



TABLE OF CONTENTS

PAGE

PAGE

PAGE

1.COVER PAGE  
2.INDEX  
3.BLOCK DIAGRAM  
4.POWER SEQUENCE BLOCK  
5-12.SYSTEM POWER  
13.CLOCK GENERATOR  
14.CPU Merom1  
15.CPU Merom2  
16.CPU Merom3  
17.CPU Merom4  
18.FAN & THERMAL CONTROLLER  
19.N/B Crestline 1  
20.N/B Crestline 2  
21.N/B Crestline 3  
22.N/B Crestline 4  
23.N/B Crestline 5  
24.N/B Crestline 6  
25.N/B Crestline 7  
26.DDR2 DIMM0  
27.DDR2 DIMM1  
28.DDR DAMPING  
29.CIR  
30.CRT CONN  
31.S-VIDEO CONN  
32.LCM CONN

33. HDMI TRANSMITTER  
34.HDMI CONN & CEC  
35.S/B ICH8 1  
36.S/B ICH8 2  
37.S/B ICH8 3  
38.S/B ICH8 4  
39.S/B ICH8 5  
40.SATA CONN  
41.USB CONN  
42.Felica & Camera CONN  
43.Bluetooth CONN  
44.EC  
45.K/B & TP/B CONN  
46.AZALIA CODEC  
47.AUDIO AMP  
48.Audio JACKs  
49.LAN Controller  
50.RJ45 & Transformer  
51.ODD CONN  
52.1394/Cardreader Controller  
53.5 in 1 & 1394 CONN  
54.Express Card CONN  
55.ROBSON & WLAN  
56.Broadcom Accelerator  
57.MDC 1.5 CONN

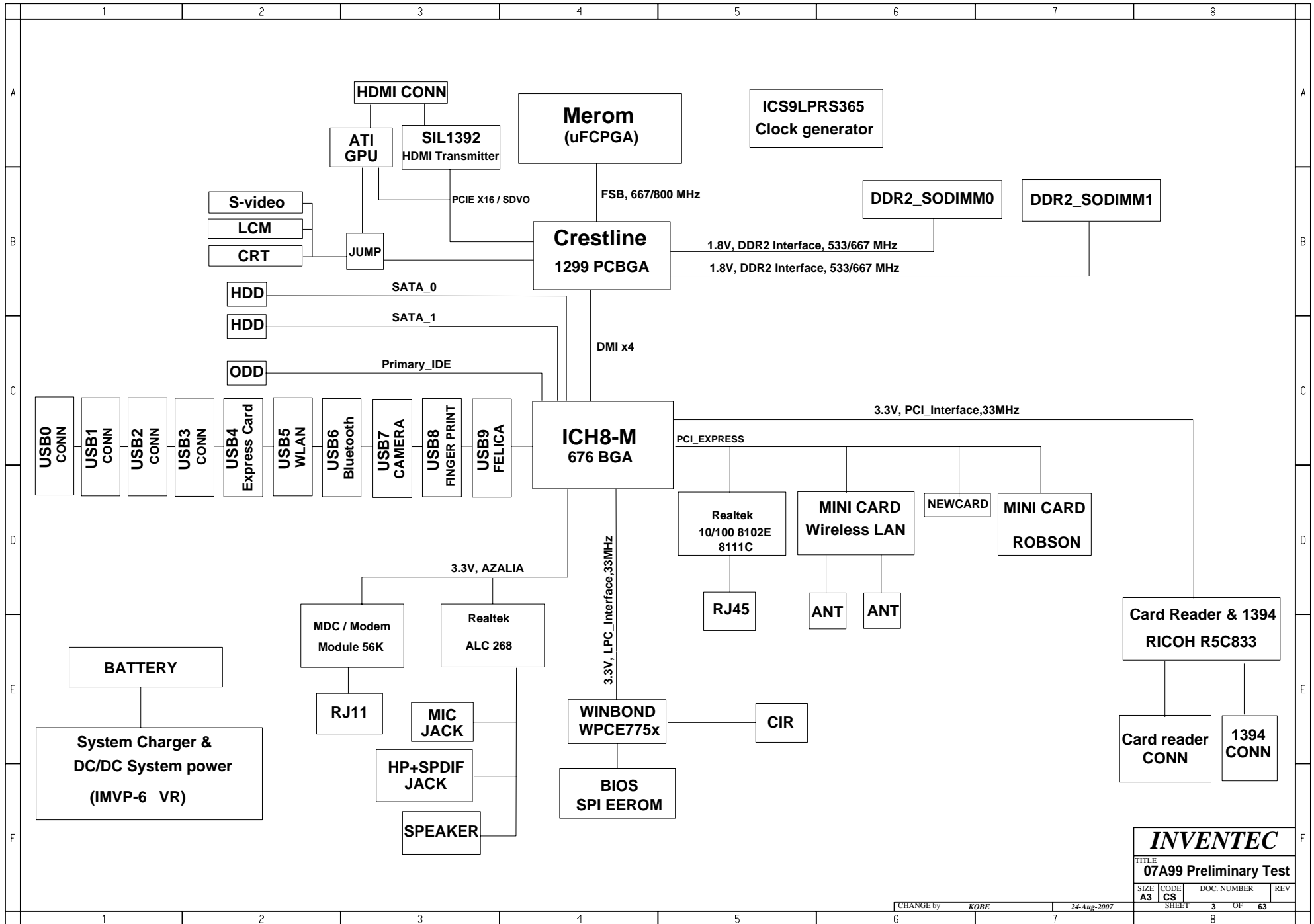
58.LED(M/B) & HOTKEY/B CONN  
59.Pick Button & Fingerprint Board  
60.KILL SWITCH& HALL SENSOR  
61.SCREW & EMI CAP  
62.FM TUNER BOARD  
63.FINGER PRINT BOARD

