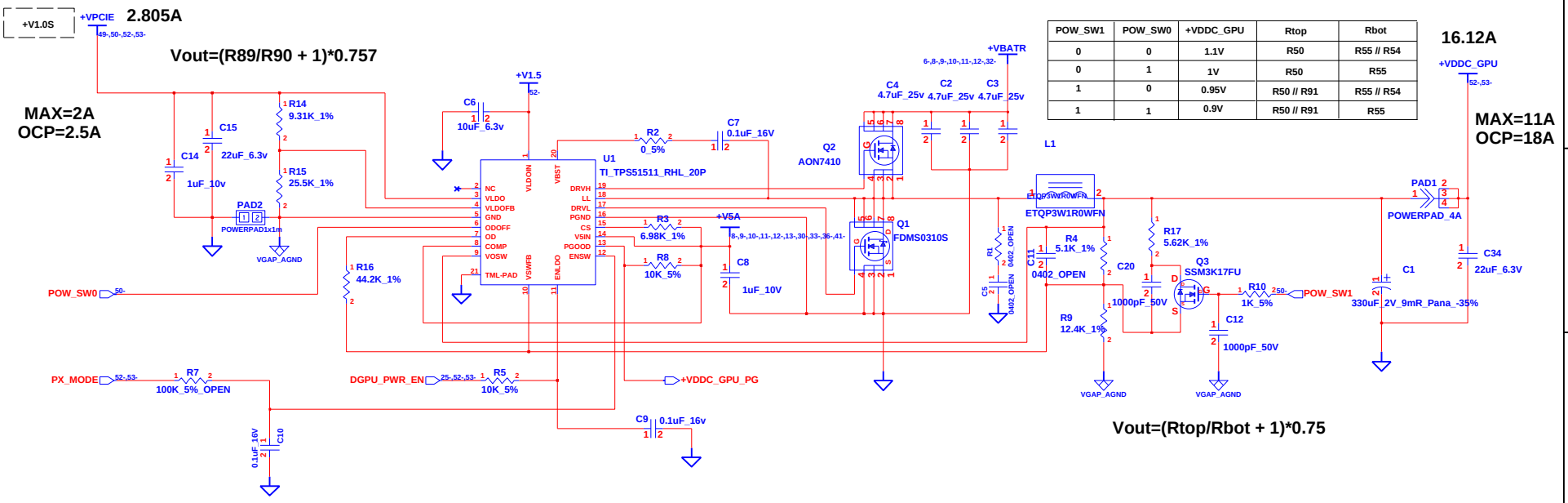
INVENTEC

TITLE: ROCKY-AMD
+V1.2A & VCC_NB

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1234	X01

SHEET 12 OF 60


V3S
Typ@2.72A
+V3A
+V3S
+V15A
8-,13-,35-,52-
Q9343
AO6402AL
R15251
750K_5%
2009/11/29
+V15A_RC
R15252
0_5%
V3_EN
C12602
10uF_6.3V
Q9342
SSM3K7002FU
CORE_PWEN#
13-,29-
C12601
2200pF_50V
470 OHM
R15254
0603_OPEN
NA
Q9345
SSM3K7002FU
V5S
Typ@2.6A
+V5S
6-,22-,30-,31,-32-,33-,35-,39-,41-,53-
+V5A
Q9344
AO6402AL
C12603
10uF_10V
R15253
0_5%
V5_EN
470 OHM
R15255
0603_OPEN
NA
Q9346
SSM3K7002FU
CORE_PWEN# | V35_EN | +V3S & +V5S
L | H | 3V & 5V
H | L | 0V
V1.1S
+V1.1A
9-,26-,27-
+V1.1S
23-,27-
+V15A
8-,13-,35-,52-
Q9338
FDMC7672
R15245
330K_5%
R15247
0_5%
C12599
10uF_6.3V
Q9333
SSM3K7002FU
CORE_PWEN#
13-,29-
C12597
2200pF_50V
R15249
470_5%
Q9337
SSM3K7002FU
V1.5S
+VDDIO_SUS
10-,11-,17-,18-,19-,20-,21-
+V1.5S
6-,17-,27-,43-
+V15A
8-,13-,35-,52-
Q9340
FDMC7672
R15246
330K_5%
R15248
0_5%
C12600
10uF_6.3V
Q9339
SSM3K7002FU
CORE_PWEN#
13-,29-
C12598
2200pF_50V
R15250
470_5%
Q9341
SSM3K7002FU
INVENTEC
TITLE
ROCKY-AMD
DDR3 POWER
SIZE A3
CODE CS
DOC. NUMBER 1234
REV X01
CHANGE by Ken, Chiang
9-Jun-2010
SHEET 13 OF 60



POW_SW1	POW_SW0	+VDDC_GPU	Rtop	Rbot
0	0	1.1V	R50	R55 // R54
0	1	1V	R50	R55
1	0	0.95V	R50 // R91	R55 // R54
1	1	0.9V	R50 // R91	R55

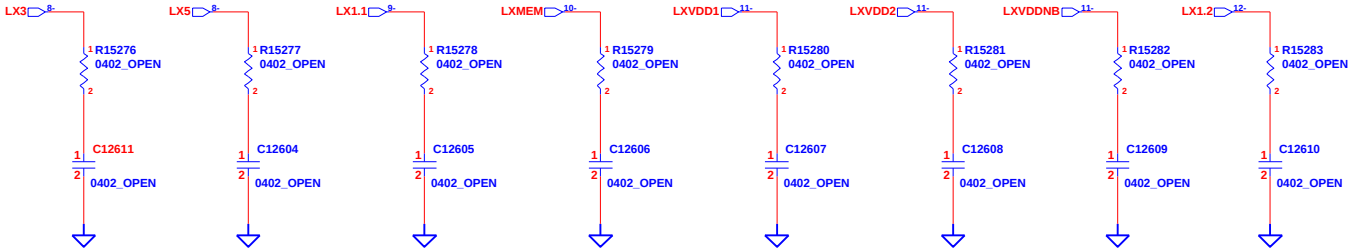
INVENTEC

TITLE: ROCKY-AMD
+VCC_CORE & +VCC_CORE_NB

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1234	X01

SHEET 14 OF 60

CHANGE by Ken, Chiang 9-Aug-2010



N/A

+V1.5S_LDO

CHANGE by	*Ken, Chiang*	*3-Aug-2010*	

INVENTEC

TITLE: *ROCKY-AMD*

SIZE	CODE	DOC. NUMBER	REV
A3	CS	*1234*	*X01*

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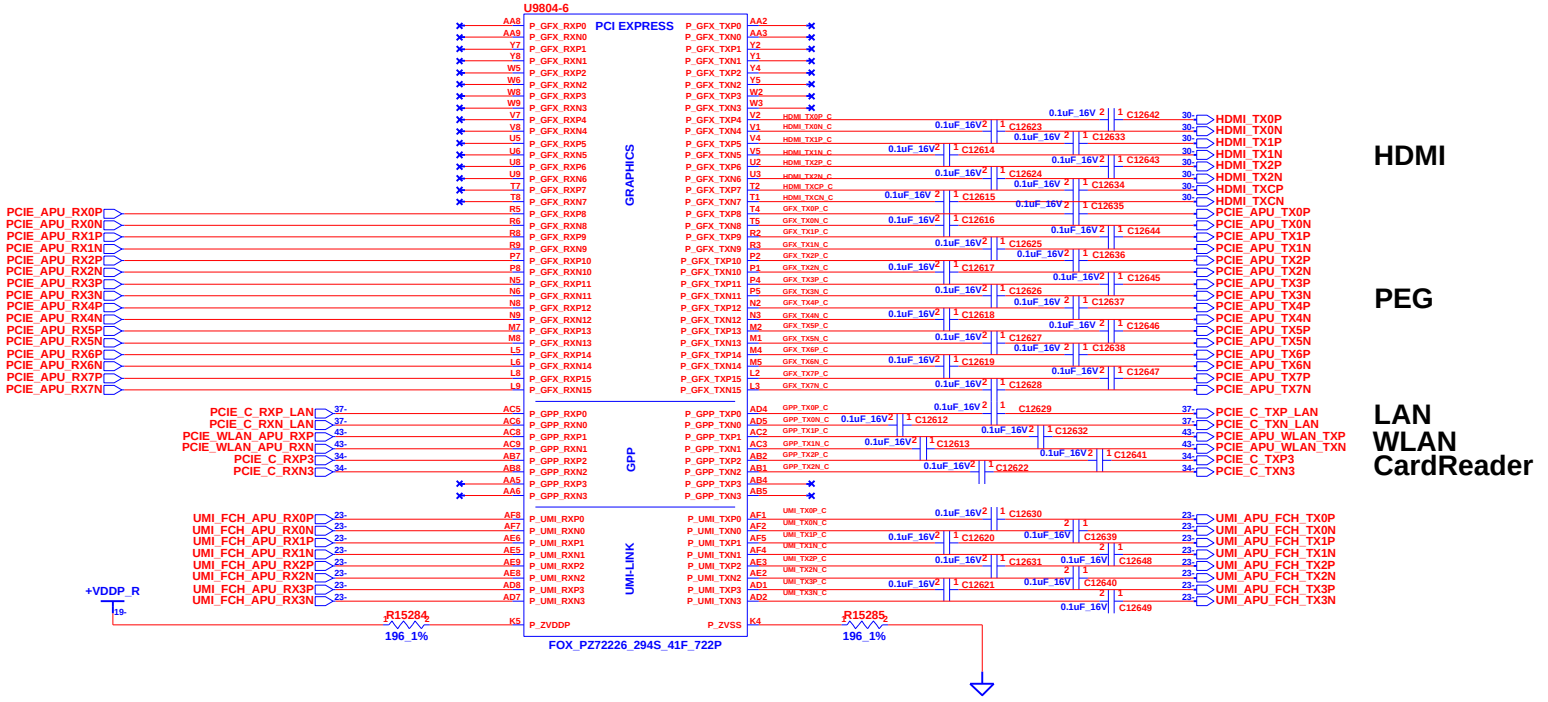
CPU



CHANGE by	Ken, Chiang	9-Jun-2010			

INVENTEC

TITLE: ROCKY-AMD
+V5S & +V3.3S & +V1.5S & +V1.2S

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1234	X01

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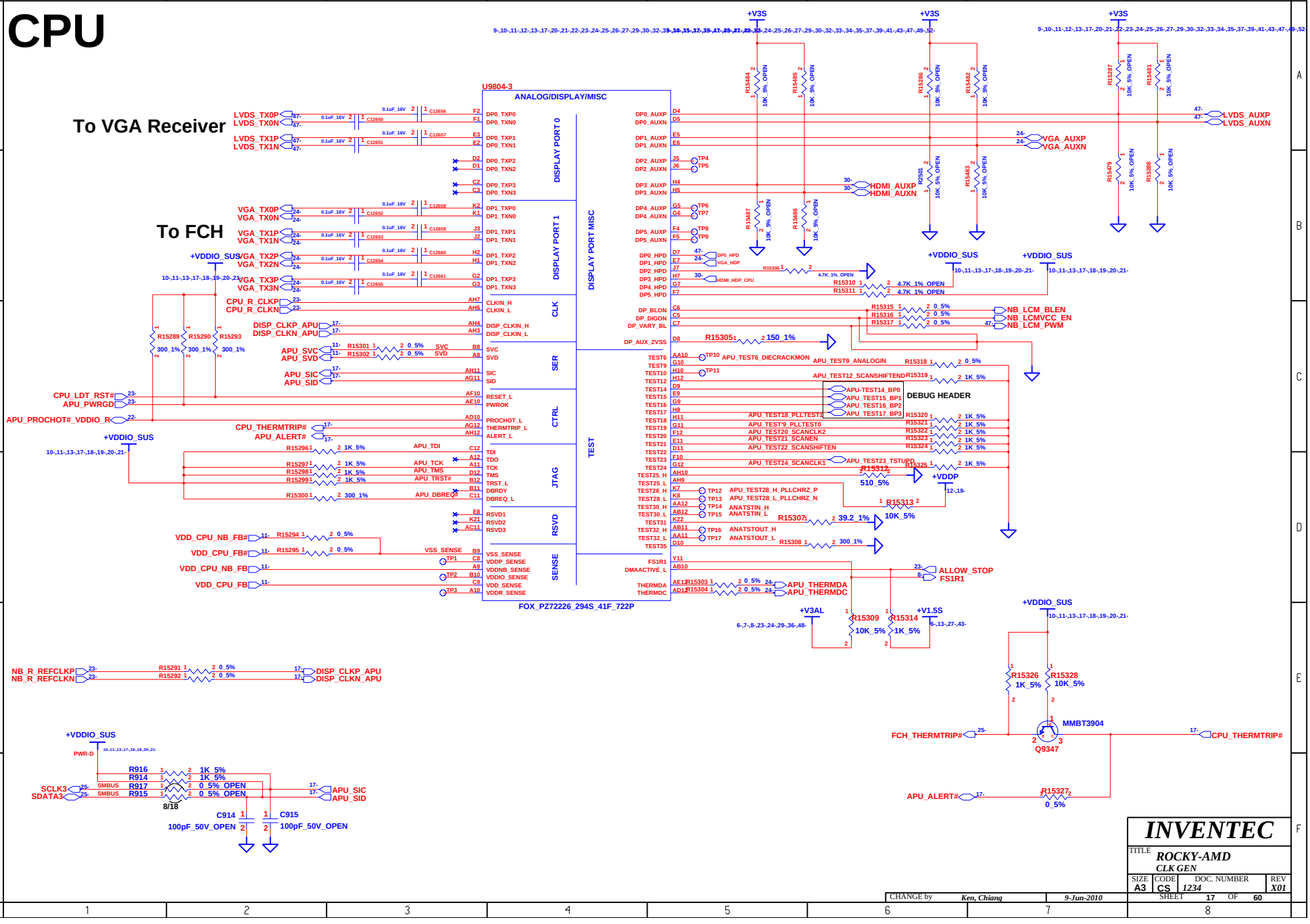
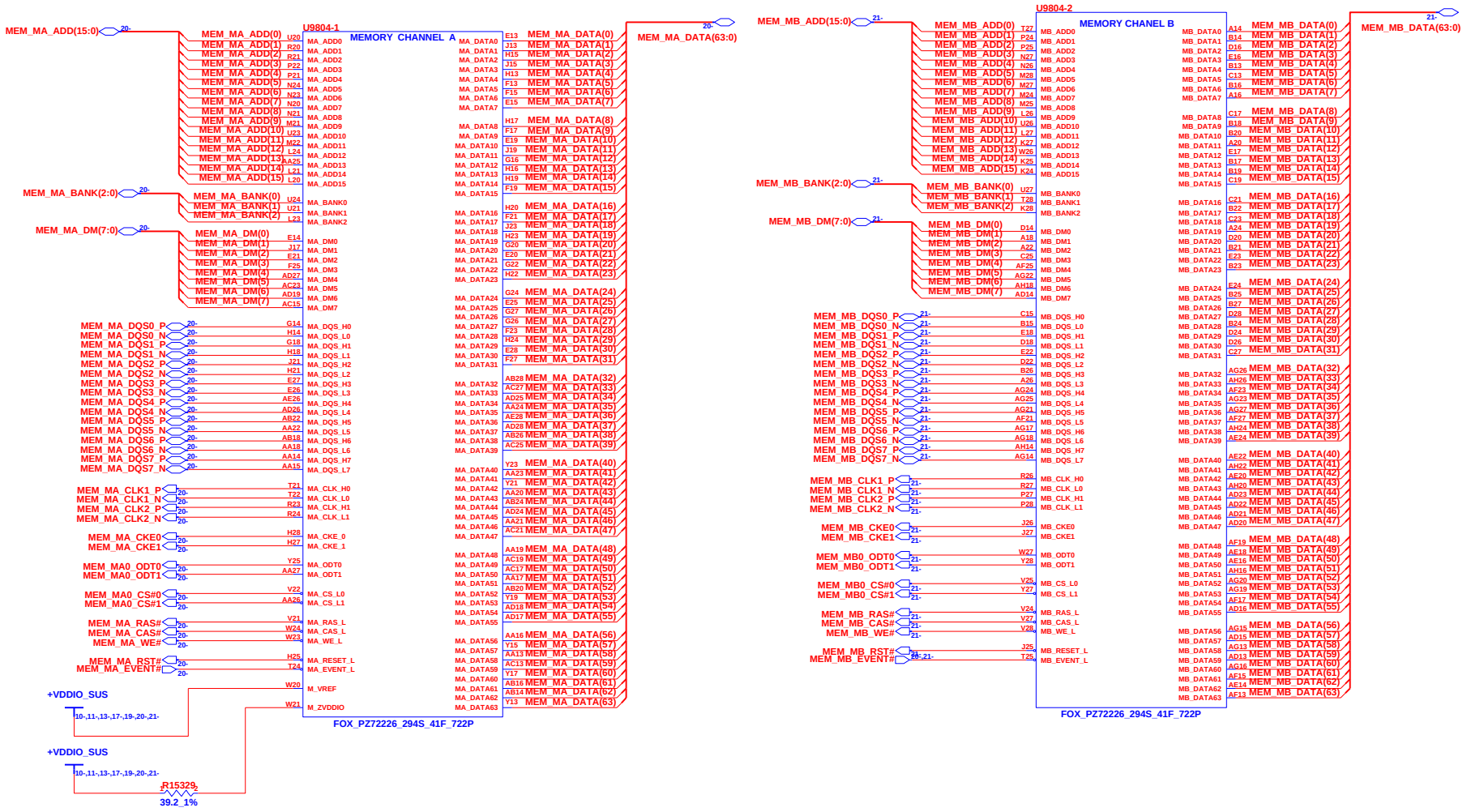
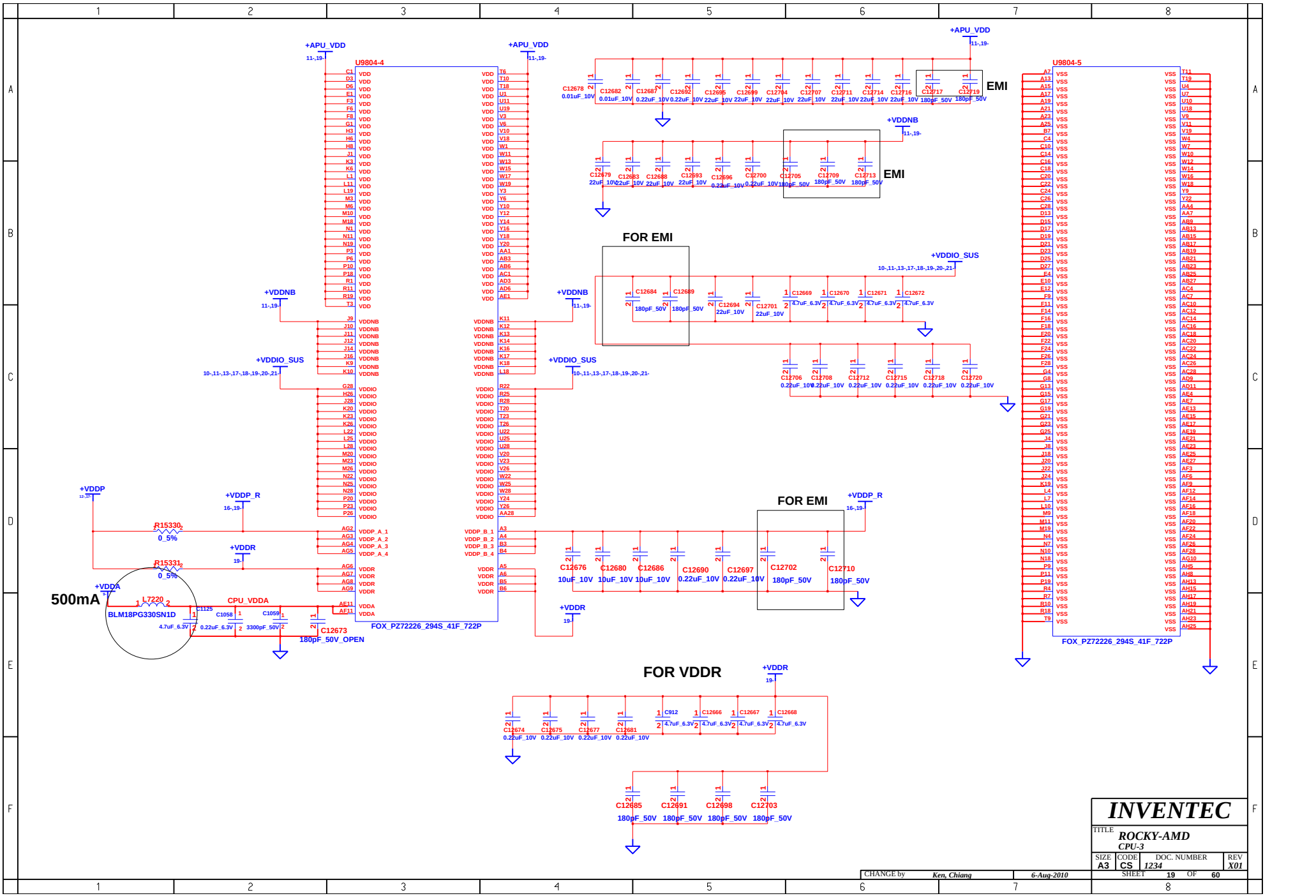
CPU


To VGA Receiver
To FCH
U9804-3
ANALOG/DISPLAY/MISC
DISPLAY PORT 0
DISPLAY PORT 1
DISPLAY PORT MISC
CLK
SER
CTRL
JTAG
RSVD
SENSE
TEST
FOX_PZ72226_294S_41F_722P
DEBUG HEADER
+V3S
+VDDIO_SUS
+V3AL
+V1.5S
+VDDP
LVDS_TX0P
LVDS_TX0N
LVDS_TX1P
LVDS_TX1N
VGA_TX0P
VGA_TX0N
VGA_TX1P
VGA_TX1N
VGA_TX2P
VGA_TX2N
VGA_TX3P
VGA_TX3N
LVDS_AUXP
LVDS_AUXN
VGA_AUXP
VGA_AUXN
HDMI_AUXP
HDMI_AUXN
CPU_R_CLKP
CPU_R_CLKN
DISP_CLKP_APU
DISP_CLKN_APU
APU_SVC
APU_SVD
APU_SIC
APU_SID
CPU_LDT_RST#
APU_PWRGD
APU_PROCHOT#_VDDIO_R
CPU_THERMTRIP#
APU_ALERT#
APU_TDI
APU_TCK
APU_TMS
APU_TRST#
APU_DBREQ#
VDD_CPU_NB_FB#
VDD_CPU_FB#
VDD_CPU_NB_FB
VDD_CPU_FB
VSS_SENSE
NB_R_REFCLKP
NB_R_REFCLKN
SCLK3
SDATA3
SMBUS
NB_LCM_BLEN
NB_LCMVCC_EN
NB_LCM_PWM
APU_THERMDA
APU_THERMDC
ALLOW_STOP
FS1R1
MMBT3904
Q9347
FCH_THERMTRIP#
CPU_THERMTRIP#
APU_TEST6_DIECRACKMON
APU_TEST9_ANALOGIN
APU_TEST12_SCANSHIFTEND
APU-TEST14_BP0
APU_TEST15_BP1
APU_TEST16_BP2
APU_TEST17_BP3
APU_TEST18_PLLTEST1
APU_TEST9_PLLTEST0
APU_TEST20_SCANCLK2
APU_TEST21_SCANEN
APU_TEST22_SCANSHIFTEN
APU_TEST23_TSTUPD
APU_TEST24_SCANCLK1
APU_TEST28_H_PLLCHRZ_P
APU_TEST28_L_PLLCHRZ_N
ANATSTIN_H
ANATSTIN_L
ANATSTOUT_H
ANATSTOUT_L
INVENTEC
ROCKY-AMD
CLK GEN
CHANGE by Ken, Chiang
9-Jun-2010
SHEET 17 OF 60



CPU

INVENTEC			
TITLE	ROCKY-AMD RS880M - 1		
SIZE A3	CODE CS	DOC. NUMBER 1234	REV X01
CHANGE by Ken, Chiang	9-Jun-2010	SHEET 18 OF 60	



CHANGE by	Ken, Chiang	6-Aug-2010		

INVENTEC

TITLE: *ROCKY-AMD*
CPU-3

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1234	X01

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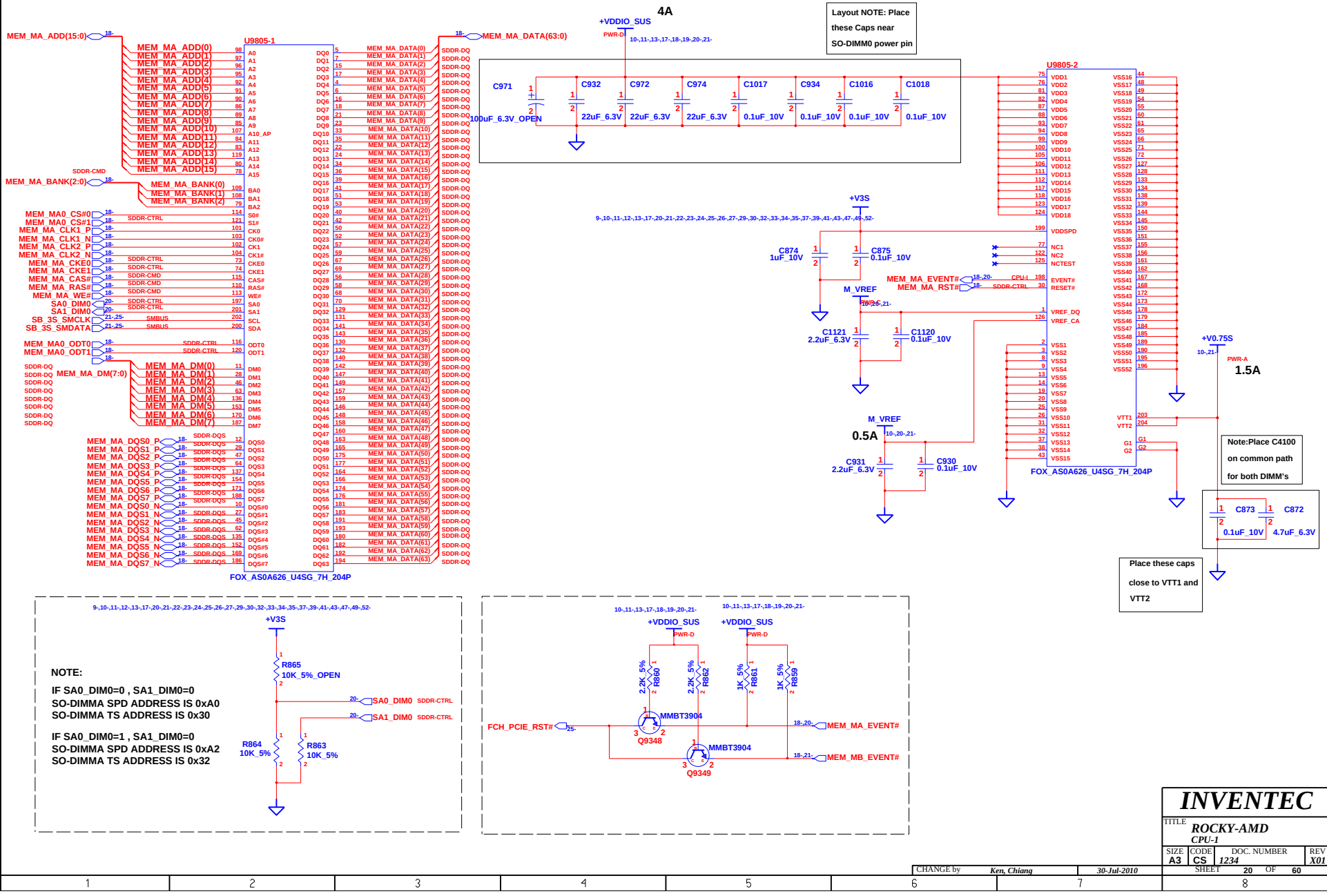
SO-DIMM0



CHANGE by	*Ken, Chiang*	*30-Jul-2010*			

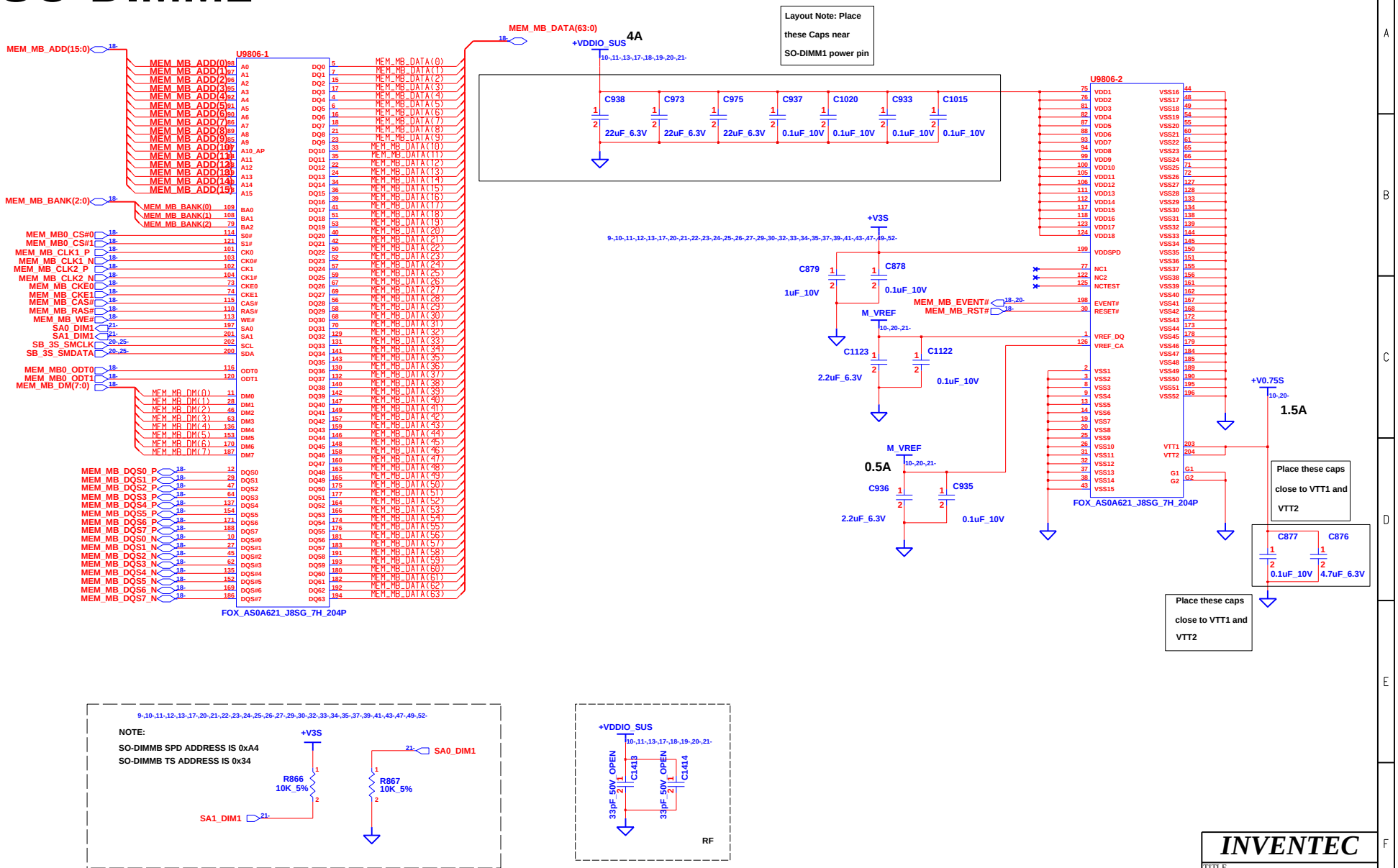
INVENTEC

TITLE: *ROCKY-AMD*
CPU-1

SIZE	CODE	DOC. NUMBER	REV
A3	CS	*1234*	*X01*

SHEET 20 OF 60

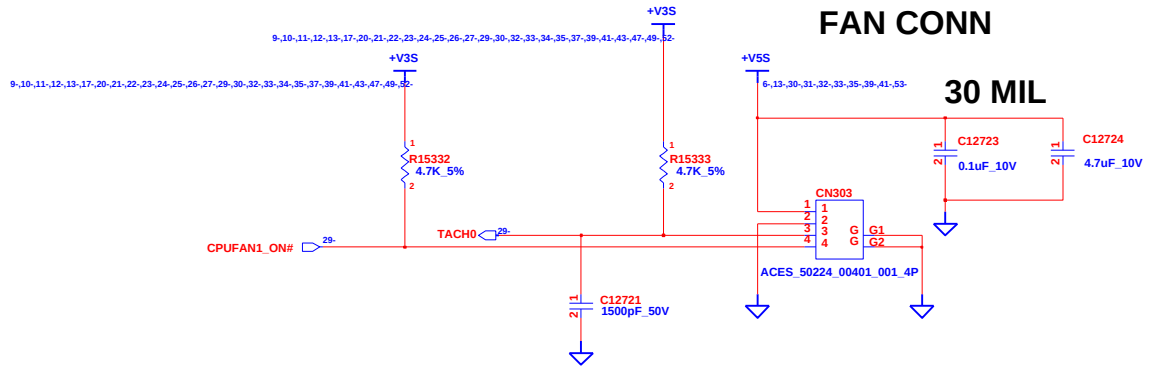
SO-DIMM1

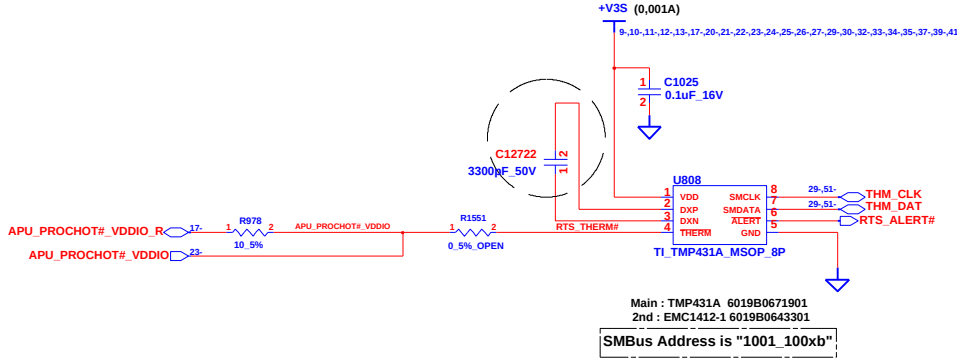


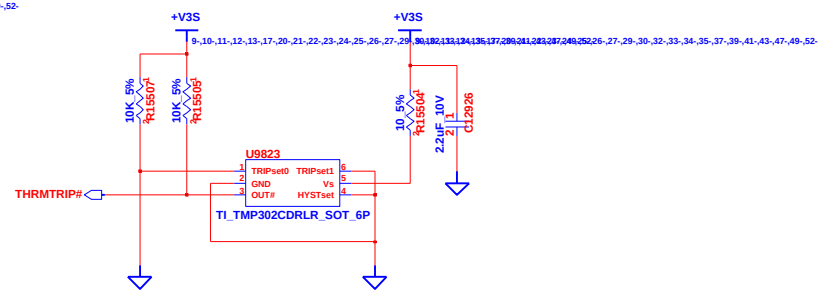
TITLE	ROCKY-AMD
COMPANY	INVENTEC
SIZE	A3
CODE	CS
DOC. NUMBER	1234
REV	X01
SHEET	21 OF 60
CHANGE by	Ken, Chiang
	9-Jun-2010