**INVENTEC**

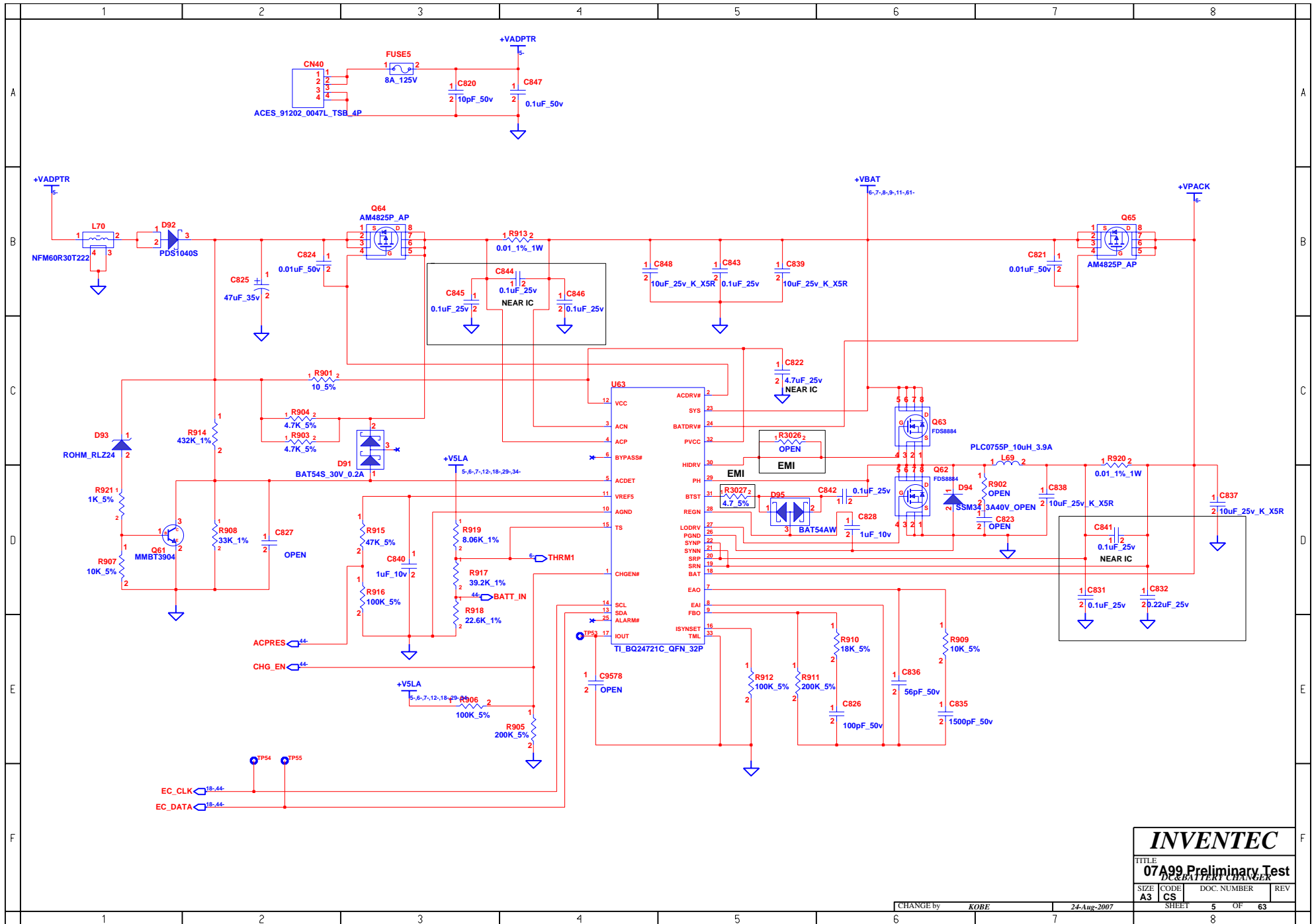
TITLE  
**07A99 Preliminary Test**  
SIZE CODE DOC. NUMBER REV  
**A3 CS 2 OF 63 X01**