FAN CONN

30 MIL







CHANGE by	RKY15SB	6-Aug-2010	

INVENTEC

TITLE: *ROCKY-AMD*
SO-DIMM0

SIZE	CODE	DOC. NUMBER	REV
A3	CS		

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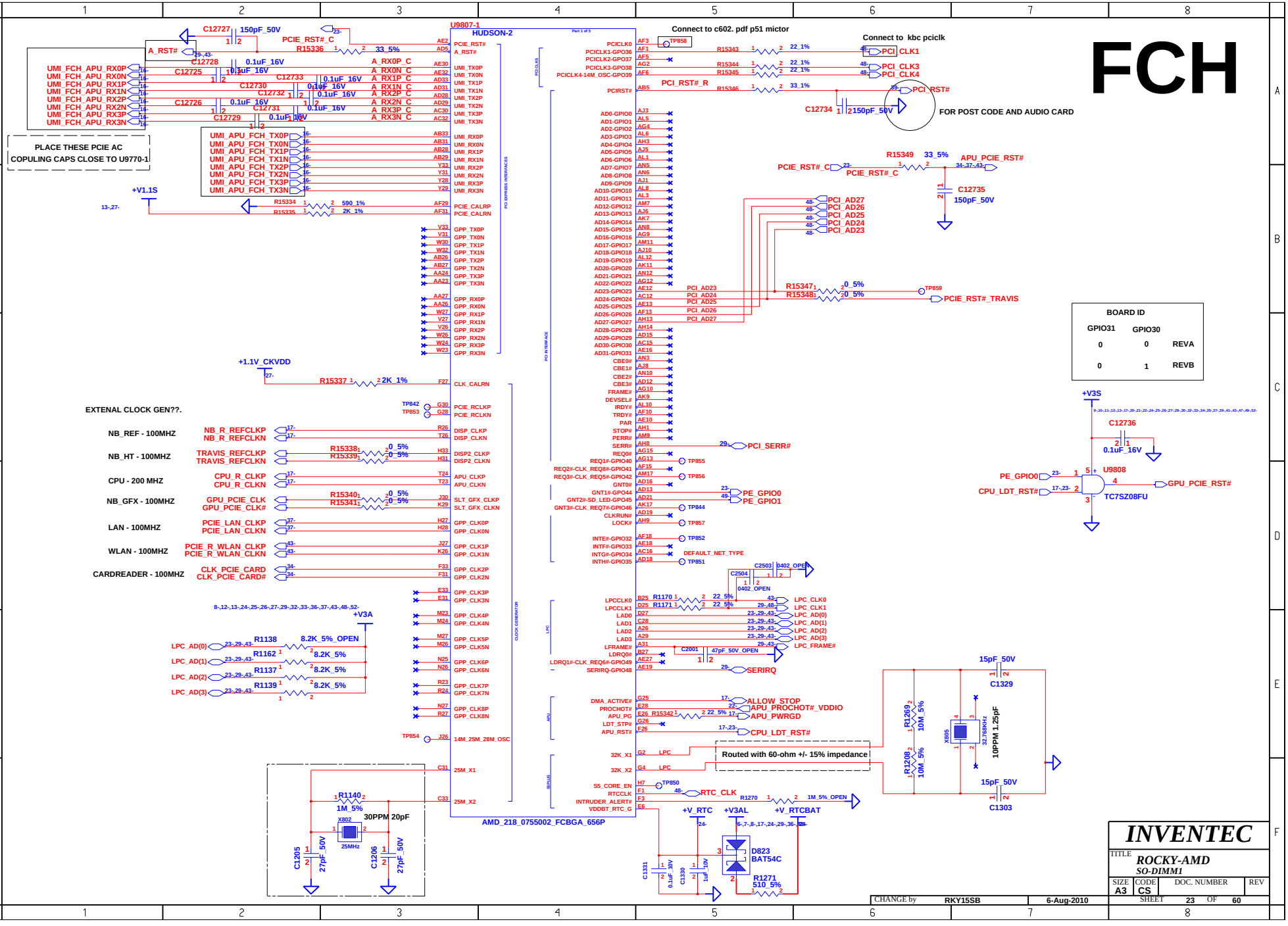
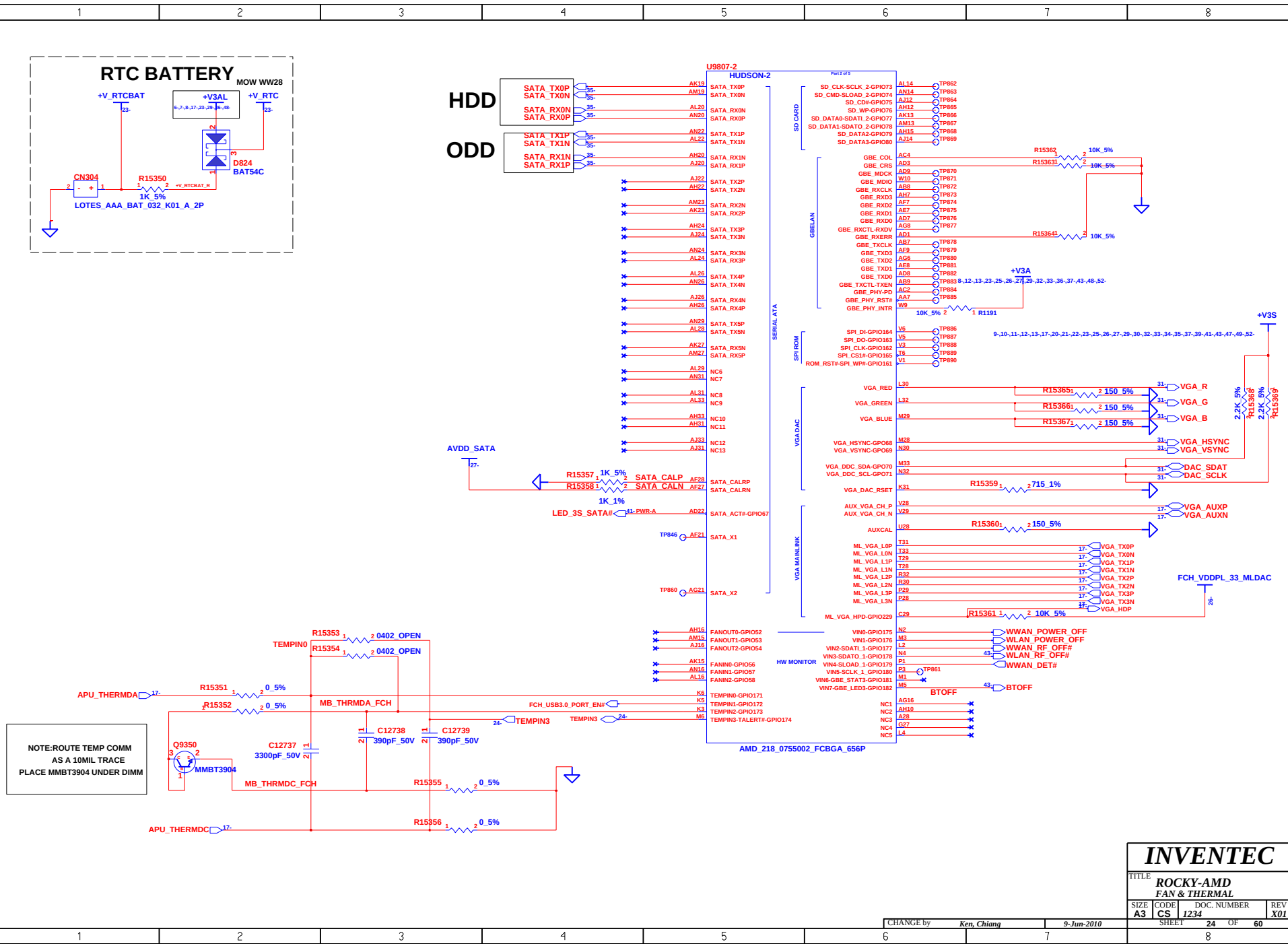
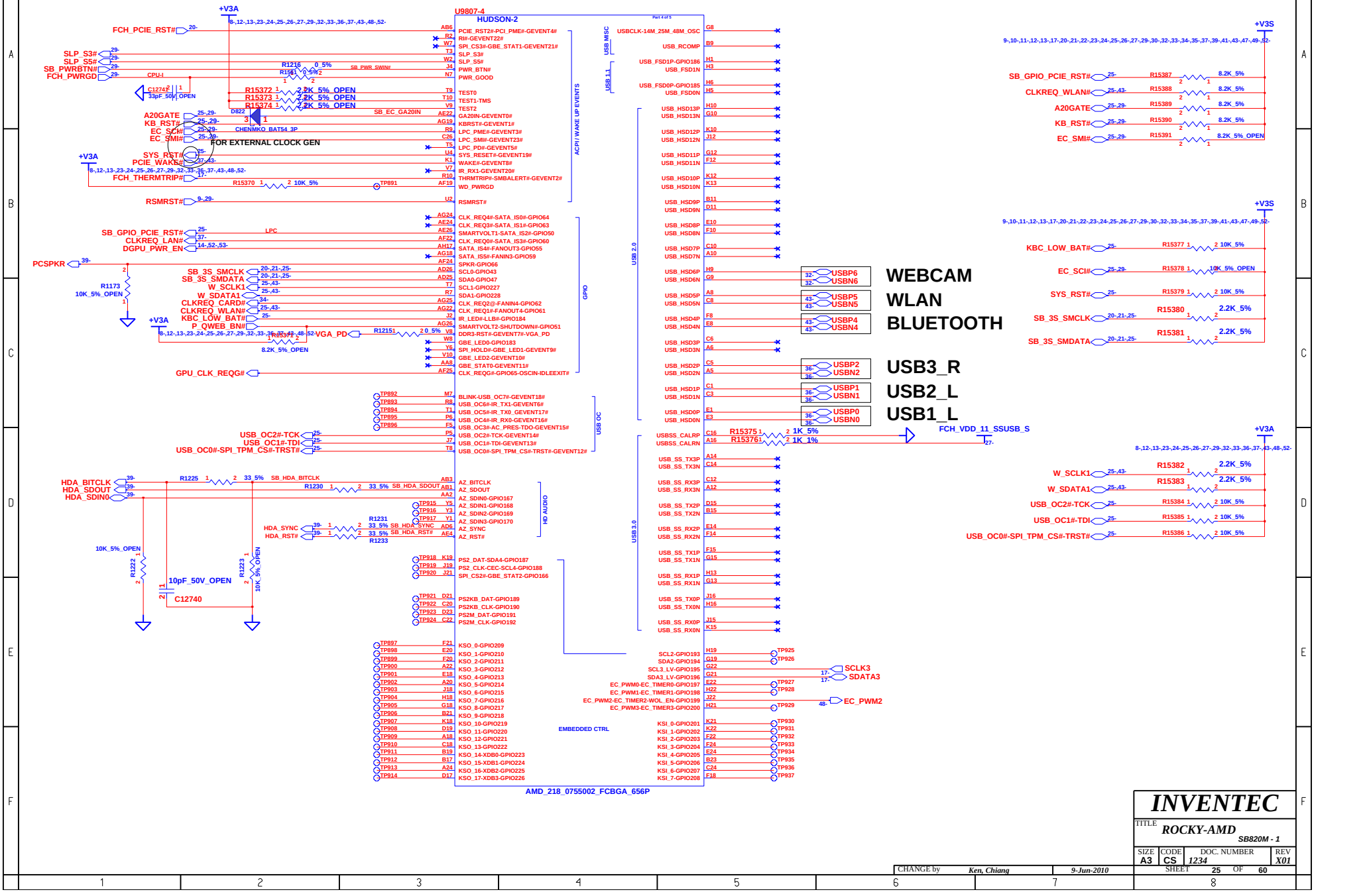
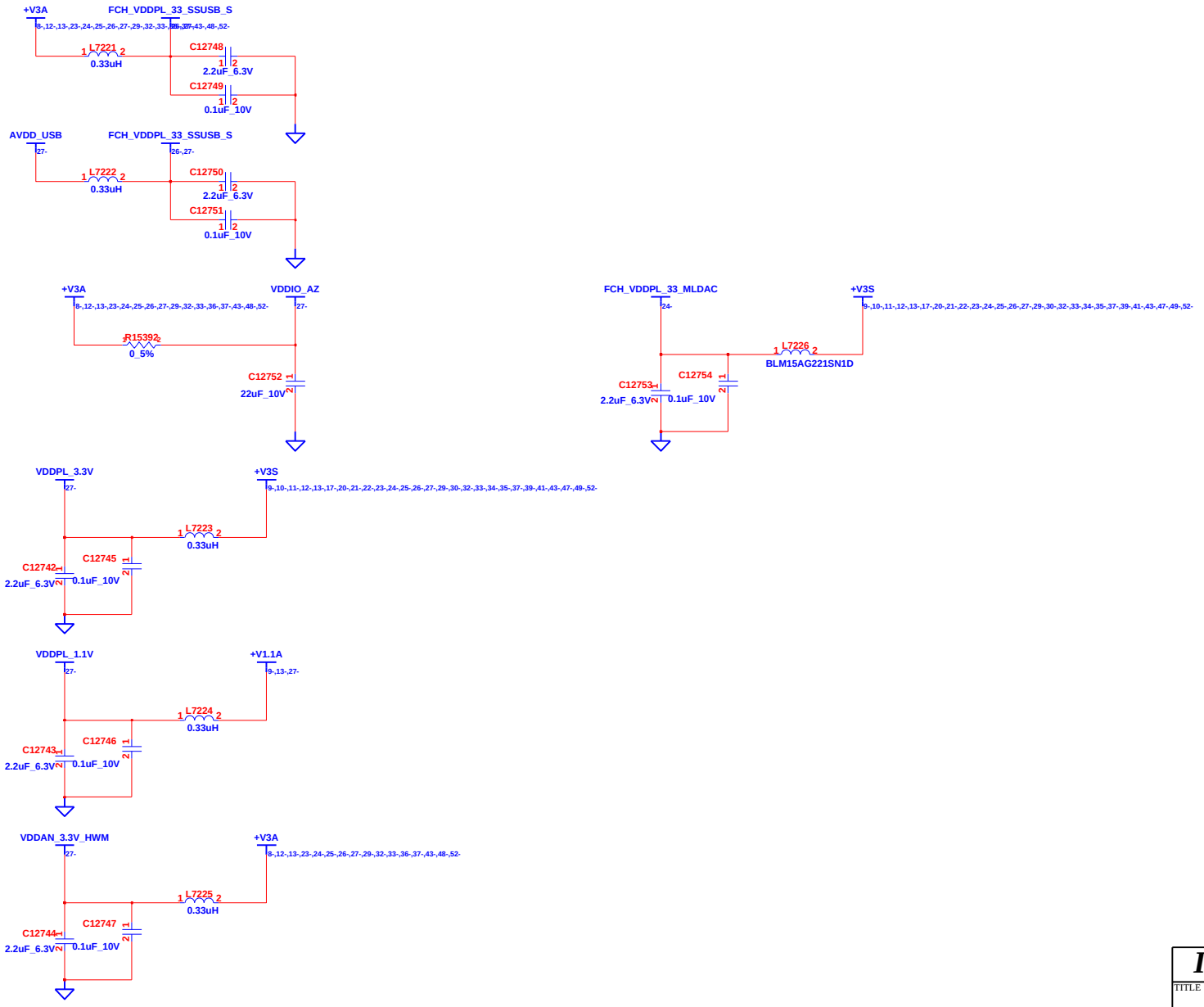
FCH


U9807-1
HUDSON-2
AMD_218_0755002_FCBGA_656P
Connect to c602. pdf p51 mictor
Connect to kbc pciclk
FOR POST CODE AND AUDIO CARD
PLACE THESE PCIE AC
COPULING CAPS CLOSE TO U9770-1
EXTENAL CLOCK GEN??.
NB_REF - 100MHZ
NB_HT - 100MHZ
CPU - 200 MHZ
NB_GFX - 100MHZ
LAN - 100MHZ
WLAN - 100MHZ
CARDREADER - 100MHZ
Routed with 60-ohm +/- 15% impedance
BOARD ID
GPIO31
GPIO30
0
0
REVA
0
1
REVB
INVENTEC
ROCKY-AMD
SO-DIMM1
CHANGE by
RKY15SB
6-Aug-2010
SHEET
23
OF
60


RTC BATTERY
MOW WW28
+V_RTCBAT
+V3AL
+V_RTC
CN304
R15350
1K_5%
LOTES_AAA_BAT_032_K01_A_2P
D824
BAT54C
HDD
ODD
U9807-2
HUDSON-2
SERIAL ATA
SD CARD
GBELAN
SPI ROM
VGA DAC
VGA MAINLINK
HW MONITOR
AMD_218_0755002_FCBGA_656P
AVDD_SATA
SATA_CALP
SATA_CALN
LED_3S_SATA#
TP846
TP860
+V3A
+V3S
VGA_R
VGA_G
VGA_B
VGA_HSYNC
VGA_VSYNC
DAC_SDAT
DAC_SCLK
VGA_AUXP
VGA_AUXN
FCH_VDDPL_33_MLDAC
WWAN_POWER_OFF
WLAN_POWER_OFF
WWAN_RF_OFF#
WLAN_RF_OFF#
WWAN_DET#
BTOFF
TEMPIN0
TEMPIN3
APU_THERMDA
APU_THERMDC
MB_THRMDA_FCH
MB_THRMDC_FCH
Q9350
MMBT3904
C12737
C12738
C12739
390pF_50V
3300pF_50V
NOTE:ROUTE TEMP COMM
AS A 10MIL TRACE
PLACE MMBT3904 UNDER DIMM
INVENTEC
ROCKY-AMD
FAN & THERMAL
SIZE A3
CODE CS
DOC. NUMBER 1234
REV X01
CHANGE by Ken, Chiang
9-Jun-2010
SHEET 24 OF 60


U9807-4
HUDSON-2
AMD_218_0755002_FCBGA_656P
FCH_PCIE_RST#
SLP_S3#
SLP_S5#
SB_PWRBTN#
FCH_PWRGD
A20GATE
KB_RST#
EC_SCI#
EC_SMI#
SYS_RST#
PCIE_WAKE#
FCH_THERMTRIP#
RSMRST#
FOR EXTERNAL CLOCK GEN
SB_GPIO_PCIE_RST#
CLKREQ_LAN#
DGPU_PWR_EN
PCSPKR
SB_3S_SMCLK
SB_3S_SMDATA
W_SCLK1
W_SDATA1
CLKREQ_CARD#
CLKREQ_WLAN#
KBC_LOW_BAT#
P_QWEB_BN#
VGA_PD
GPU_CLK_REQG#
USB_OC2#-TCK
USB_OC1#-TDI
USB_OC0#-SPI_TPM_CS#-TRST#
HDA_BITCLK
HDA_SDOUT
HDA_SDIN0
HDA_SYNC
HDA_RST#
WEBCAM
WLAN
BLUETOOTH
USB3_R
USB2_L
USB1_L
FCH_VDD_11_SSUSB_S
SCLK3
SDATA3
EC_PWM2
INVENTEC
ROCKY-AMD
SB820M - 1
CHANGE by Ken, Chiang 9-Jun-2010
SIZE A3 CODE CS DOC. NUMBER 1234 REV X01
SHEET 25 OF 60



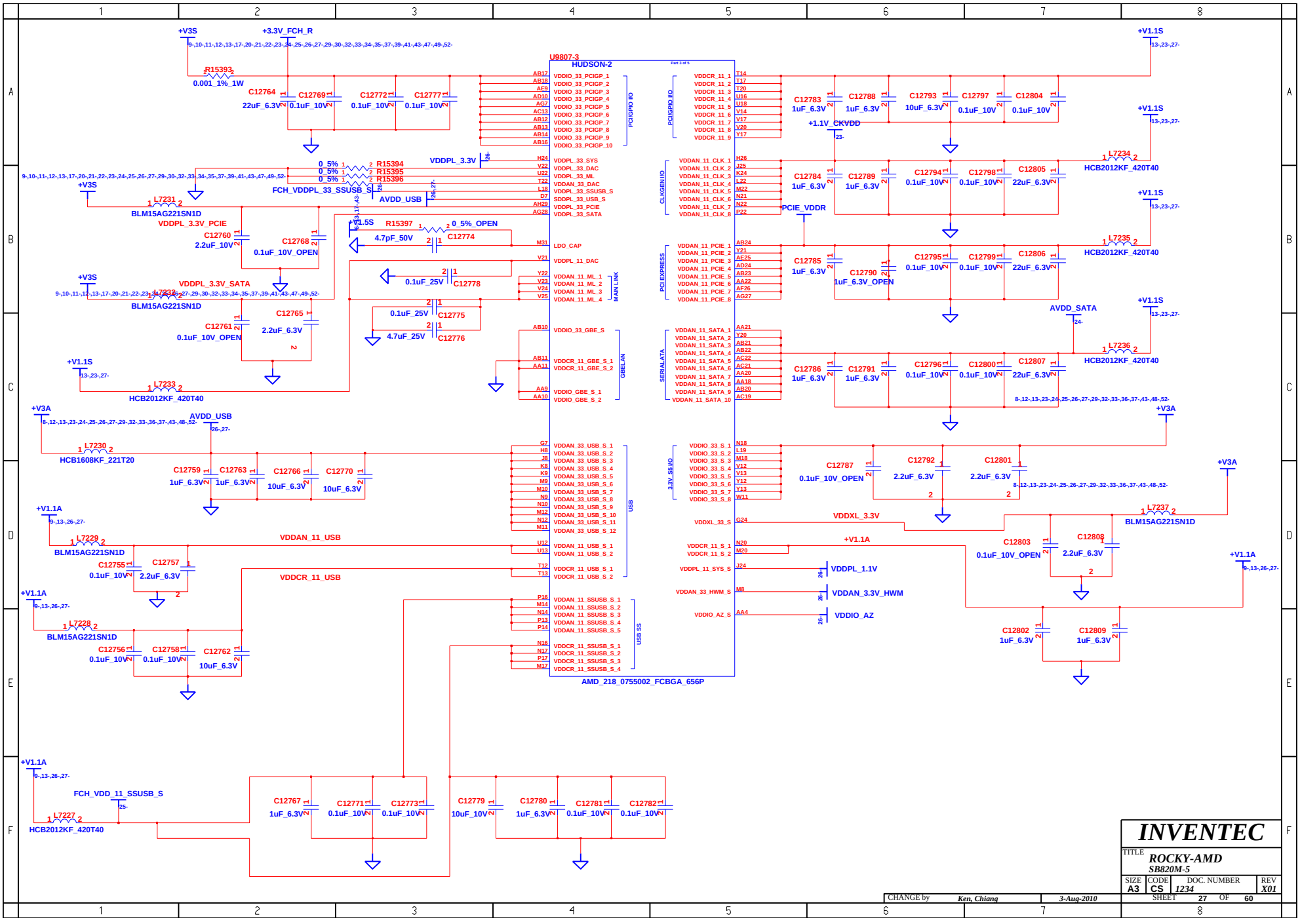
CHANGE by	Ken, Chiang	3-Aug-2010

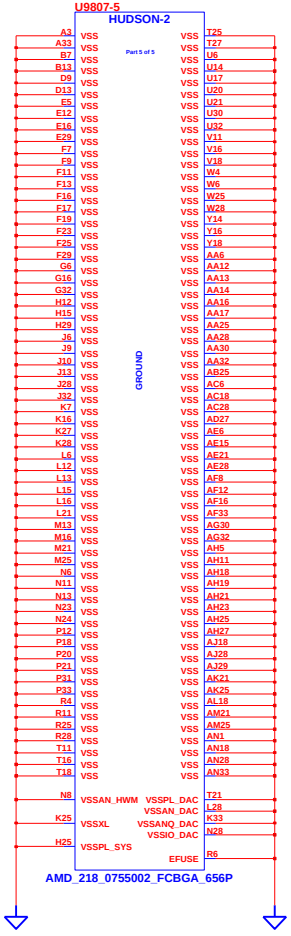
INVENTEC

TITLE: *ROCKY-AMD*
SB820M-2

SIZE	CODE	DOC. NUMBER	REV
A3	CS	*1234*	*X01*

SHEET 26 OF 60


U9807-3
HUDSON-2
AMD_218_0755002_FCBGA_656P
+V3S
+3.3V_FCH_R
+V1.1S
+V1.1A
+V3A
VDDPL_3.3V_PCIE
VDDPL_3.3V_SATA
AVDD_USB
AVDD_SATA
VDDAN_11_USB
VDDCR_11_USB
FCH_VDDPL_33_SSUSB_S
FCH_VDD_11_SSUSB_S
PCIE_VDDR
+1.1V_CKVDD
VDDPL_1.1V
VDDAN_3.3V_HWM
VDDIO_AZ
VDDXL_3.3V
INVENTEC
ROCKY-AMD
SB820M-5
CHANGE by Ken, Chiang 3-Aug-2010
SIZE A3 CODE CS DOC. NUMBER 1234 REV X01
SHEET 27 OF 60

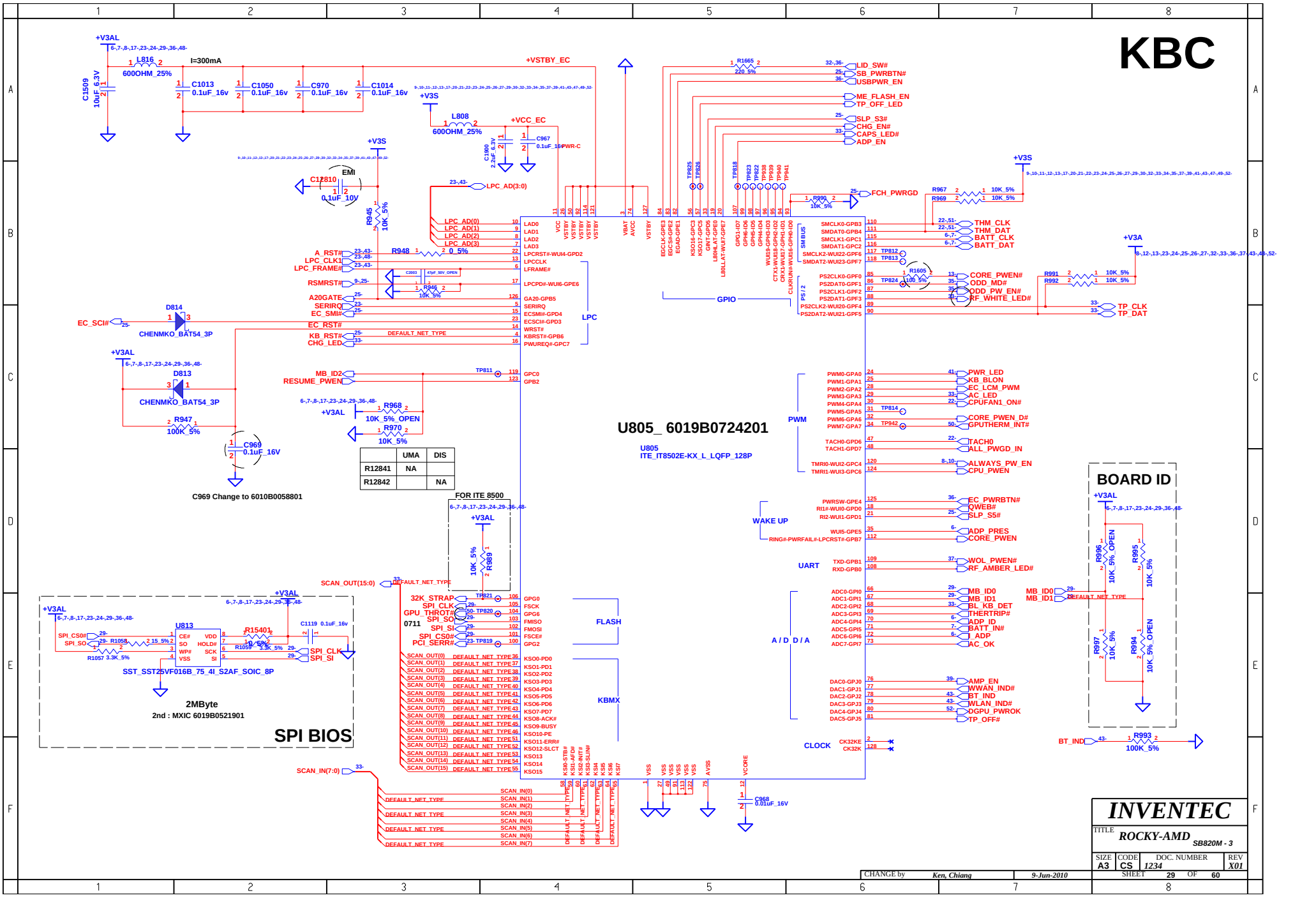


CHANGE by	*Ken, Chiang*	*9-Jun-2010*	SHEET	28 OF 60

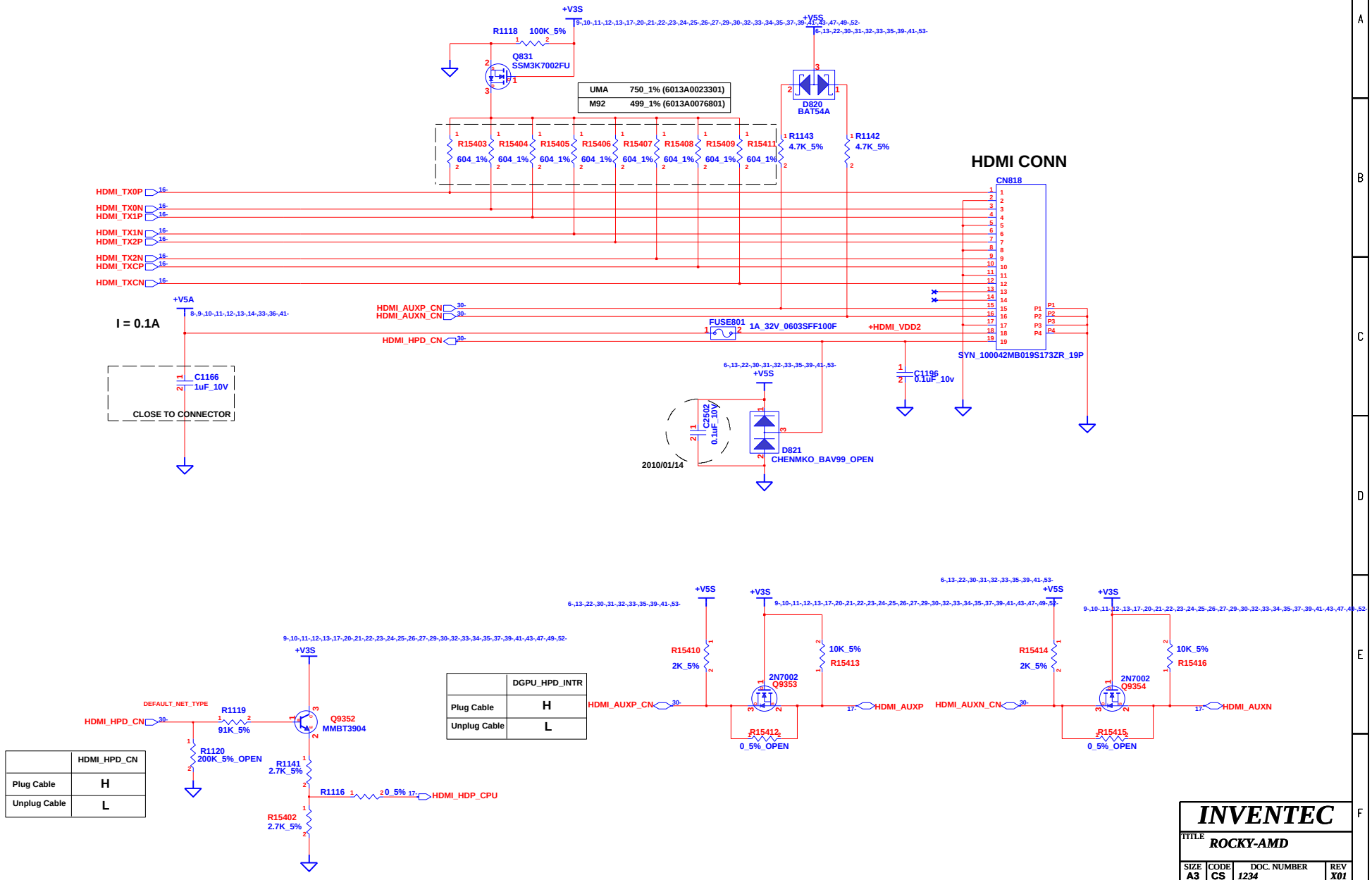
INVENTEC

TITLE *ROCKY-AMD*

SIZE	CODE	DOC. NUMBER	REV
A3	CS	*1234*	*X01*

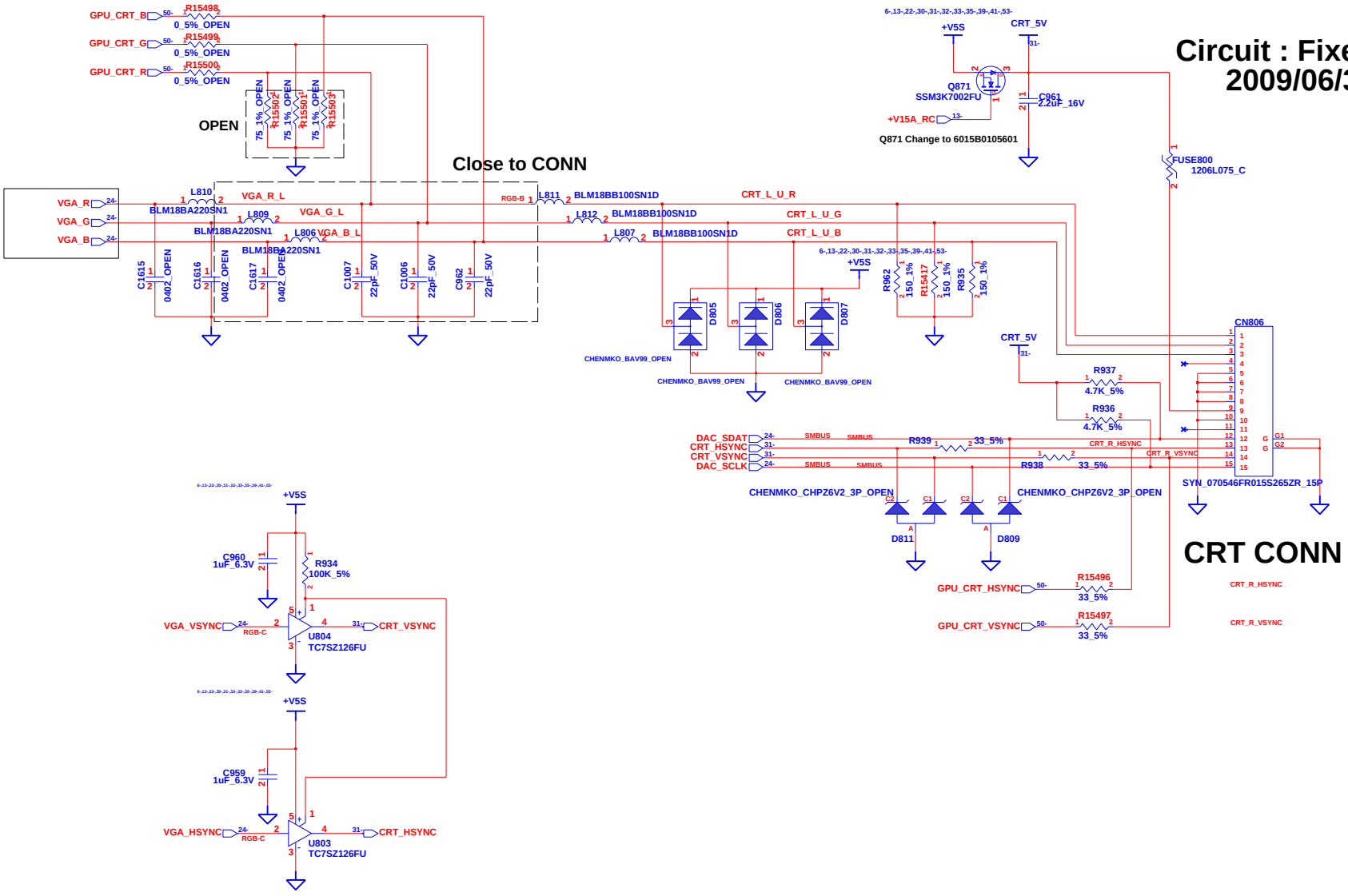

KBC
U805_ 6019B0724201
U805
ITE_IT8502E-KX_L_LQFP_128P
SPI BIOS
SST_SST25VF016B_75_4I_S2AF_SOIC_8P
2MByte
2nd : MXIC 6019B0521901
C969 Change to 6010B0058801
FOR ITE 8500
BOARD ID
GPIO
LPC
FLASH
KBMX
PWM
WAKE UP
UART
A / D / A
CLOCK
SM BUS
PS/2
EMI
UMA
DIS
R12841 NA
R12842 NA
INVENTEC
TITLE ROCKY-AMD SB820M - 3
SIZE A3
CODE CS
DOC. NUMBER 1234
REV X01
CHANGE by Ken, Chiang
9-Jun-2010
SHEET 29 OF 60

HDMI



TITLE	ROCKY-AMD
SIZE	A3
CODE	CS
DOC. NUMBER	1234
REV	X01
SHEET	30 OF 60
CHANGE by	Ken, Chiang
	9-Jun-2010

INVENTEC



CHANGE by	Ken, Chiang	5-Aug-2010	

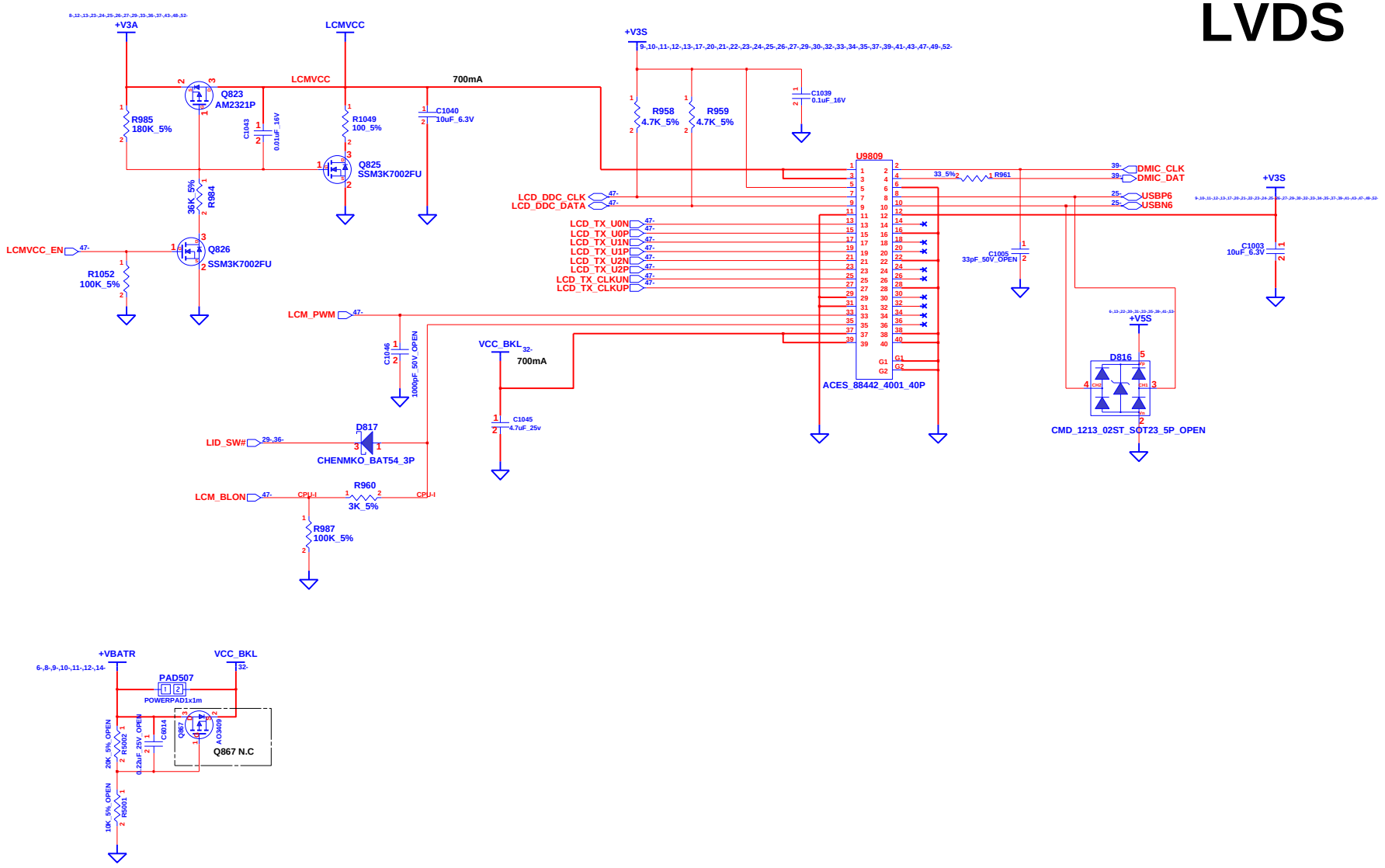
INVENTEC

TITLE: ROCKY-AMD

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1234	X01

SHEET 31 OF 60

LVDS



CHANGE by	RKY15SB	9-Aug-2010	

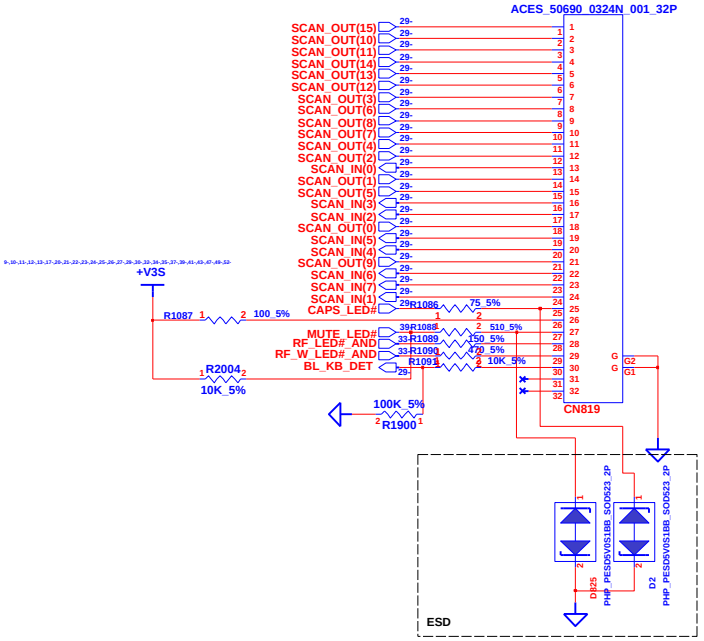
INVENTEC

TITLE: *ROCKY-AMD*

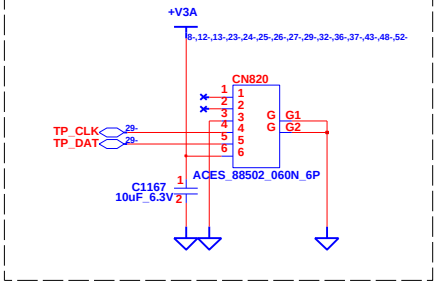
SIZE	CODE	DOC. NUMBER	REV
A3	CS		

SHEET 32 OF 60

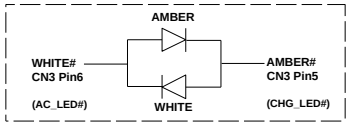
KeyBoard CONN (30 pin)

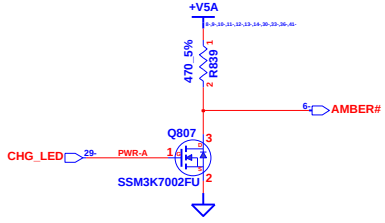


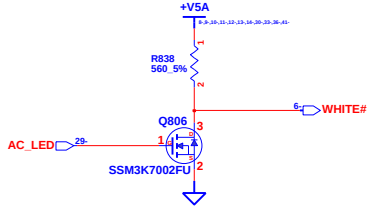
TouchPad on MB



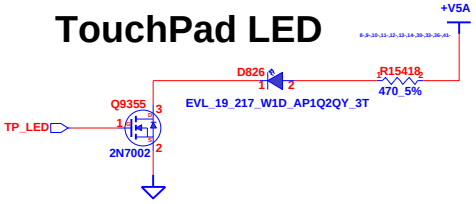
DC-JACK LED

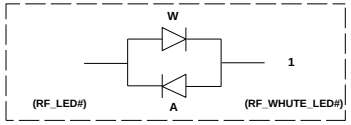


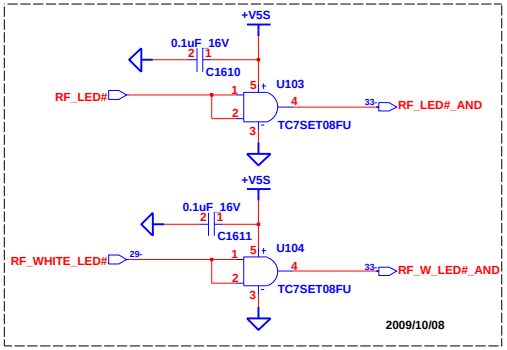




TouchPad LED







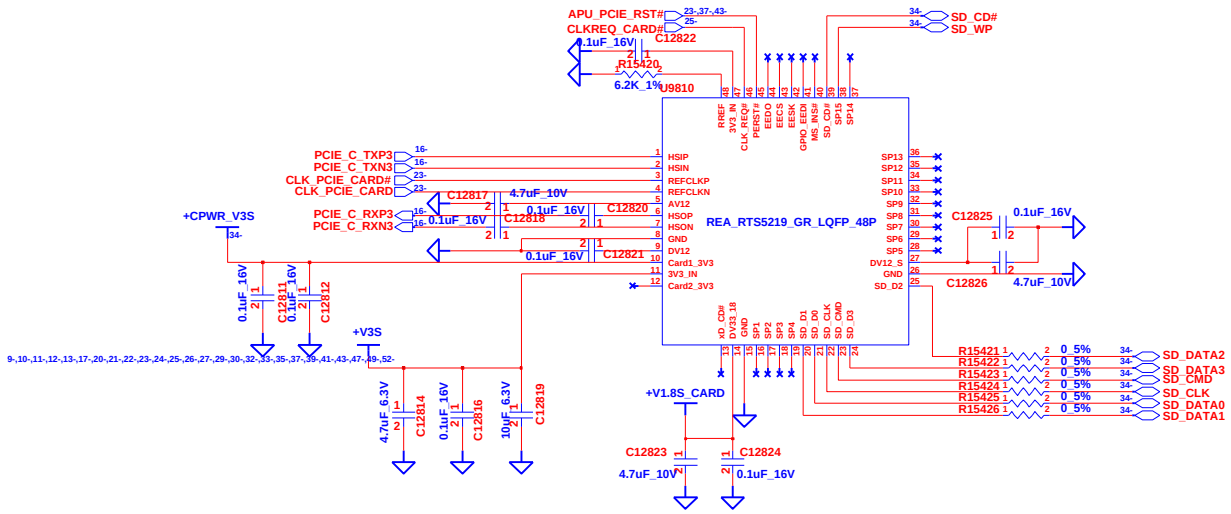
CHANGE by	Ken, Chiang	5-Aug-2010

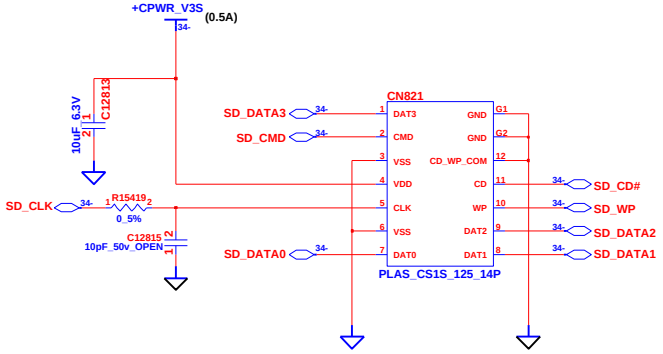
INVENTEC

TITLE: ROCKY-AMD

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1234	X01

SHEET 33 OF 60

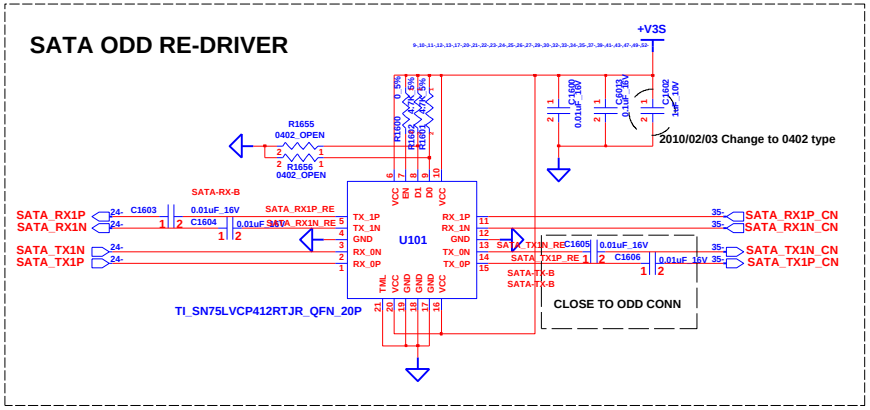




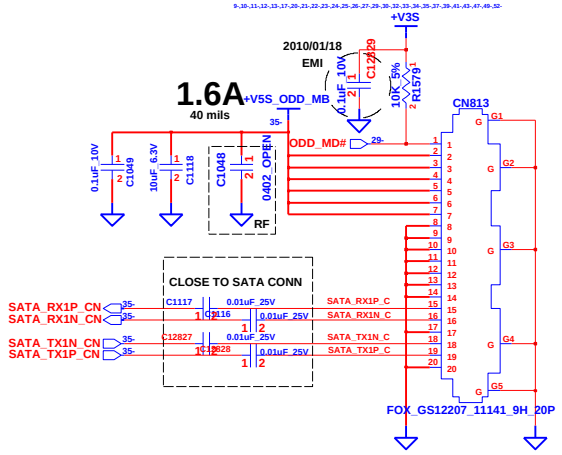
Card Reader CONN

INVENTEC			
TITLE: ROCKY-AMD			
SIZE: A3	CODE: CS	DOC. NUMBER: 1234	REV: X01
CHANGE by: Ken, Chiang	5-Aug-2010	SHEET 34 OF 60	