CHANGE by **KOE** 30-Nov-2007

SHEET 2 OF 63

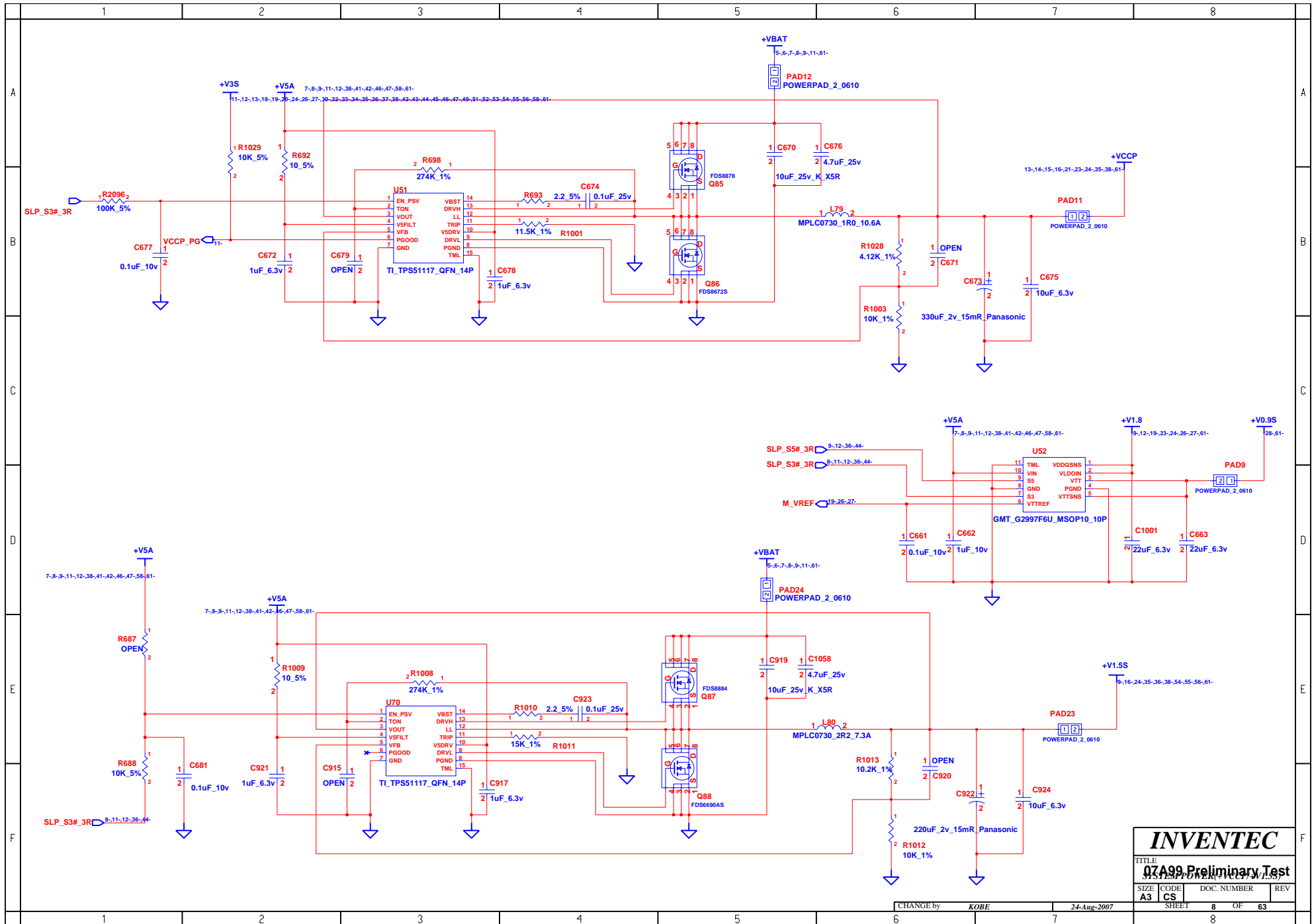






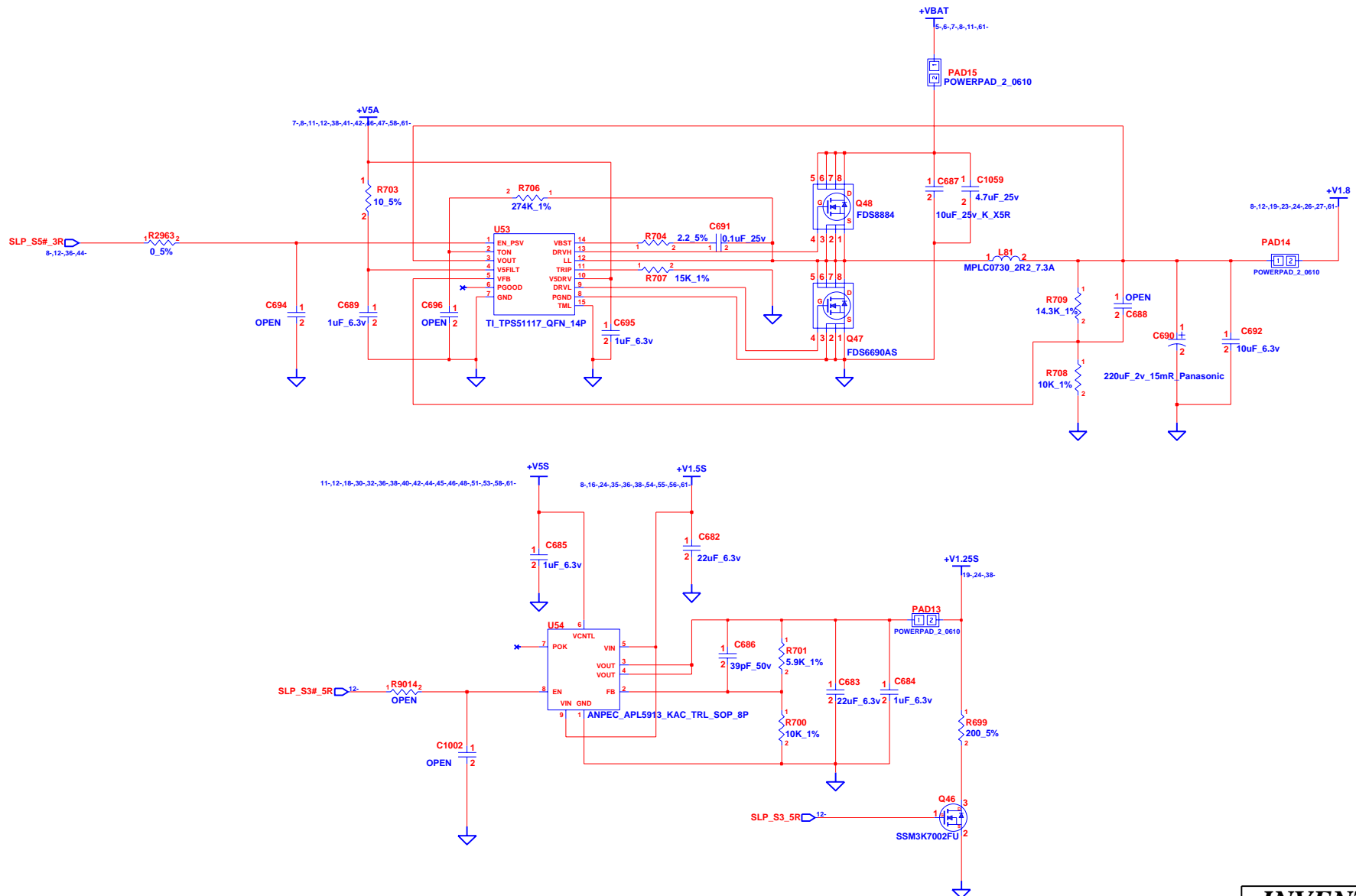






INVENTEC			
TITLE			
07A99 Preliminary Test			
SIZE	CODE	DOC. NUMBER	REV
A3	CS		
CHANGE by		24-Aug-2007	
SHEET		8	OF 63





INVENTEC			
TITLE			
07A99 Preliminary Test			
SIZE	CODE	DOC. NUMBER	REV
A3	CS		X01
CHANGE by		24-Aug-2007	
SHEET		9	OF 63
		8	

	1	2	3	4	5	6	7	8	
A	<div>BLANK</div>								A
B									B
C									C
D									D
E									E
F									F
	1	2	3	4	5	6	7	8	