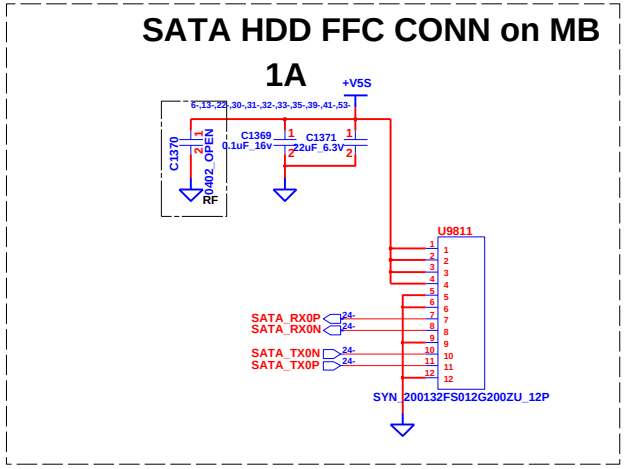
SATA ODD RE-DRIVER

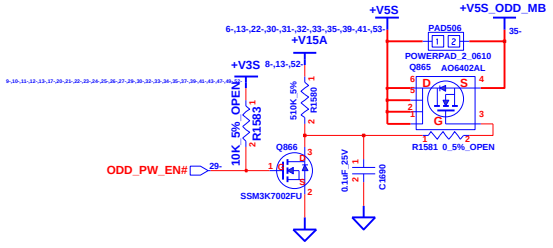


SATA ODD FFC CONN on MB



SATA HDD FFC CONN on MB





CHANGE by	*Ken, Chiang*	*5-Aug-2010*	

INVENTEC

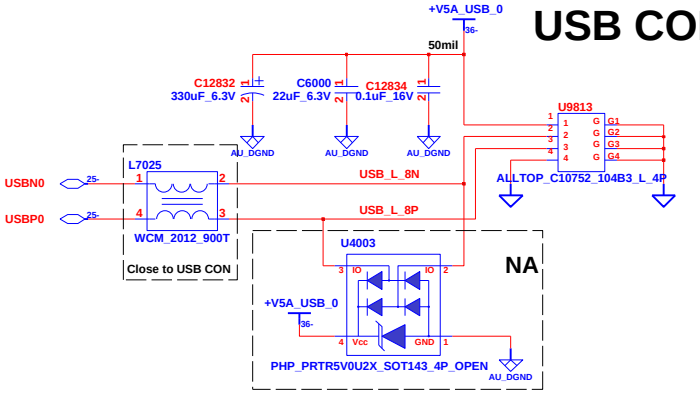
TITLE: *ROCKY-AMD*

SIZE	CODE	DOC. NUMBER	REV
A3	CS	*1234*	*X01*

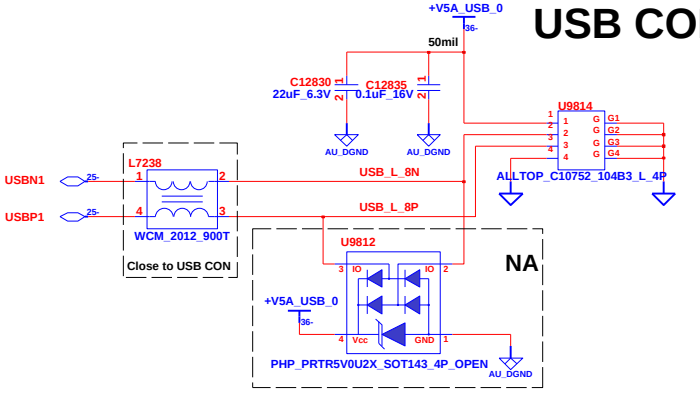
SHEET 35 OF 60

USB

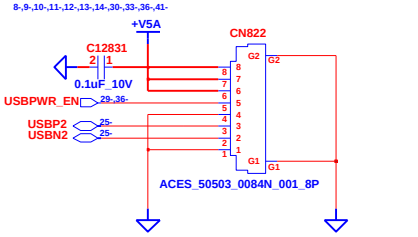
USB CONN01



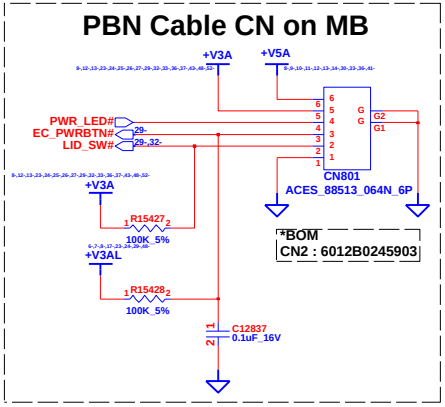
USB CONN02

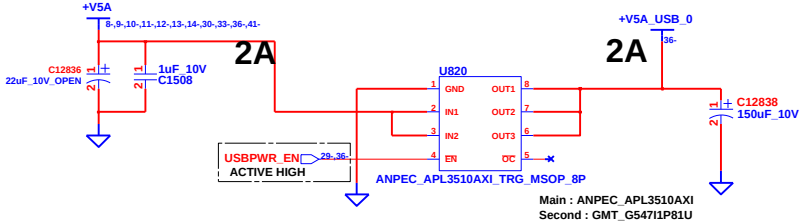


USB BOARD Cable on MB



PBN Cable CN on MB





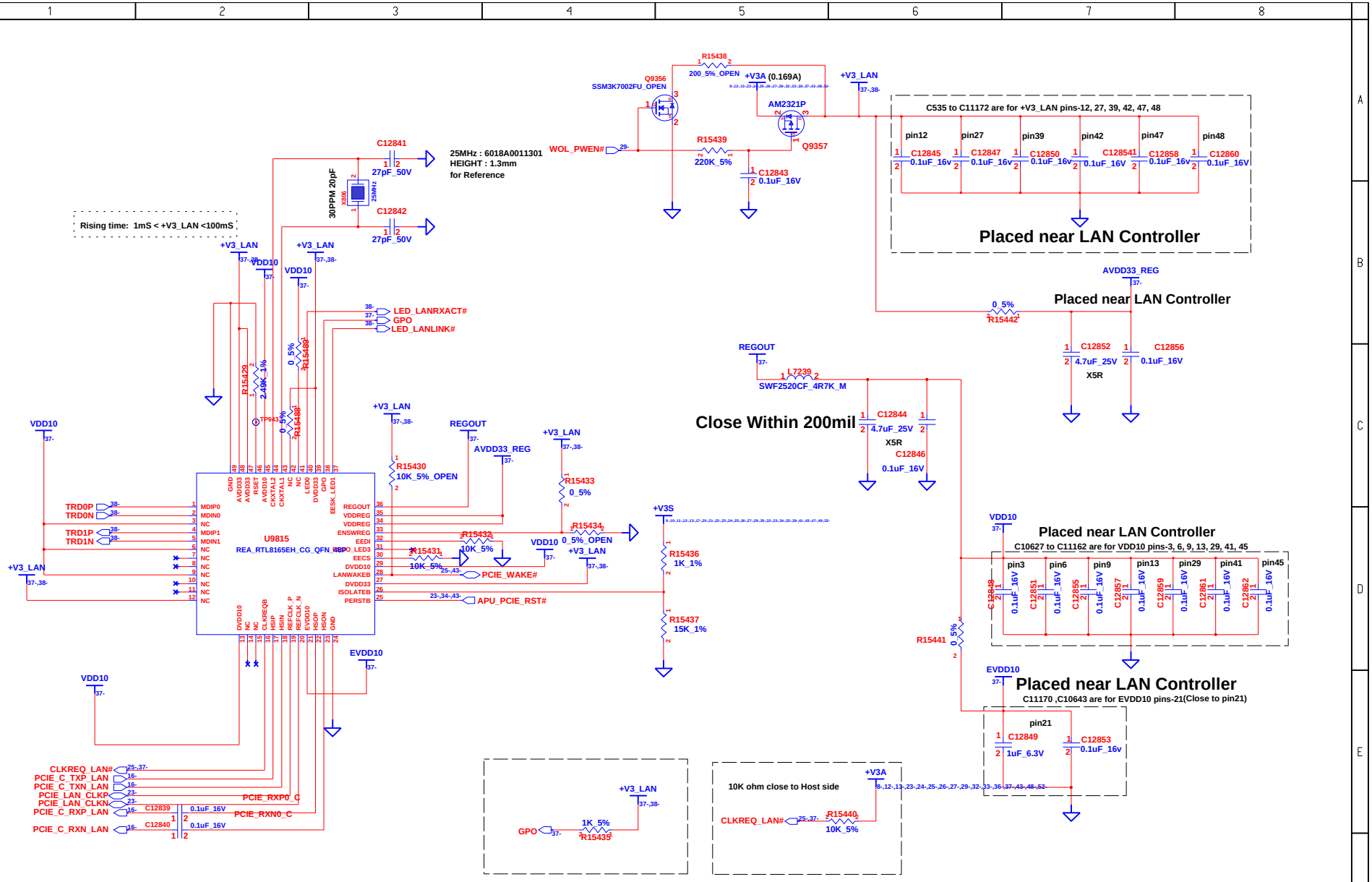
CHANGE by	Ken, Chiang	5-Aug-2010	

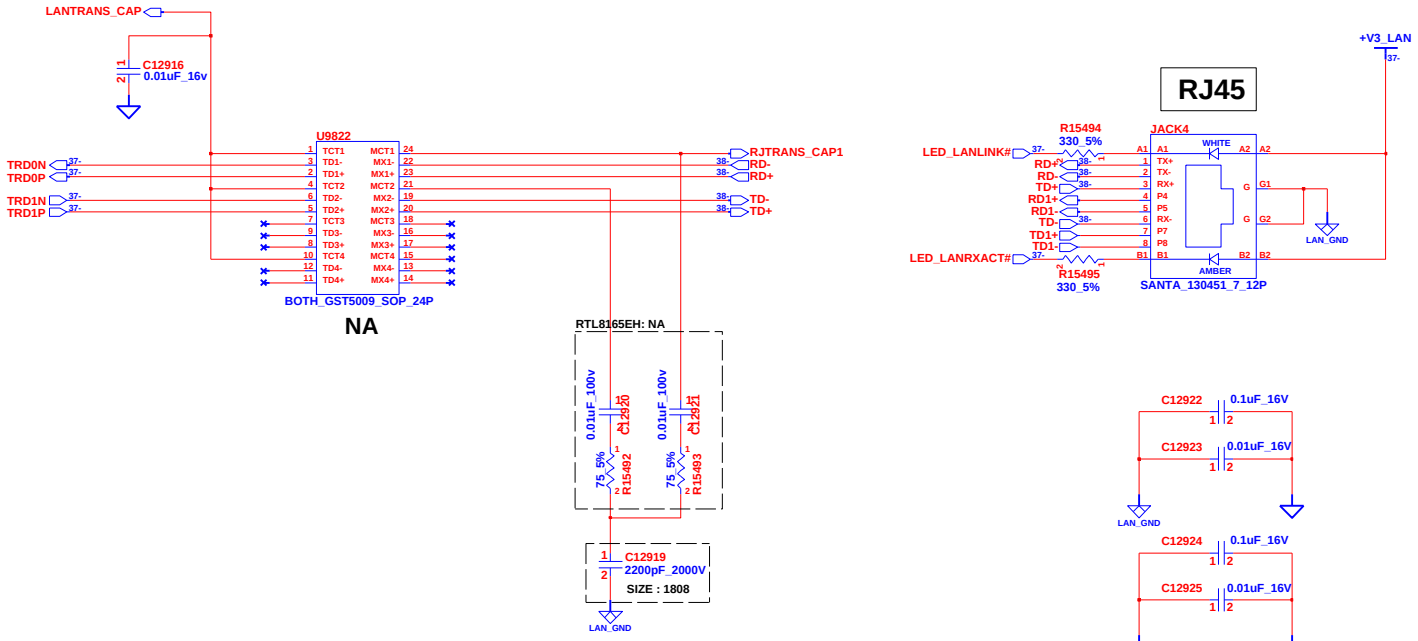
INVENTEC

TITLE: ROCKY-AMD

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1234	X01

SHEET 36 OF 60

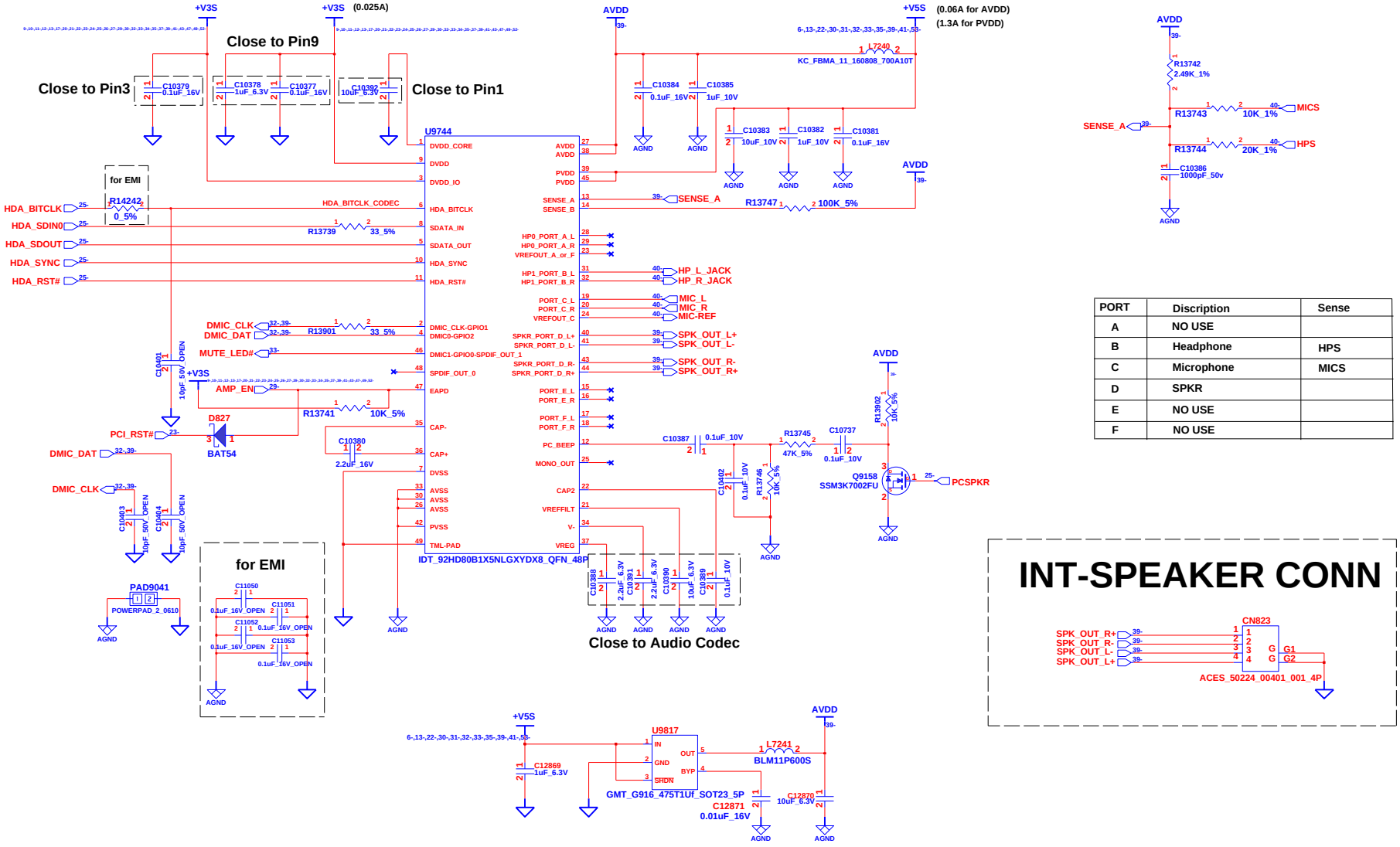

Rising time: 1mS < +V3_LAN <100mS
25MHz : 6018A0011301
HEIGHT : 1.3mm
for Reference
30PPM 20pF
C12841
27pF_50V
C12842
27pF_50V
X696
25MHz
WOL_PWEN#
Q9356
SSM3K7002FU_OPEN
R15438
200_5%_OPEN
+V3A (0.169A)
AM2321P
Q9357
R15439
220K_5%
C12843
0.1uF_16V
+V3_LAN
C535 to C11172 are for +V3_LAN pins-12, 27, 39, 42, 47, 48
pin12
pin27
pin39
pin42
pin47
pin48
C12845
C12847
C12850
C128541
C12858
C12860
0.1uF_16V
Placed near LAN Controller
AVDD33_REG
Placed near LAN Controller
0_5%
R15442
C12852
4.7uF_25V
X5R
C12856
0.1uF_16V
REGOUT
L7239
SWF2520CF_4R7K_M
Close Within 200mil
C12844
4.7uF_25V
X5R
C12846
0.1uF_16V
VDD10
+V3_LAN
LED_LANRXACT#
GPO
LED_LANLINK#
R15429
2.49K_1%
R15428
0_5%
R15430
10K_5%_OPEN
R15433
0_5%
R15434
0_5%_OPEN
R15432
10K_5%
R15431
10K_5%
PCIE_WAKE#
APU_PCIE_RST#
+V3S
R15436
1K_1%
R15437
15K_1%
U9815
REA_RTL8165EH_CG_QFN_48P
TRD0P
TRD0N
TRD1P
TRD1N
CLKREQ_LAN#
PCIE_C_TXP_LAN
PCIE_C_TXN_LAN
PCIE_LAN_CLKP
PCIE_LAN_CLKN
PCIE_C_RXP_LAN
PCIE_C_RXN_LAN
C12839
C12840
0.1uF_16V
PCIE_RXP0_C
PCIE_RXN0_C
EVDD10
Placed near LAN Controller
C10627 to C11162 are for VDD10 pins-3, 6, 9, 13, 29, 41, 45
pin3
pin6
pin9
pin13
pin29
pin41
pin45
C12848
C12851
C12855
C12857
C12859
C12861
C12862
0.1uF_16V
R15441
0_5%
Placed near LAN Controller
C11170 ,C10643 are for EVDD10 pins-21(Close to pin21)
pin21
C12849
1uF_6.3V
C12853
0.1uF_16v
GPO
1K_5%
R15435
10K ohm close to Host side
CLKREQ_LAN#
R15440
10K_5%
INVENTEC
TITLE
ROCKY-AMD
SIZE
A3
CODE
CS
DOC. NUMBER
1234
REV
X01
CHANGE by
Ken, Chiang
5-Aug-2010
SHEET
37
OF
60



LAYOUT NOTE : Place termination resistors and caps as close to LAN controller as possible

CHANGE by	*Ken, Chiang*	*5-Aug-2010*	SHEET	38 OF 60

INVENTEC			
TITLE *ROCKY-AMD*			
SIZE A3	CODE CS	DOC. NUMBER *1234*	REV *X01*



PORT	Discription	Sense
A	NO USE	
B	Headphone	HPS
C	Microphone	MICS
D	SPKR	
E	NO USE	
F	NO USE	