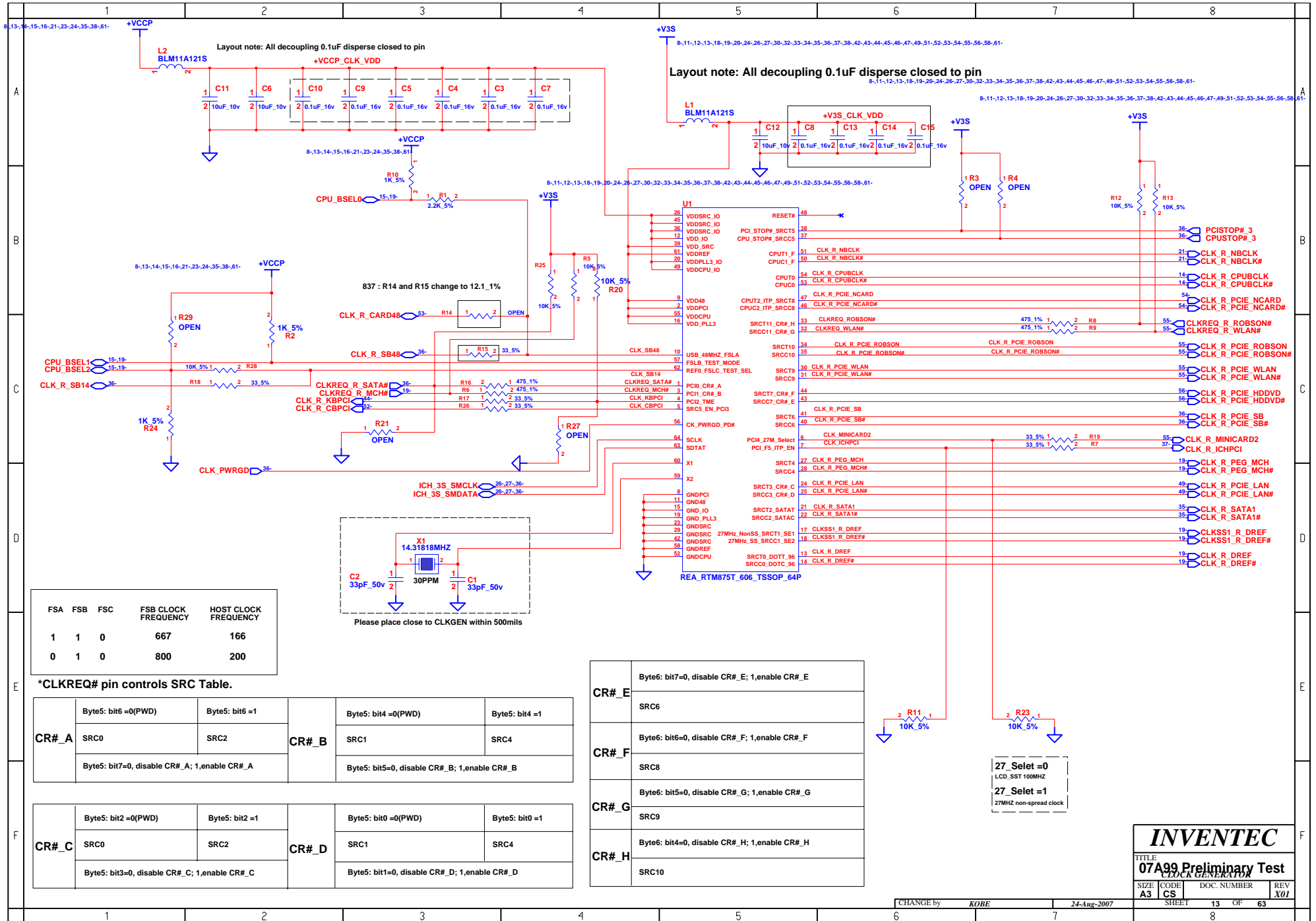
INVENTEC			
TITLE			
07A99 Preliminary Test			
SIZE	CODE	DOC. NUMBER	REV
A3	CS		X01

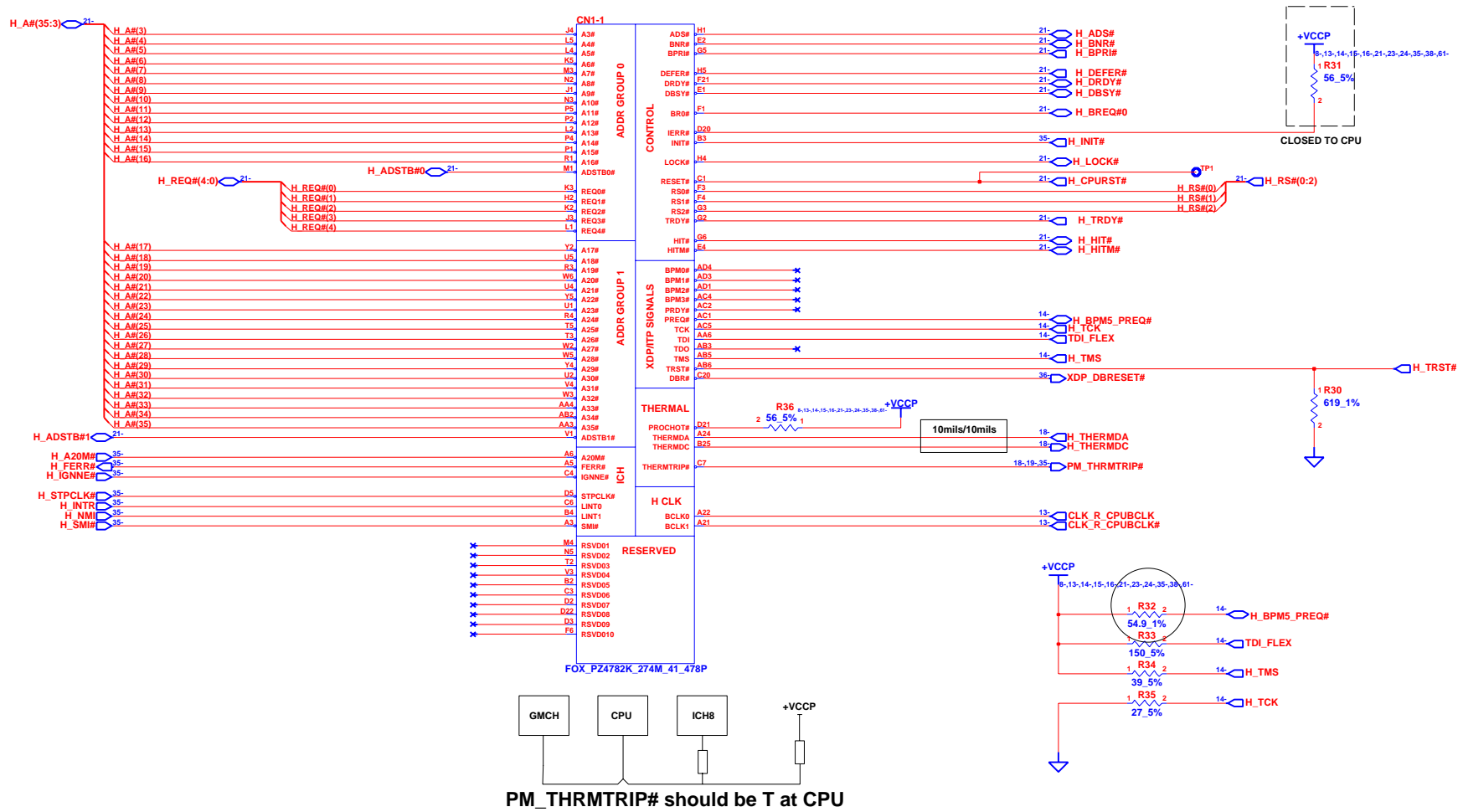
CHANGE by KOBE 30-Nov-2007

SHEET 10 OF 63



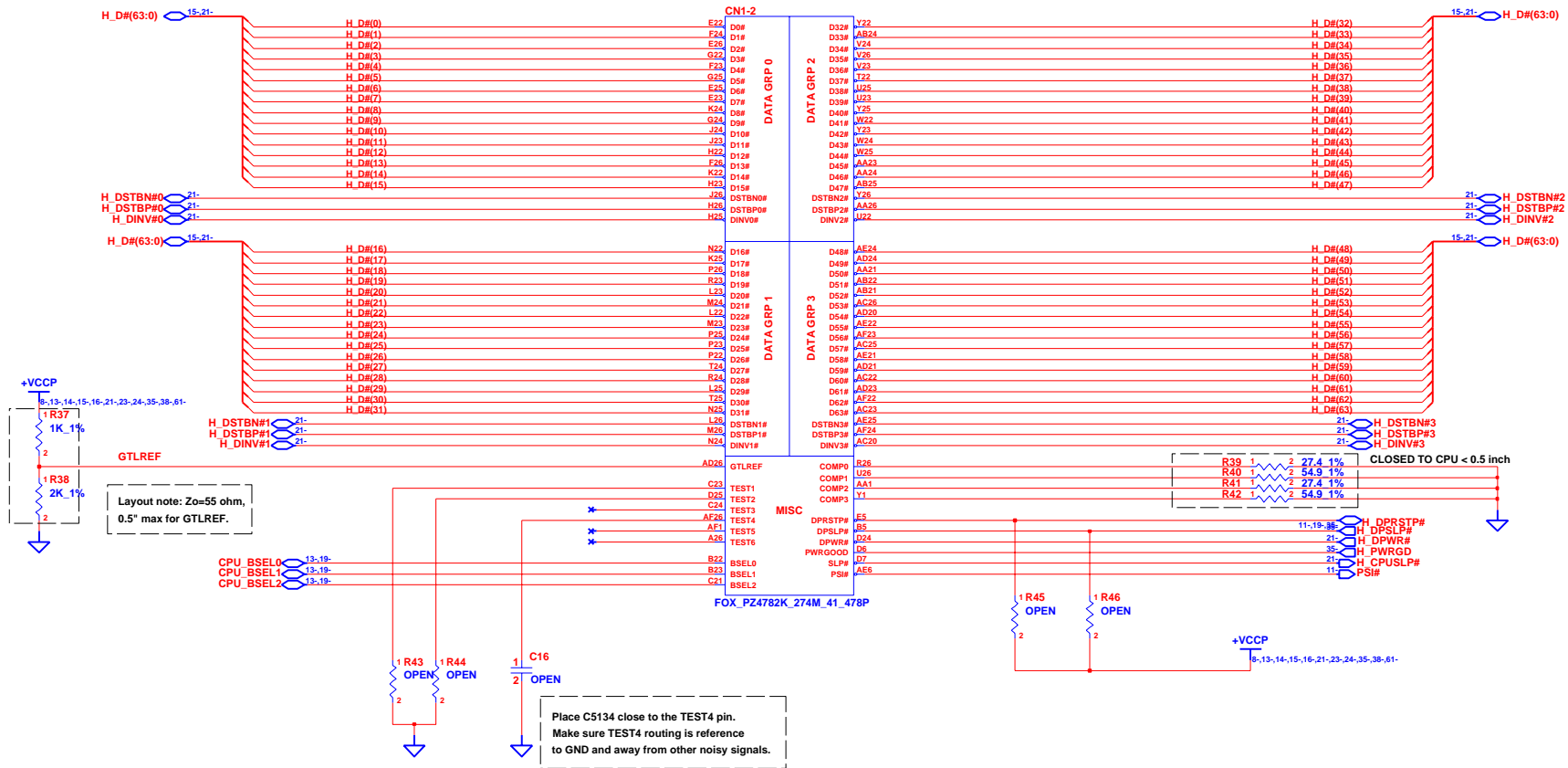


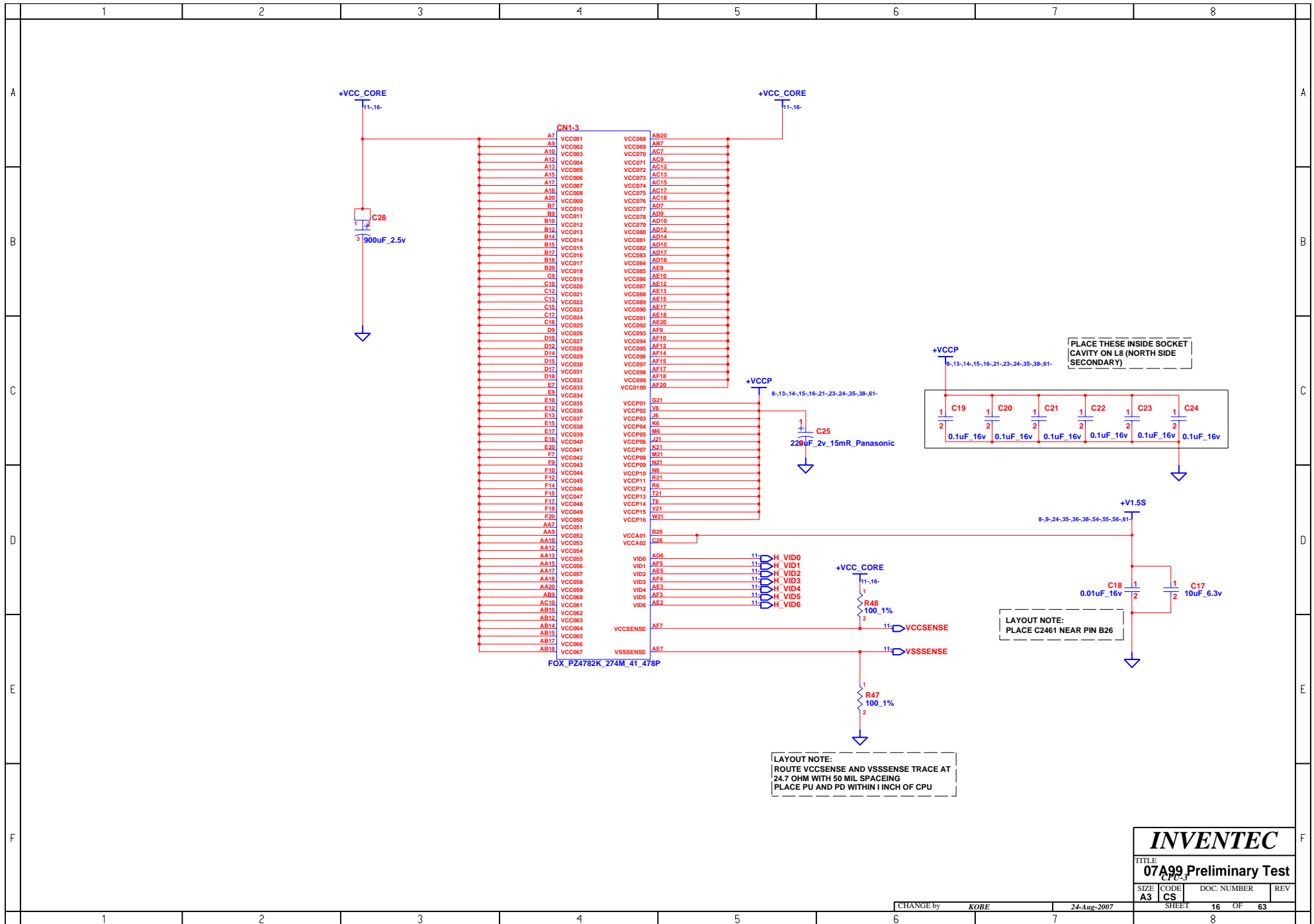




INVENTEC			
TITLE			
07A99 Preliminary Test			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	SHEET 14 OF 63	X01

CHANGE by KOBE 24-Aug-2007