INT-SPEAKER CONN

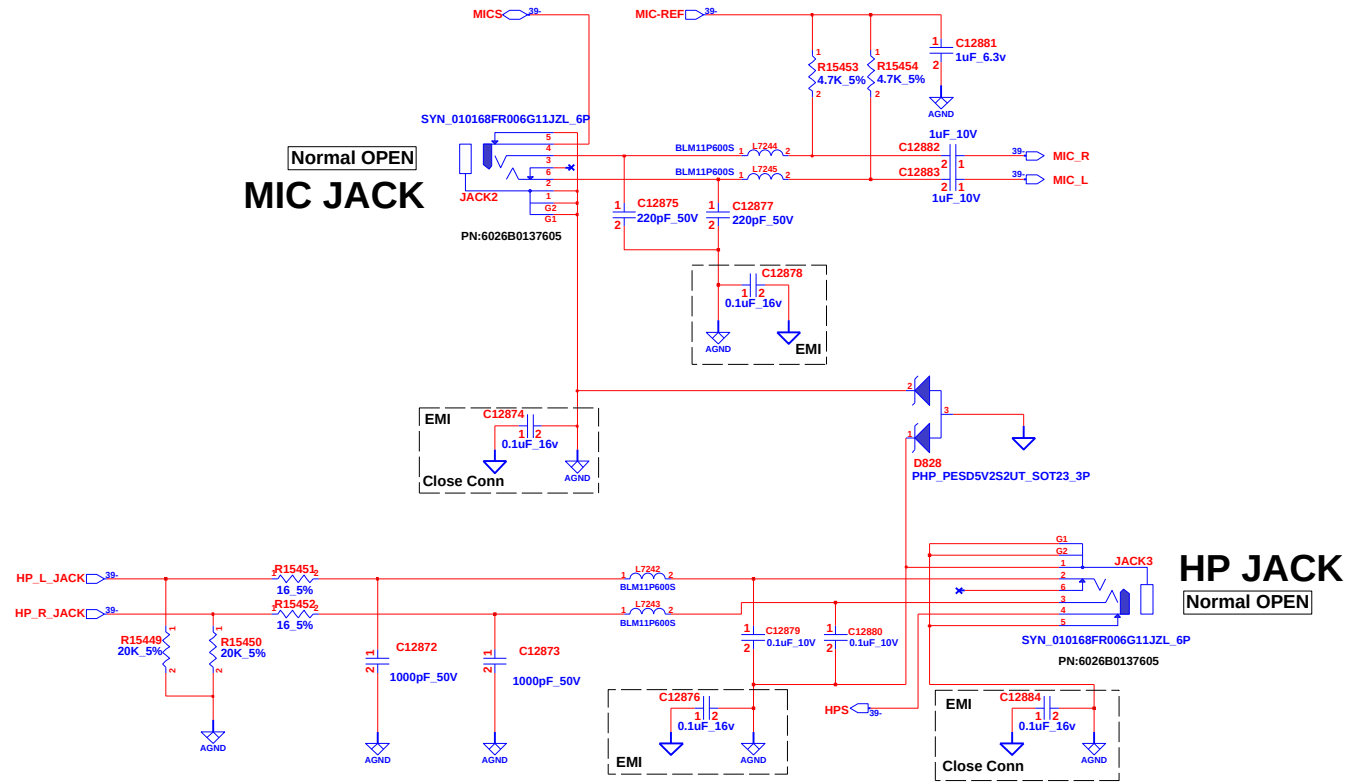
CHANGE by	Ken, Chiang	9-Jun-2010

INVENTEC

TITLE: *ROCKY-AMD*
KBC

SIZE	CODE	DOC. NUMBER	REV
A3	CS	*1234*	*X01*

SHEET 39 OF 60



CHANGE by	Ken, Chiang	9-Jun-2010	

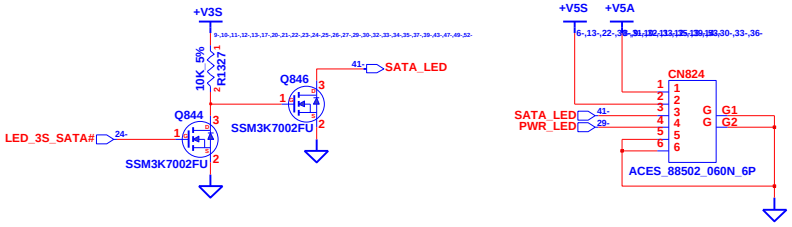
INVENTEC

TITLE: *ROCKY-AMD HDMI*

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1234	X01

SHEET 40 OF 60

LED BOARD on MB



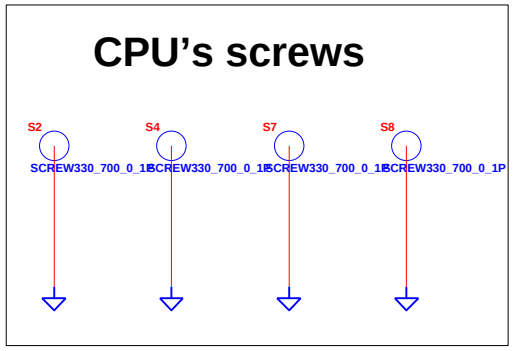
CHANGE by	*Ken, Chiang*	*4-Aug-2010*		

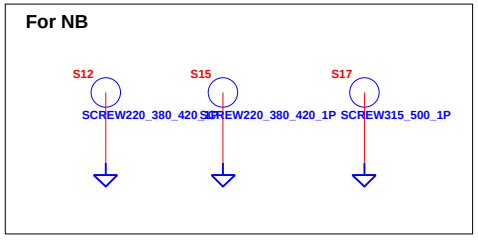
INVENTEC

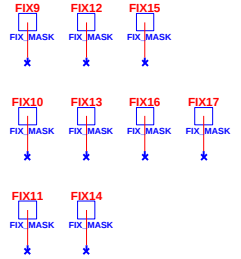
TITLE: ***ROCKY-AMD***
DDR3 DAMPING

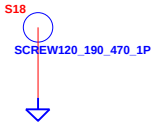
SIZE	CODE	DOC. NUMBER	REV
A3	CS	*1234*	*X01*

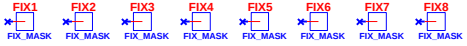
SHEET **41** OF **60**

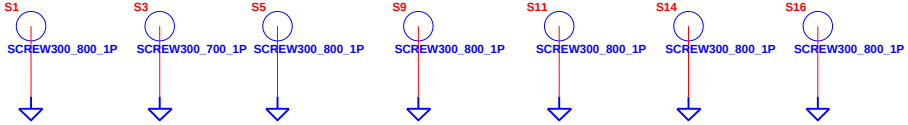


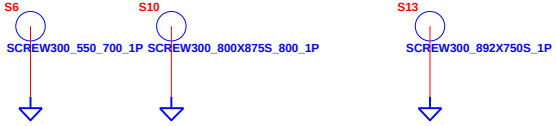










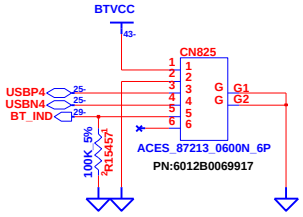


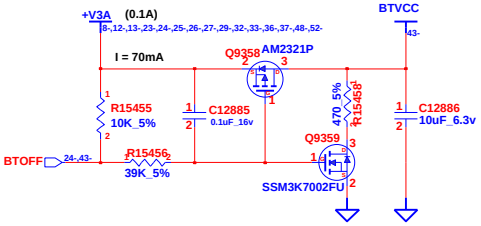
CHANGE by	*Ken, Chiang*	*9-Jun-2010*	

INVENTEC

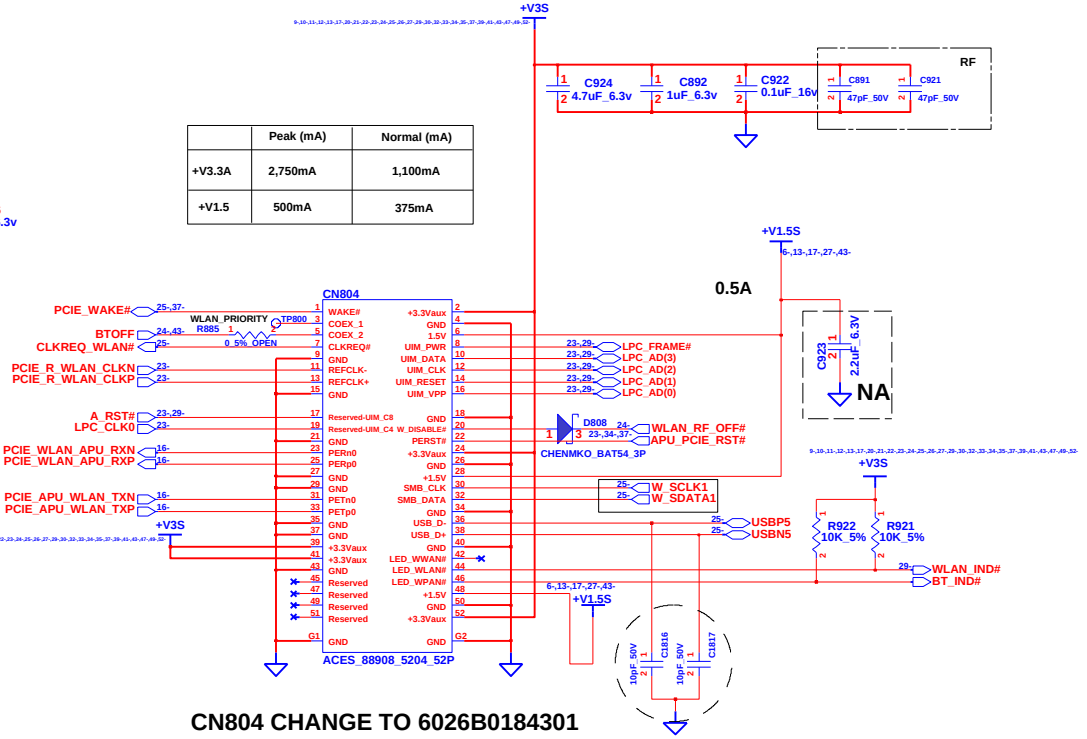
TITLE	*ROCKY-AMD CRT*		
SIZE A3	CODE CS	DOC. NUMBER *1234*	REV *X01*
		SHEET 42 OF 60	

BLUETOOTH CONN





WLAN CONN (MINICARD)



	Peak (mA)	Normal (mA)
+V3.3A	2,750mA	1,100mA
+V1.5	500mA	375mA

CN804 CHANGE TO 6026B0184301

	PCH	SB800\820
WLAN_RF_OFF#	GPIO57	GPIO12
WLAN_POWER_OFF	GPIO35	GPIO176

CHANGE by *Ken, Chiang* *9-Jun-2010*

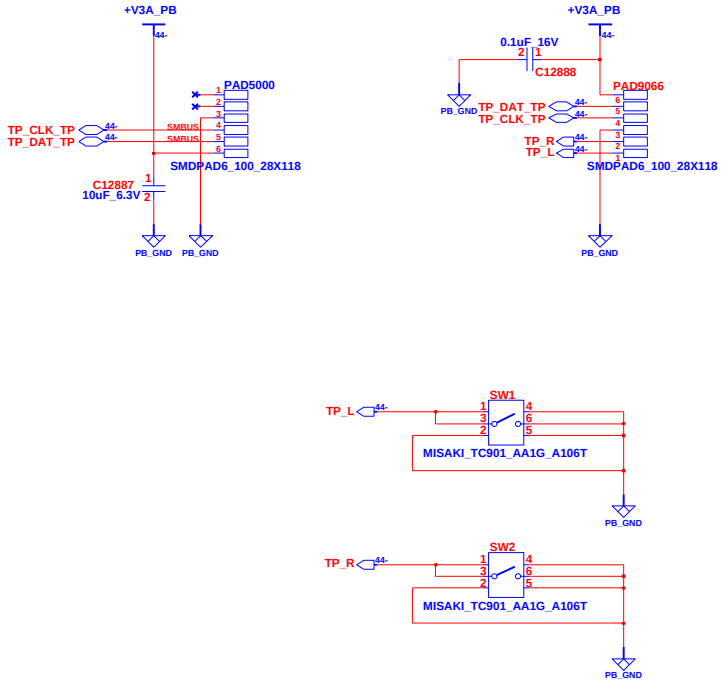
INVENTEC

TITLE *ROCKY-AMD*
LCM CONN

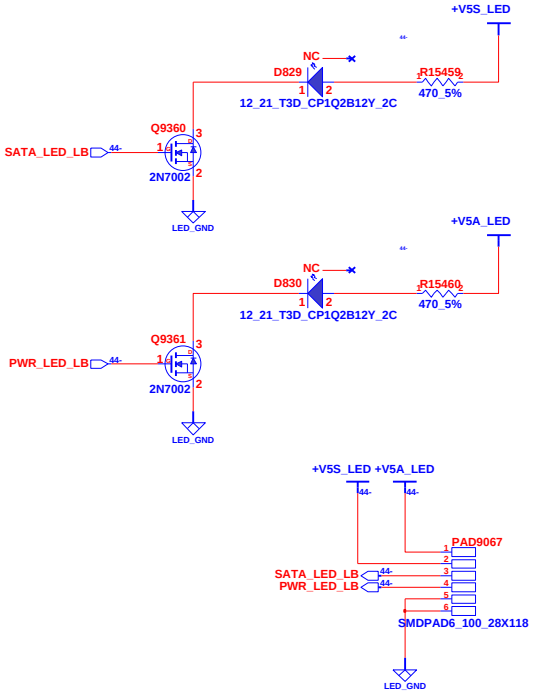
SIZE	CODE	DOC. NUMBER	REV
A3	CS	*1234*	*X01*