**INVENTEC**

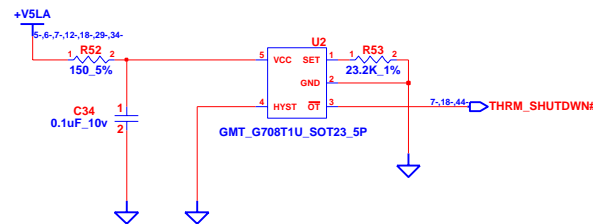
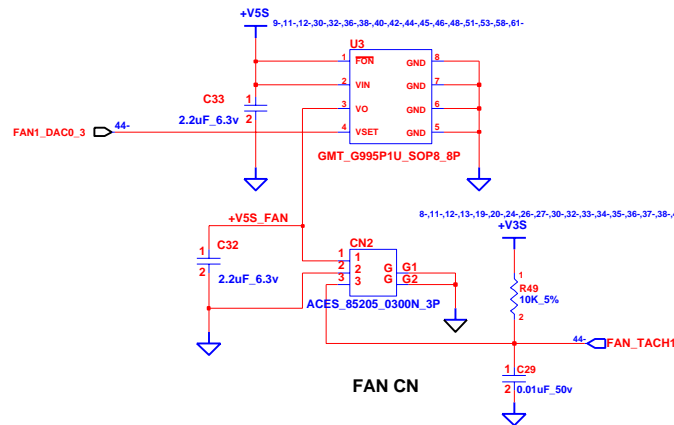
TITLE			
07A99 Preliminary Test			
SIZE	CODE	DOC. NUMBER	REV
A3	CS		

CHANGE by KOBE 24-Aug-2007

SHEET 16 OF 63



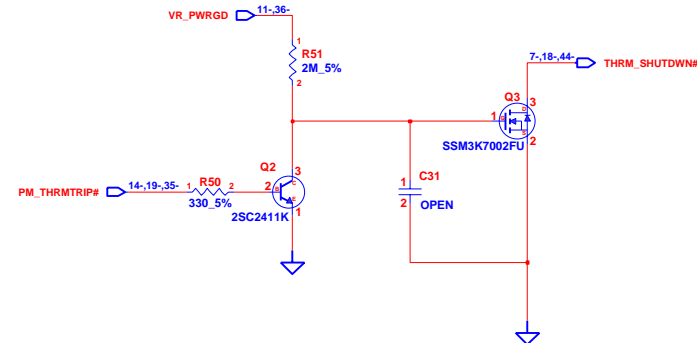
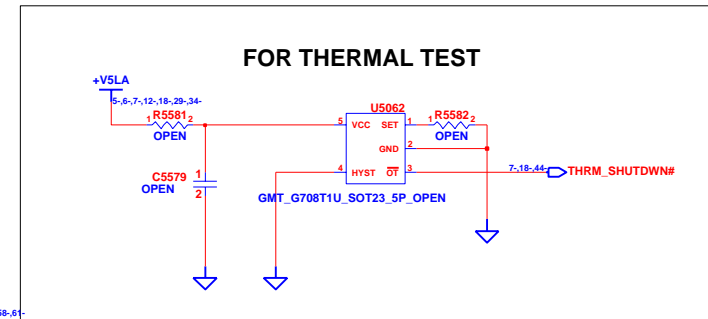
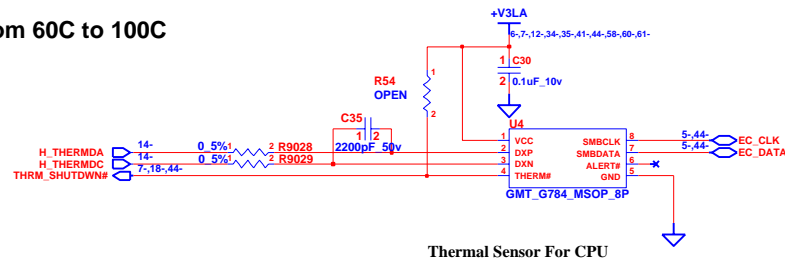




Thermal shutdown at 88.5C +/-3C from 60C to 100C

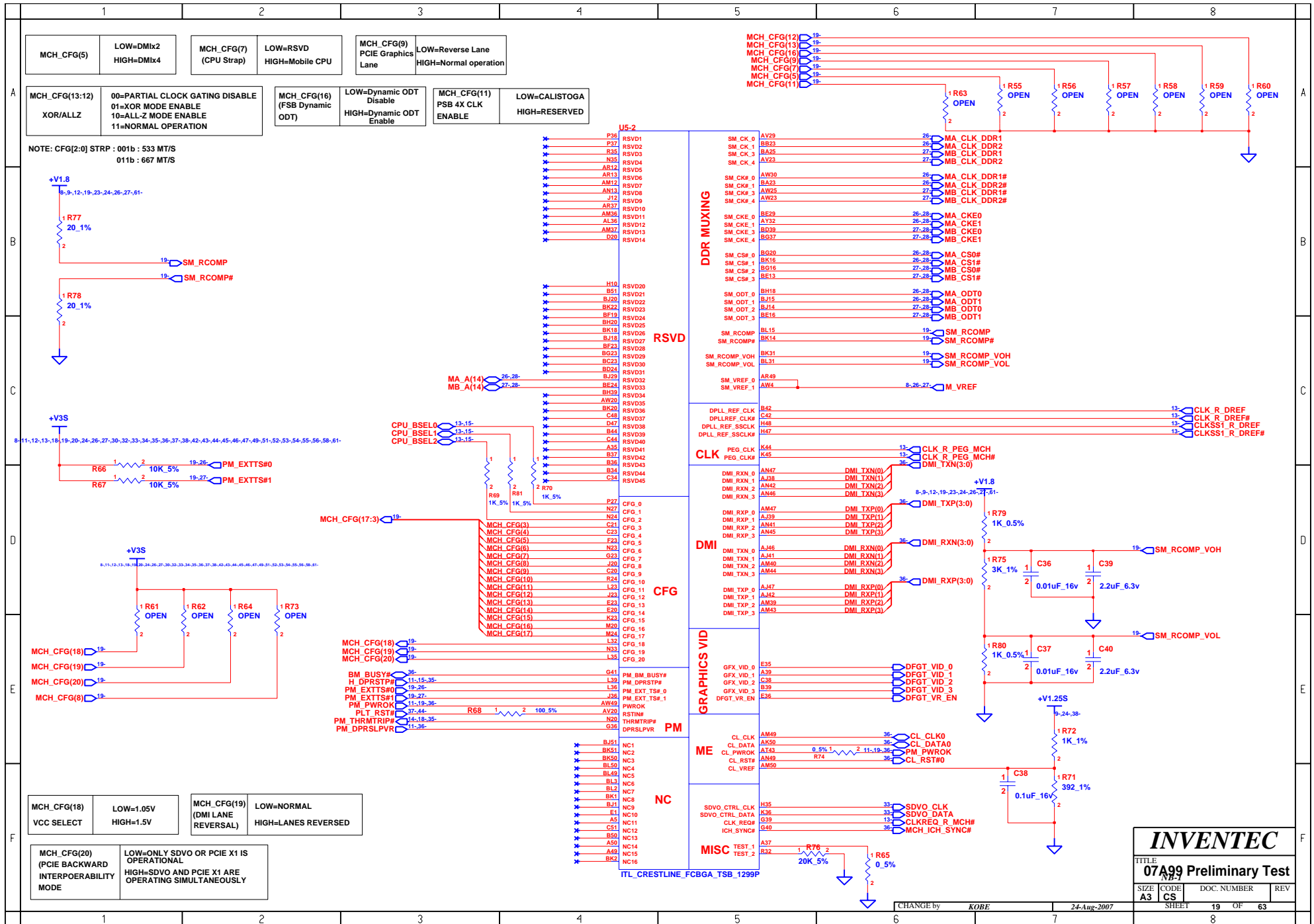
$$RSET=0.0012 \cdot T^2 - 0.9308 \cdot T + 96.147$$