SHEET 43 OF 60

PICK BUTTON BOARD



LED BOARD



CHANGE by	*Ken, Chiang*	*9-Jun-2010*	

INVENTEC

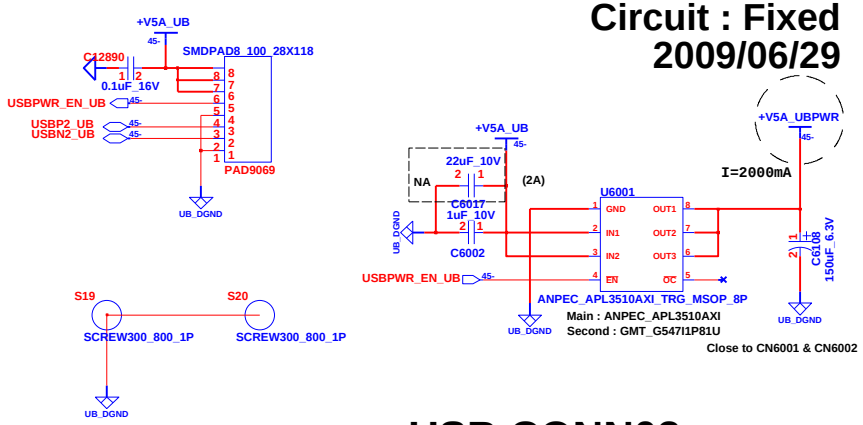
TITLE: ***ROCKY-AMD***
KEYBOARD CONN

SIZE	CODE	DOC. NUMBER	REV
A3	CS	*1234*	*X01*

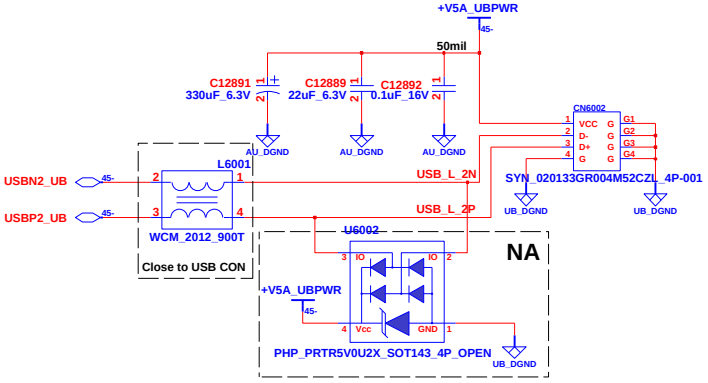
SHEET 44 OF 60

USB BOARD

USB BOARD Cable ON UB

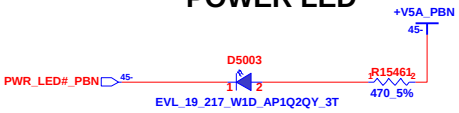


USB CONN03

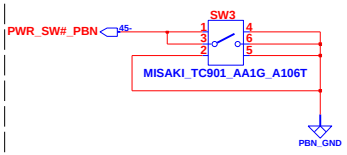


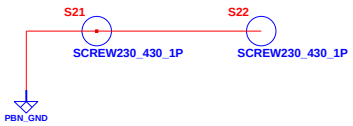
POWER BOTTON BOARD

POWER LED

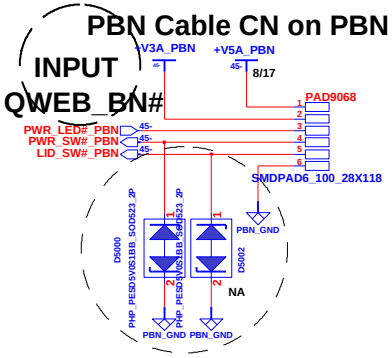


POWER BUTTON

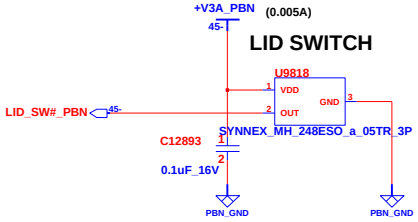




PBN Cable CN on PBN



LID SWITCH



Circuit : Fixed 2009/06/29

CHANGE by	Ken, Chiang	9-Jun-2010	

INVENTEC

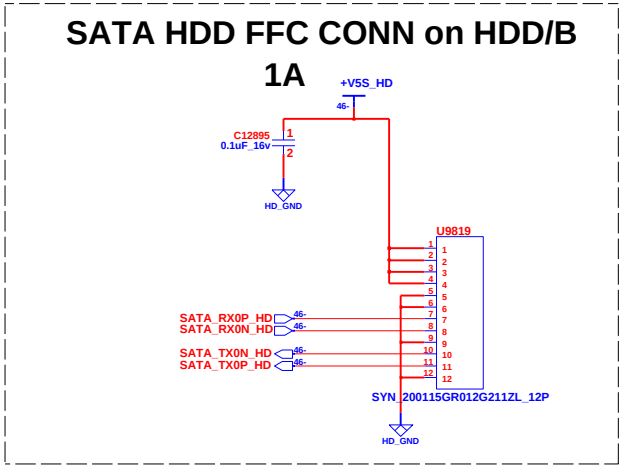
TITLE: ROCKY-AMD
AU6433 & CARDREADER CONN

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1234	X01

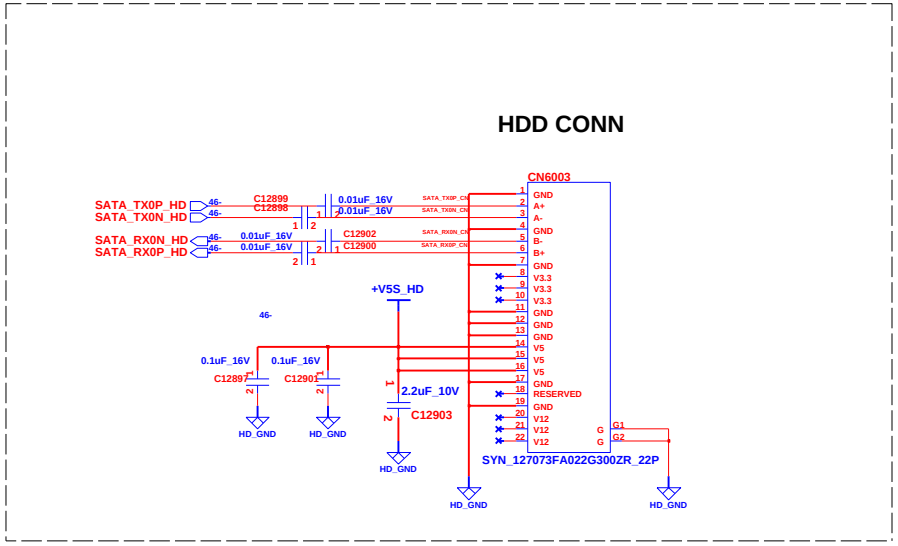
SHEET 45 OF 60

SATA HDD BOARD

SATA HDD FFC CONN on HDD/B 1A



HDD CONN



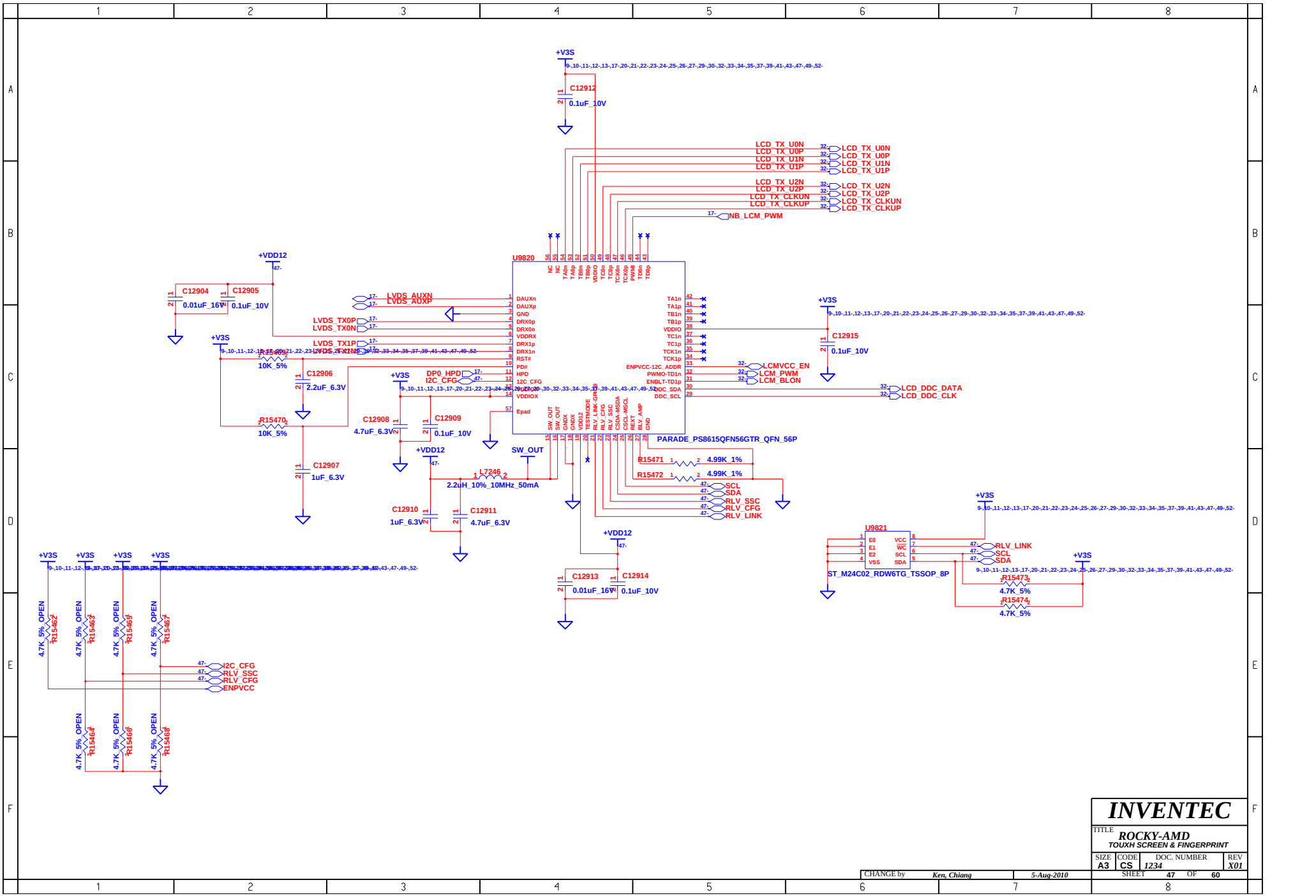
CHANGE by	Ken, Chiang	9-Jun-2010		

INVENTEC

TITLE: *ROCKY-AMD*
SATA HDD & SATA ODD

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1234	X01

SHEET 46 OF 60



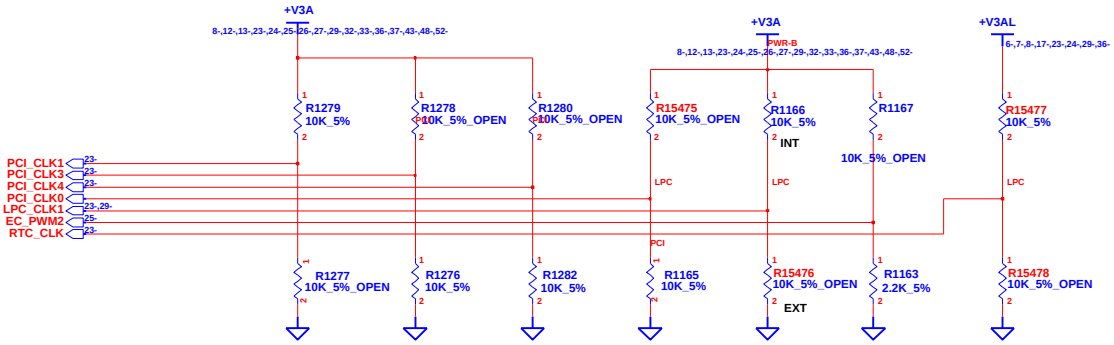
CHANGE by	*Ken, Chiang*	*5-Aug-2010*	

INVENTEC

TITLE: ***ROCKY-AMD***
TOUXH SCREEN & FINGERPRINT

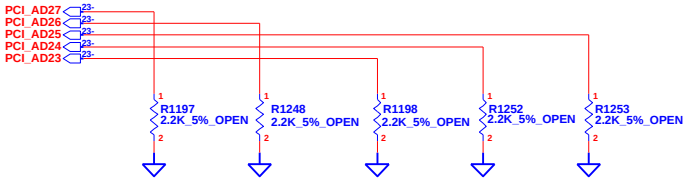
SIZE	CODE	DOC. NUMBER	REV
A3	CS	*1234*	*X01*

SHEET 47 OF 60



Required Straps:

RTCCLK		PCI_CLK1	PCI_CLK3	PCI_CLK4	PCI_CLK0	PCI_CLK1	EC_PWM2
S5 PLUS MODE DISABLE (DEFAULT)	PULL HIGH	ALLOW PCIE Gen2 DEFAULT	USE DEBUG STRAP	non Fusion CLOCK MODE APU_CLK AND DISP_CLK NO CLOCK OUTPUT	EC ENABLED	INTEGRATED CLKGEN ENABLED DEFAULT	LPC ROM DEFAULT
S5 PLUS MODE ENABLE	PULL LOW	FORCE PCIE Gen1	IGNORE DEBUG STRAPE DEFULT	Fusion CLOCK MODE DEFULT APU_CLK AND DISP_CLK CLOCK OUTPUT FROM INT CLOCK GEN	EC DISABLED DEFAULT	INTEGRATED CLKGEN DISABLED	SPI ROM



Debug Straps

SB800 HAS 15K INTERNAL PU FOR PCI_AD[27:23]

	PCI_3S_AD27	PCI_3S_AD24	PCI_3S_AD23
PULL HIGH	USE PCI PLL (default)	GETTING I2C ROM ENABLE	DISABLE PCI MEM BOOT (default)
PULL LOW	BYPASS PCI PLL	USE EEPROM PCIE STRAPS I2C ROM DISABLE	ENABLE PCI MEM BOOT

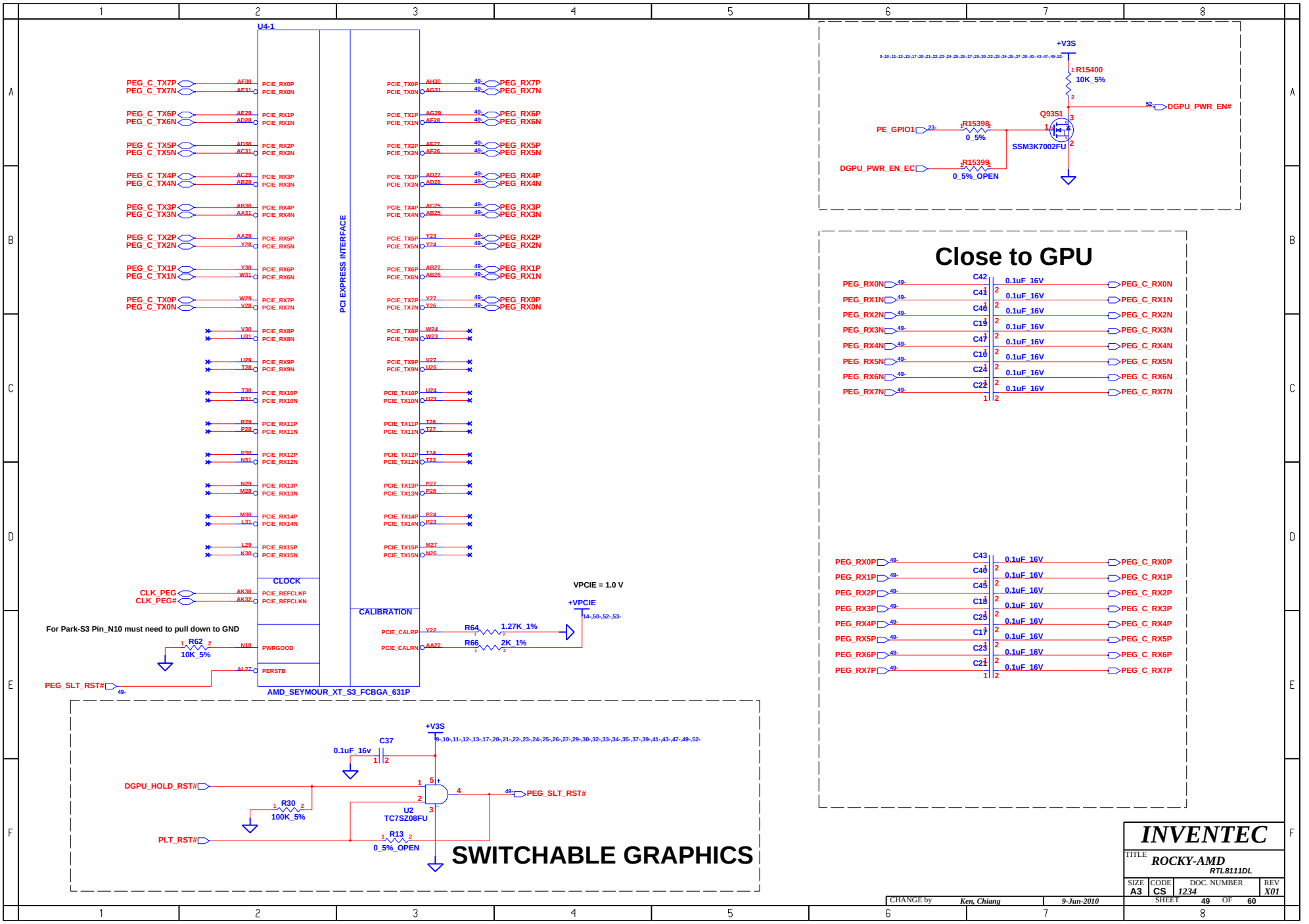
CHANGE by *Ken, Chiang* *9-Jun-2010*

INVENTEC

TITLE *ROCKY-AMD*
ESATA & USB BOARD CABLE

SIZE	CODE	DOC. NUMBER	REV
A3	CS	*1234*	*X01*

SHEET 48 OF 60



TITLE	ROCKY-AMD
	RTL8111DL
SIZE	A3
CODE	CS
DOC. NUMBER	1234
REV	X01
SHEET	49 OF 60
CHANGE by	Ken, Chiang
	9-Jun-2010

INVENTEC

MEM_ID3 R15454	MEM_ID2 R15453	MEM_ID1 R15452	MEM_ID0 R15451	vendor
0	0	0	1	Samsung(512MB) (Default)
0	0	1	1	hynix (512MB)
0	0	0	0	Samsung(1G)
0	0	1	0	hynix (1G)
0	1	1	0	Samsung(1G) C-die

STRAPS	PIN	Description of default settings
TX_PWRS_ENB	GPIO0	PCIE full TX output swing.
TX_DEEMPH_EN	GPIO1	PCIE transmitter de-emphasis enabled.
BIF_GEN2_EN_A	GPIO2	PCIE GEN2 enabled
BIF_DEBUG_ACCESS	GPIO4	Debug signals muxed out.
	GPIO7_BLON	Control Backlight On / Off
BIF_VGA_DIS	GPIO9	VGA ENABLED
ROMIDCFG(2:0)	GPIO[13:11]	Memory aperture size select.

If GPIO_22_EN = 0 , then GPIO[13:11] defines the primary memory aperture size.

GPIO_13	GPIO_12	GPIO_11	Memory aperture size
0	0	1	512MB / 256MB (Default)
1	1	0	reserved

POW_SW1	POW_SW0	+VDDC_GPU
0	0	1.1V
0	1	1V
1	0	0.95V
1	1	0.9V

110mA

CFT:
GPU Critical temperature shang down 110C

CHANGE TO 6018B0046201(5*3.2)

Place TP344 out of GPU for calpella co-lay

AMD_SEYMOUR_XT_S3_FCBGA_631P

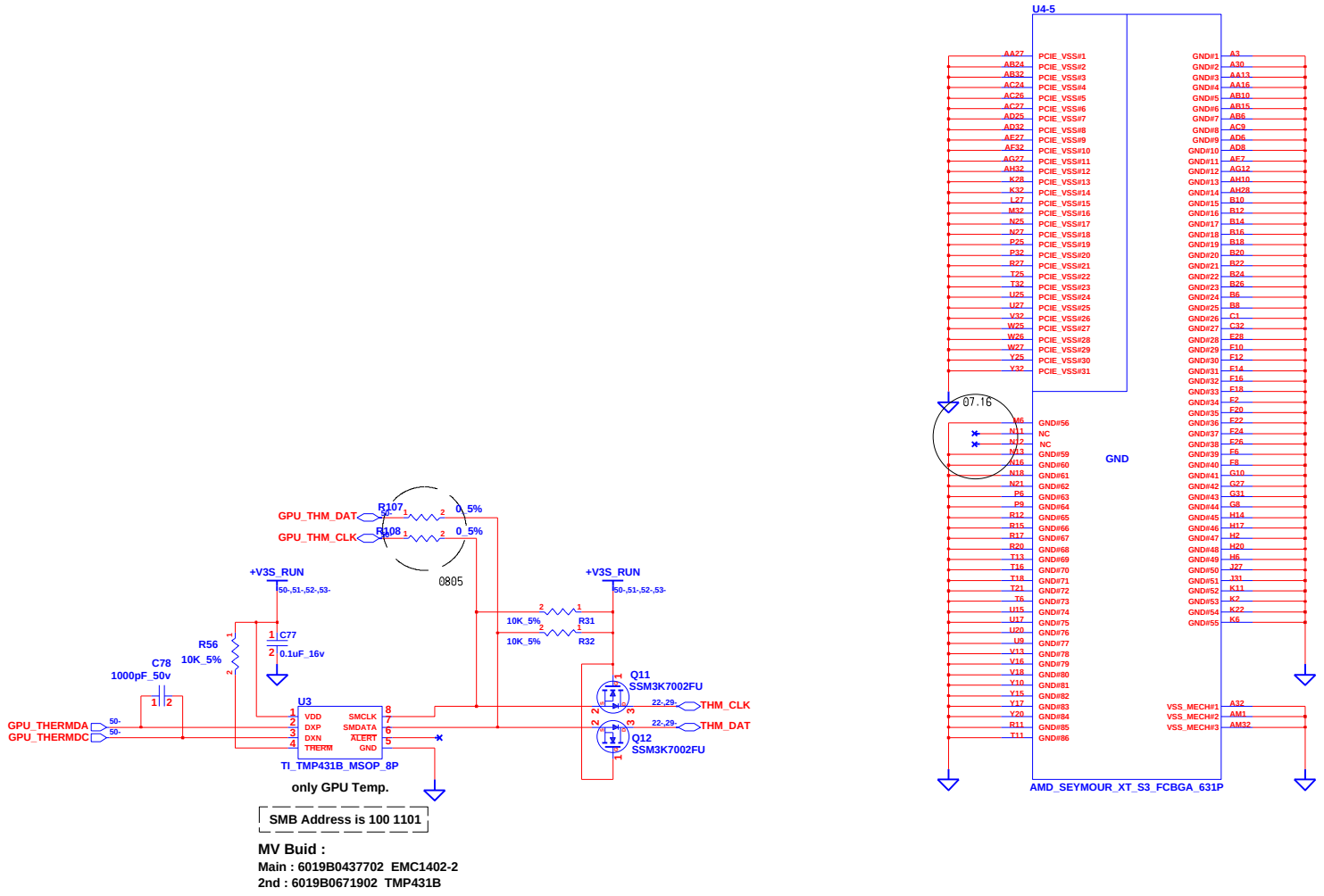
CHANGE by	Ken, Chiang	9-Jun-2010

INVENTEC

TITLE: ROCKY-AMD
LAN & RJ45 CONN

SIZE	CODE	DOC. NUMBER	REV
A3	CS	1234	X01

SHEET 50 OF 60



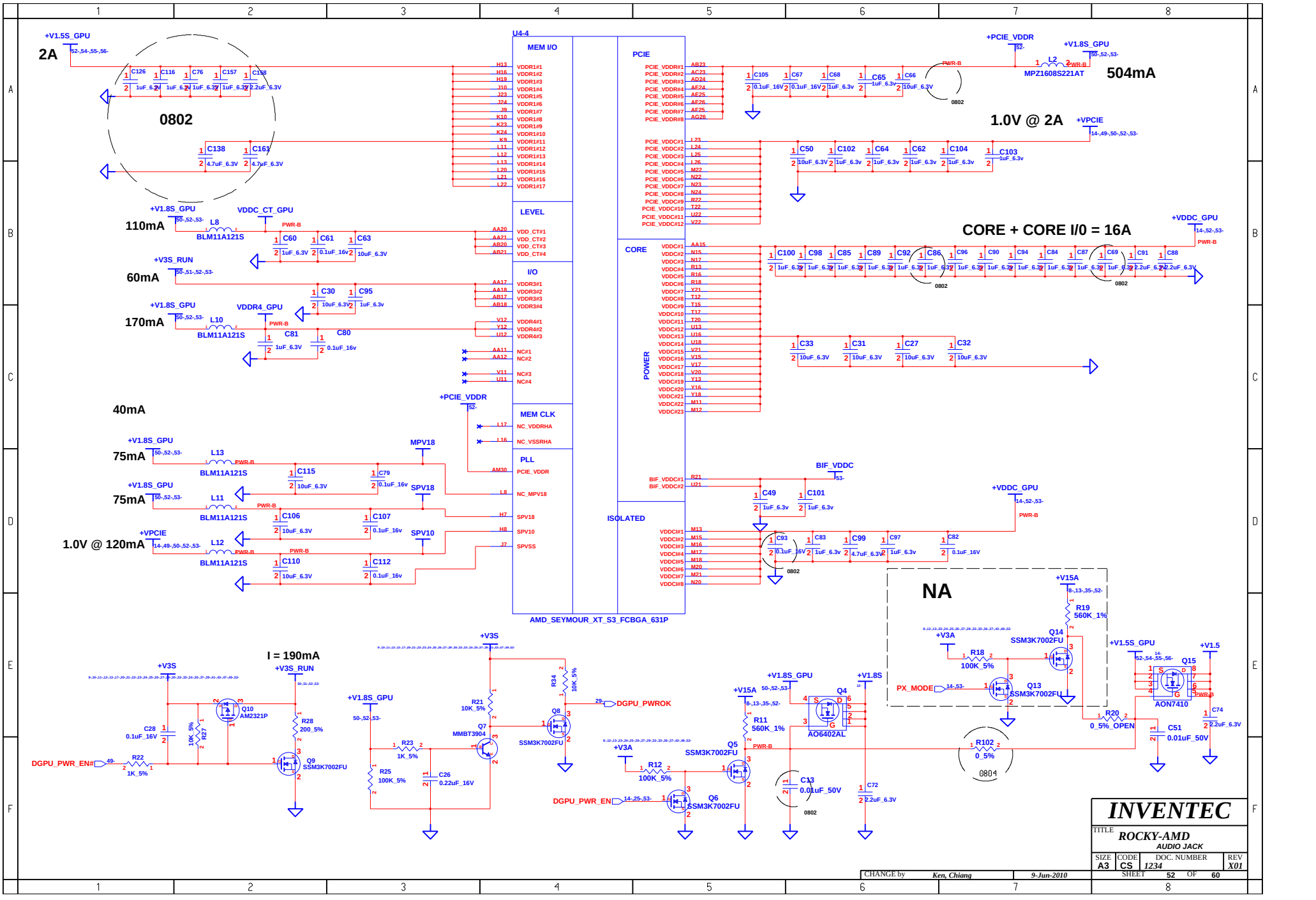
CHANGE by	Ken, Chiang	9-Jun-2010	

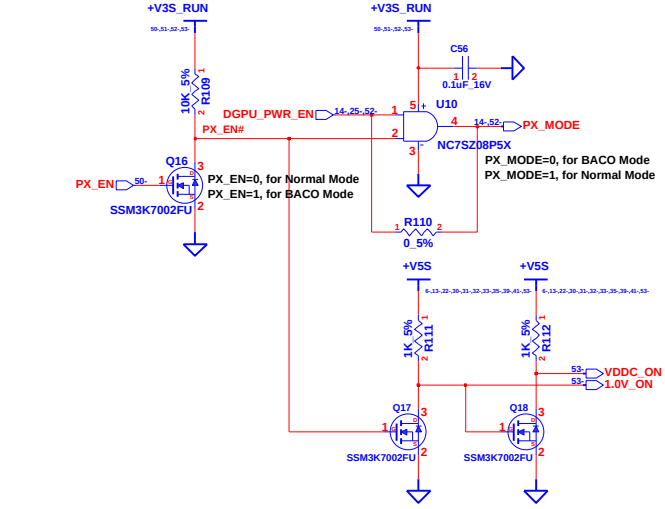
INVENTEC

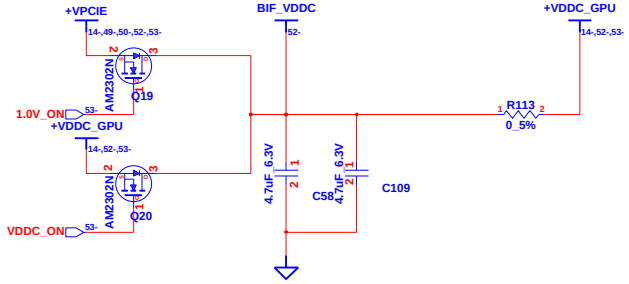
TITLE: ROCKY-AMD
AUDIO CODEC IDT_92HD80

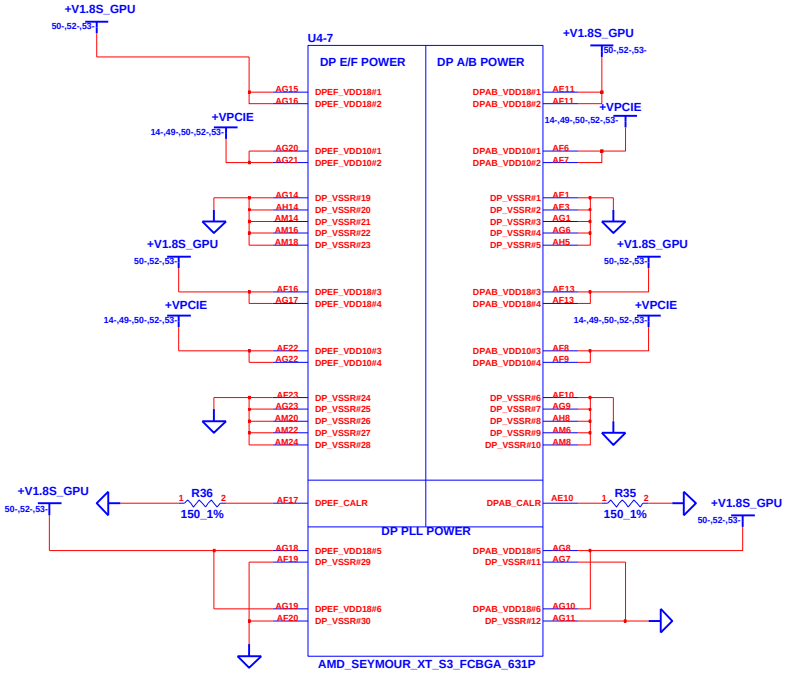
SIZE	CODE	DOC. NUMBER	REV
A3	CS	1234	X01

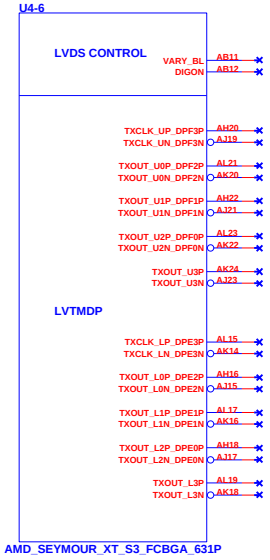
SHEET 51 OF 60


+V1.5S_GPU
2A
0802
U4-4
MEM I/O
PCIE
LEVEL
I/O
CORE
POWER
MEM CLK
PLL
ISOLATED
AMD_SEYMOUR_XT_S3_FCBGA_631P
+PCIE_VDDR
MPZ1608S221AT
504mA
+V1.8S_GPU
1.0V @ 2A
+VPCIE
CORE + CORE I/0 = 16A
+VDDC_GPU
110mA
VDDC_CT_GPU
BLM11A121S
60mA
+V3S_RUN
170mA
VDDR4_GPU
40mA
75mA
MPV18
SPV18
1.0V @ 120mA
SPV10
BIF_VDDC
NA
I = 190mA
+V3S
+V3S_RUN
DGPU_PWR_EN#
DGPU_PWROK
DGPU_PWR_EN
PX_MODE
+V15A
+V1.5S_GPU
+V1.5
+V3A
AO6402AL
AON7410
SSM3K7002FU
MMBT3904
AM2321P
INVENTEC
ROCKY-AMD
AUDIO JACK
SIZE A3
CODE CS
DOC. NUMBER 1234
REV X01
SHEET 52 OF 60
CHANGE by Ken, Chiang
9-Jun-2010



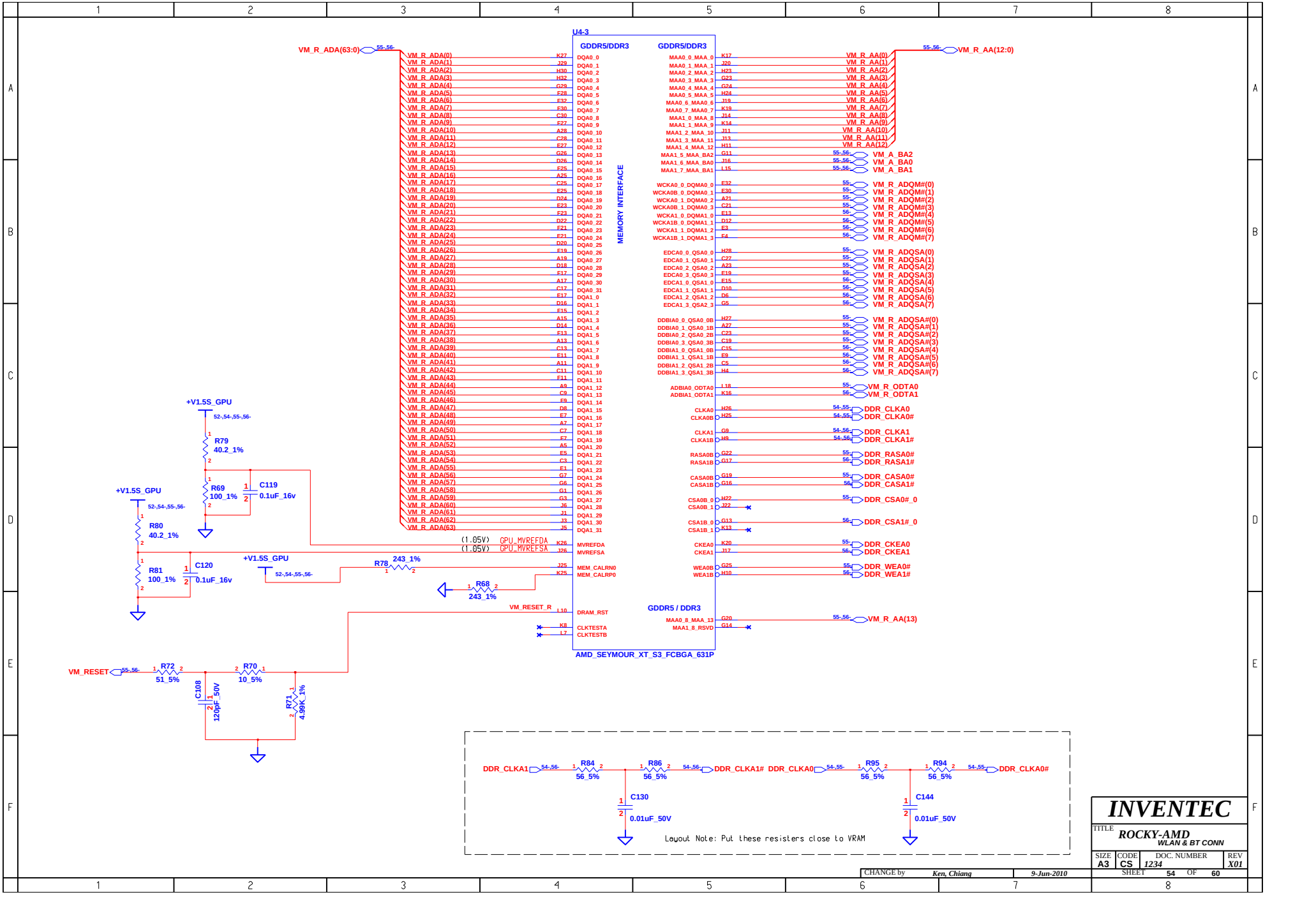




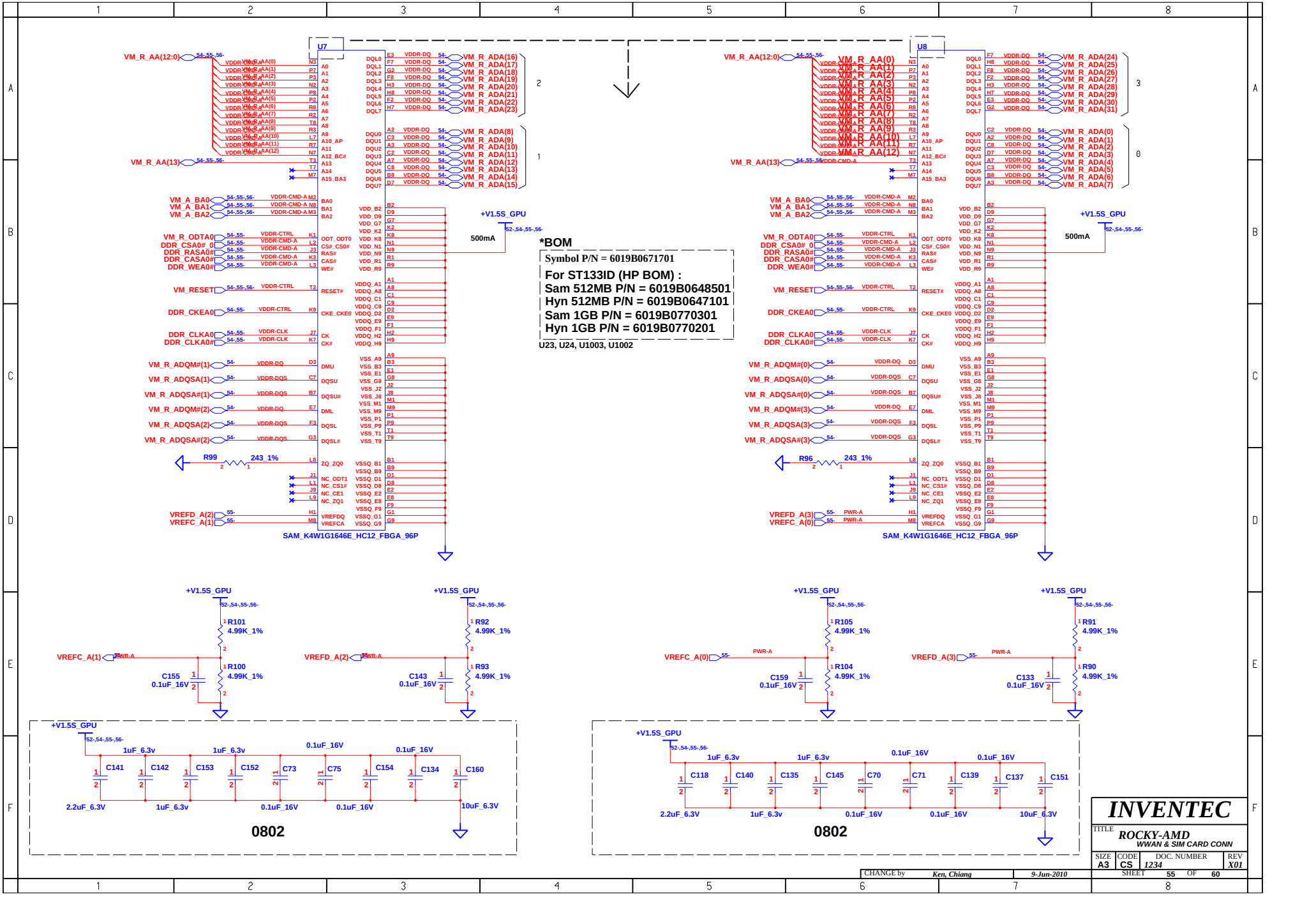


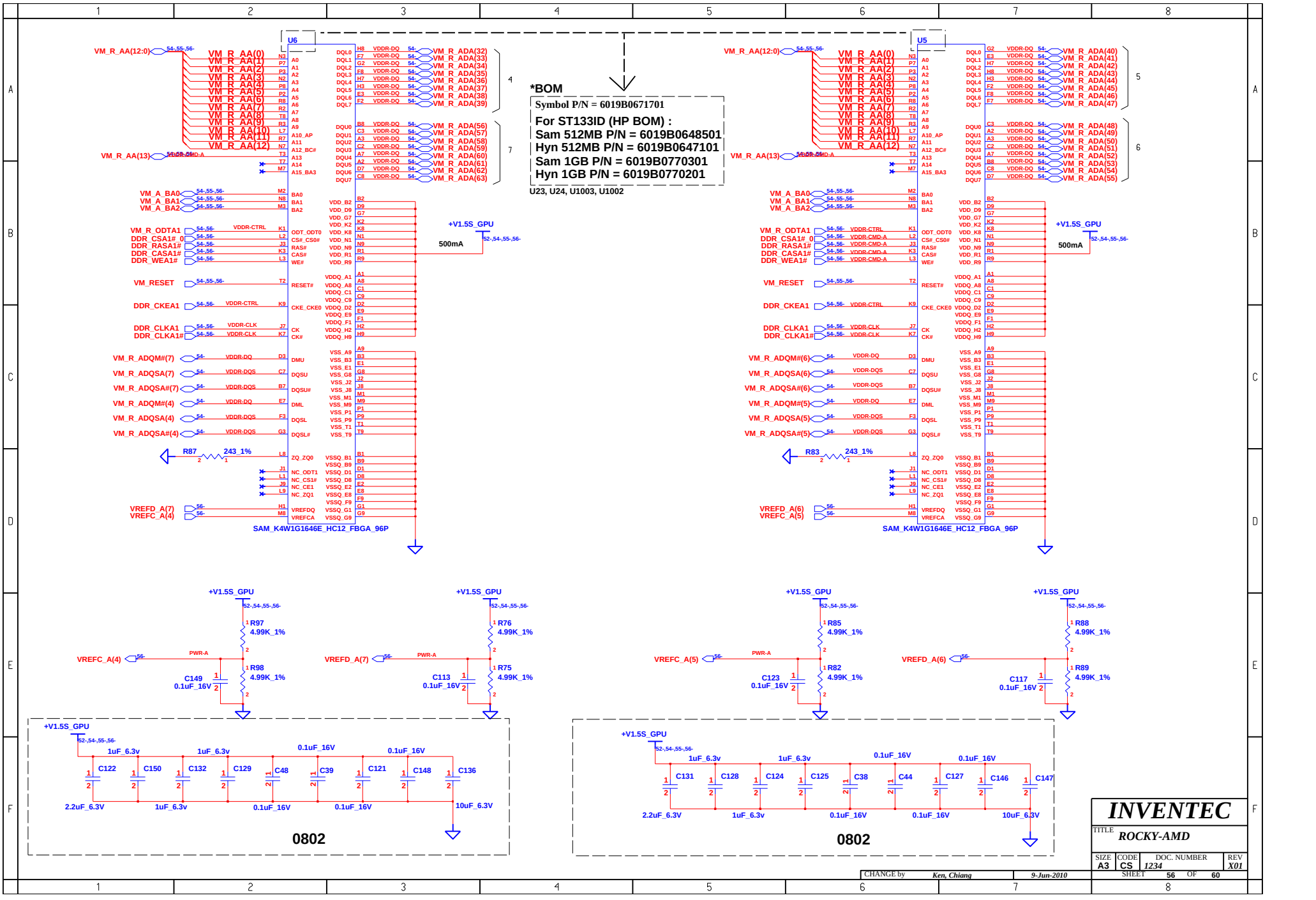
INVENTEC

TITLE	ROCKY-AMD SCREW			
SIZE A3	CODE CS	DOC. NUMBER 1234		REV X01
CHANGE by Ken, Chiang	4-Aug-2010	SHEET 53 OF 60		



INVENTEC	
TITLE	ROCKY-AMD WLAN & BT CONN
SIZE / CODE / DOC. NUMBER / REV	A3 / CS / 1234 / X01
CHANGE by	Ken, Chiang — 9-Jun-2010
SHEET	54 OF 60


U7
U8
VM_R_AA(12:0)
VM_R_AA(13)
VM_A_BA0
VM_A_BA1
VM_A_BA2
VM_R_ODTA0
DDR_CSA0#
DDR_RASA0#
DDR_CASA0#
DDR_WEA0#
VM_RESET
DDR_CKEA0
DDR_CLKA0
DDR_CLKA0#
VM_R_ADQM#(1)
VM_R_ADQSA(1)
VM_R_ADQSA#(1)
VM_R_ADQM#(2)
VM_R_ADQSA(2)
VM_R_ADQSA#(2)
VREFD_A(2)
VREFC_A(1)
VM_R_ADQM#(0)
VM_R_ADQSA(0)
VM_R_ADQSA#(0)
VM_R_ADQM#(3)
VM_R_ADQSA(3)
VM_R_ADQSA#(3)
VREFD_A(3)
VREFC_A(0)
R99 243_1%
R96 243_1%
+V1.5S_GPU
500mA
SAM_K4W1G1646E_HC12_FBGA_96P
*BOM
Symbol P/N = 6019B0671701
For ST133ID (HP BOM) :
Sam 512MB P/N = 6019B0648501
Hyn 512MB P/N = 6019B0647101
Sam 1GB P/N = 6019B0770301
Hyn 1GB P/N = 6019B0770201
U23, U24, U1003, U1002
R101 4.99K_1%
R100 4.99K_1%
C155 0.1uF_16V
R92 4.99K_1%
R93 4.99K_1%
C143 0.1uF_16V
R105 4.99K_1%
R104 4.99K_1%
C159 0.1uF_16V
R91 4.99K_1%
R90 4.99K_1%
C133 0.1uF_16V
C141 C142 C153 C152 C73 C75 C154 C134 C160
1uF_6.3v 1uF_6.3v 0.1uF_16V 0.1uF_16V
2.2uF_6.3V 1uF_6.3v 0.1uF_16V 0.1uF_16V 10uF_6.3V
0802
C118 C140 C135 C145 C70 C71 C139 C137 C151
1uF_6.3v 1uF_6.3v 0.1uF_16V 0.1uF_16V
2.2uF_6.3V 1uF_6.3v 0.1uF_16V 0.1uF_16V 10uF_6.3V
0802
INVENTEC
TITLE
ROCKY-AMD
WWAN & SIM CARD CONN
SIZE A3
CODE CS
DOC. NUMBER 1234
REV X01
CHANGE by Ken, Chiang
9-Jun-2010
SHEET 55 OF 60


U6
U5
VM_R_AA(12:0)
VM_R_AA(13)
VM_A_BA0
VM_A_BA1
VM_A_BA2
VM_R_ODTA1
DDR_CSA1#_0
DDR_RASA1#
DDR_CASA1#
DDR_WEA1#
VM_RESET
DDR_CKEA1
DDR_CLKA1
DDR_CLKA1#
VM_R_ADQM#(7)
VM_R_ADQSA(7)
VM_R_ADQSA#(7)
VM_R_ADQM#(4)
VM_R_ADQSA(4)
VM_R_ADQSA#(4)
VM_R_ADQM#(6)
VM_R_ADQSA(6)
VM_R_ADQSA#(6)
VM_R_ADQM#(5)
VM_R_ADQSA(5)
VM_R_ADQSA#(5)
R87 243_1%
R83 243_1%
VREFD_A(7)
VREFC_A(4)
VREFD_A(6)
VREFC_A(5)
+V1.5S_GPU
500mA
SAM_K4W1G1646E_HC12_FBGA_96P
*BOM
Symbol P/N = 6019B0671701
For ST133ID (HP BOM) :
Sam 512MB P/N = 6019B0648501
Hyn 512MB P/N = 6019B0647101
Sam 1GB P/N = 6019B0770301
Hyn 1GB P/N = 6019B0770201
U23, U24, U1003, U1002
R97 4.99K_1%
R98 4.99K_1%
R76 4.99K_1%
R75 4.99K_1%
R85 4.99K_1%
R82 4.99K_1%
R88 4.99K_1%
R89 4.99K_1%
C149 0.1uF_16V
C113 0.1uF_16V
C123 0.1uF_16V
C117 0.1uF_16V
PWR-A
C122 C150 C132 C129 C48 C39 C121 C148 C136
C131 C128 C124 C125 C38 C44 C127 C146 C147
2.2uF_6.3V
1uF_6.3V
0.1uF_16V
10uF_6.3V
0802
INVENTEC
TITLE ROCKY-AMD
SIZE A3
CODE CS
DOC. NUMBER 1234
REV X01
CHANGE by Ken, Chiang
9-Jun-2010
SHEET 56 OF 60

CHANGE by		
Ken, Chiang	*9-Aug-2010*	

INVENTEC

TITLE: ***ROCKY-AMD***
EXT USB CONN

SIZE	CODE	DOC. NUMBER	REV
A3	CS	*1234*	*X01*

SHEET 57 OF 60

	1	2	3	4	5	6	7	8
A								
B								
C								
D								
E								
F								

CHANGE by		
Ken, Chiang	*9-Aug-2010*	

INVENTEC

TITLE ***ROCKY-AMD***

SIZE	CODE	DOC. NUMBER	REV
A3	CS	*1234*	*X01*

SHEET **58** OF **60**

	1	2	3	4	5	6	7	8
A								
B								
C								
D								
E								
F								

CHANGE by *Ken, Chiang* *9-Aug-2010*

INVENTEC

TITLE ***ROCKY-AMD***

SIZE	CODE	DOC. NUMBER	REV
A3	CS	*1234*	*X01*

SHEET **59** OF **60**

	1	2	3	4	5	6	7	8
A								
B								
C								
D								
E								
F								

CHANGE by *Ken, Chiang* *9-Aug-2010*

INVENTEC

TITLE ***ROCKY-AMD***

SIZE	CODE	DOC. NUMBER	REV
A3	CS	*1234*	*X01*

SHEET **60** OF **60**