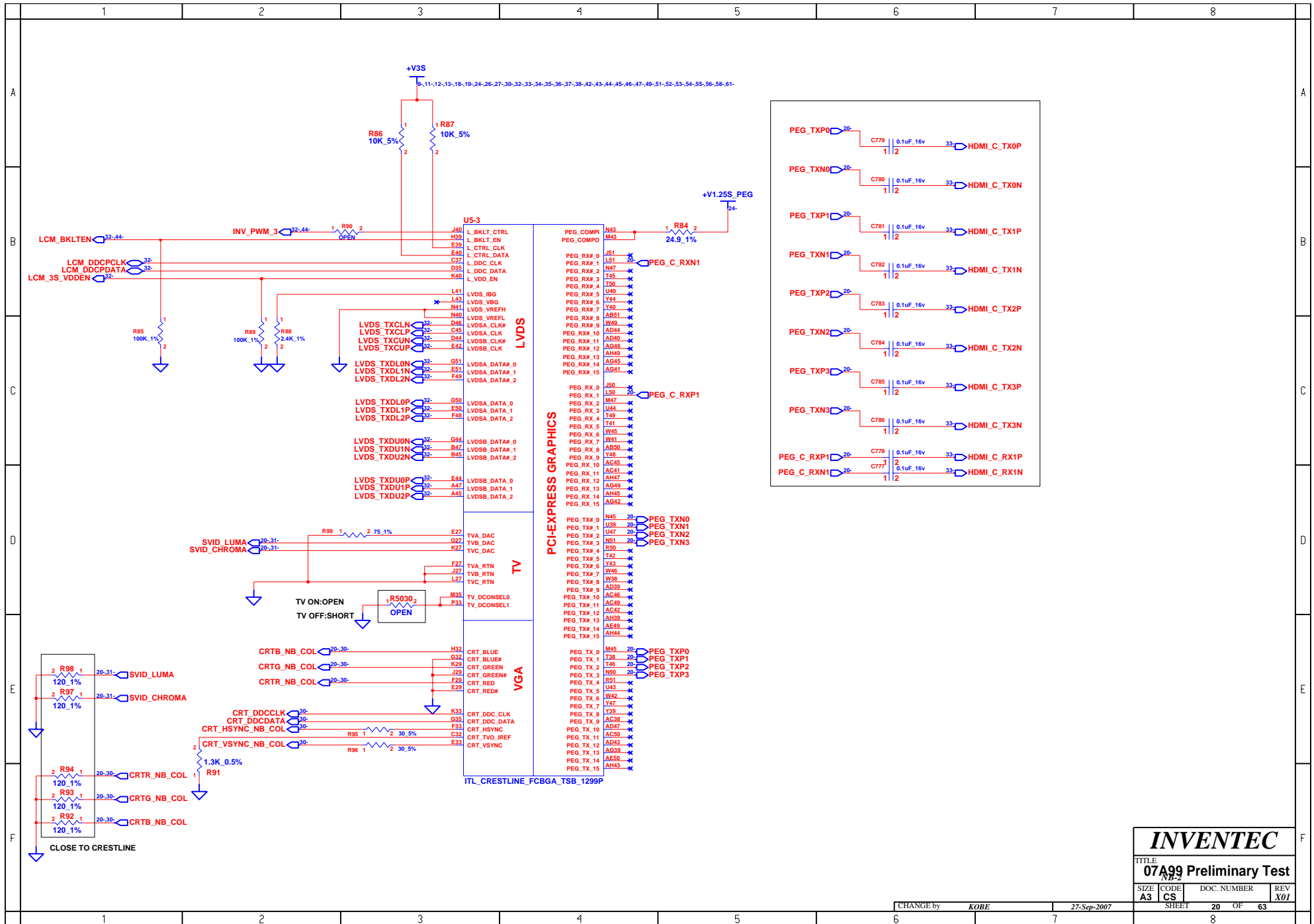
Hysteresis is 30C



INVENTEC			
TITLE			
07A99 Preliminary Test			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	18 OF 63	X01

CHANGE by KOBE 24-Aug-2007



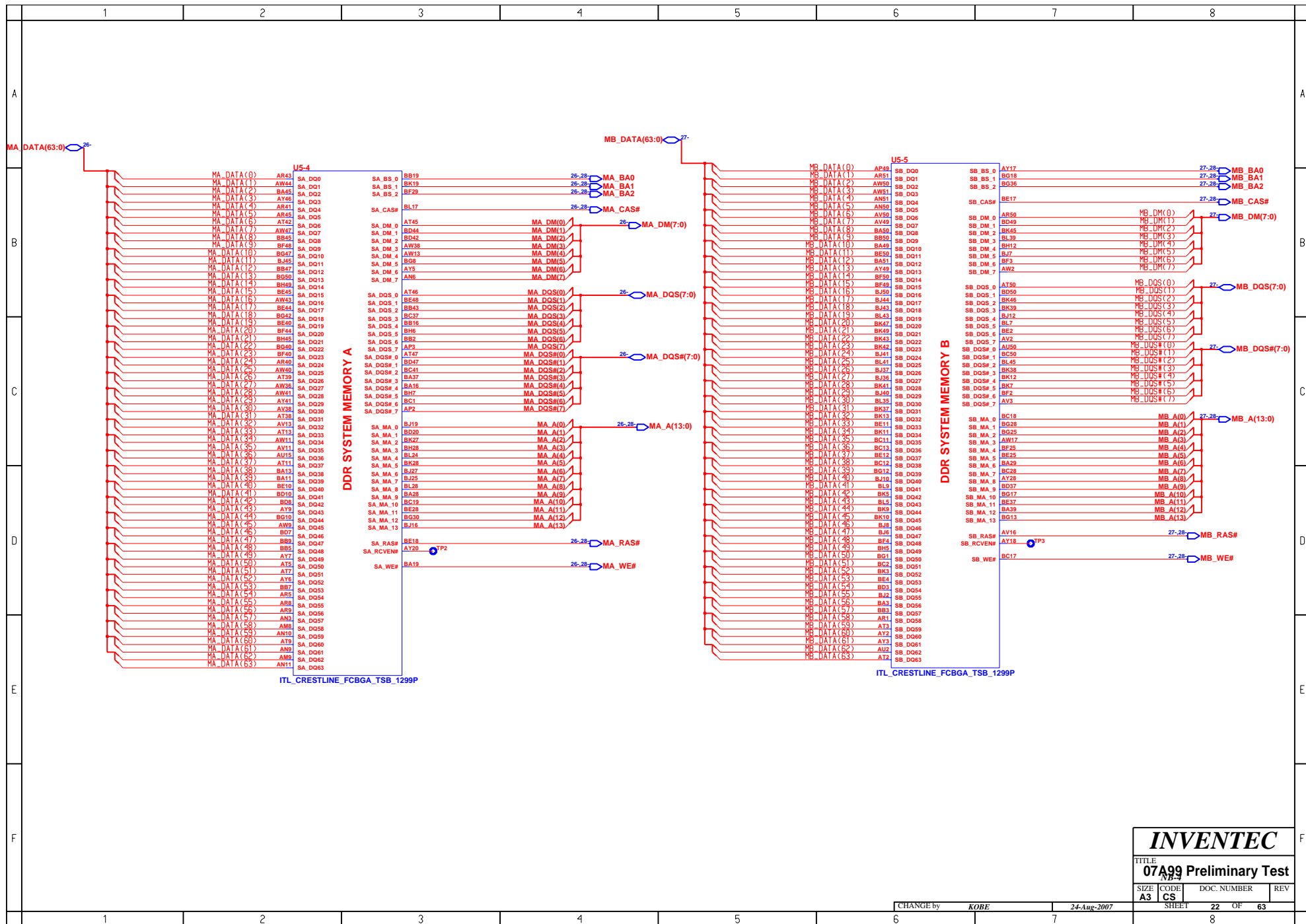


**INVENTEC**

TITLE			
07A99 Preliminary Test			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	20	X01
SHEET		OF	
63		8	

CHANGE by KOBE 27-Sep-2007



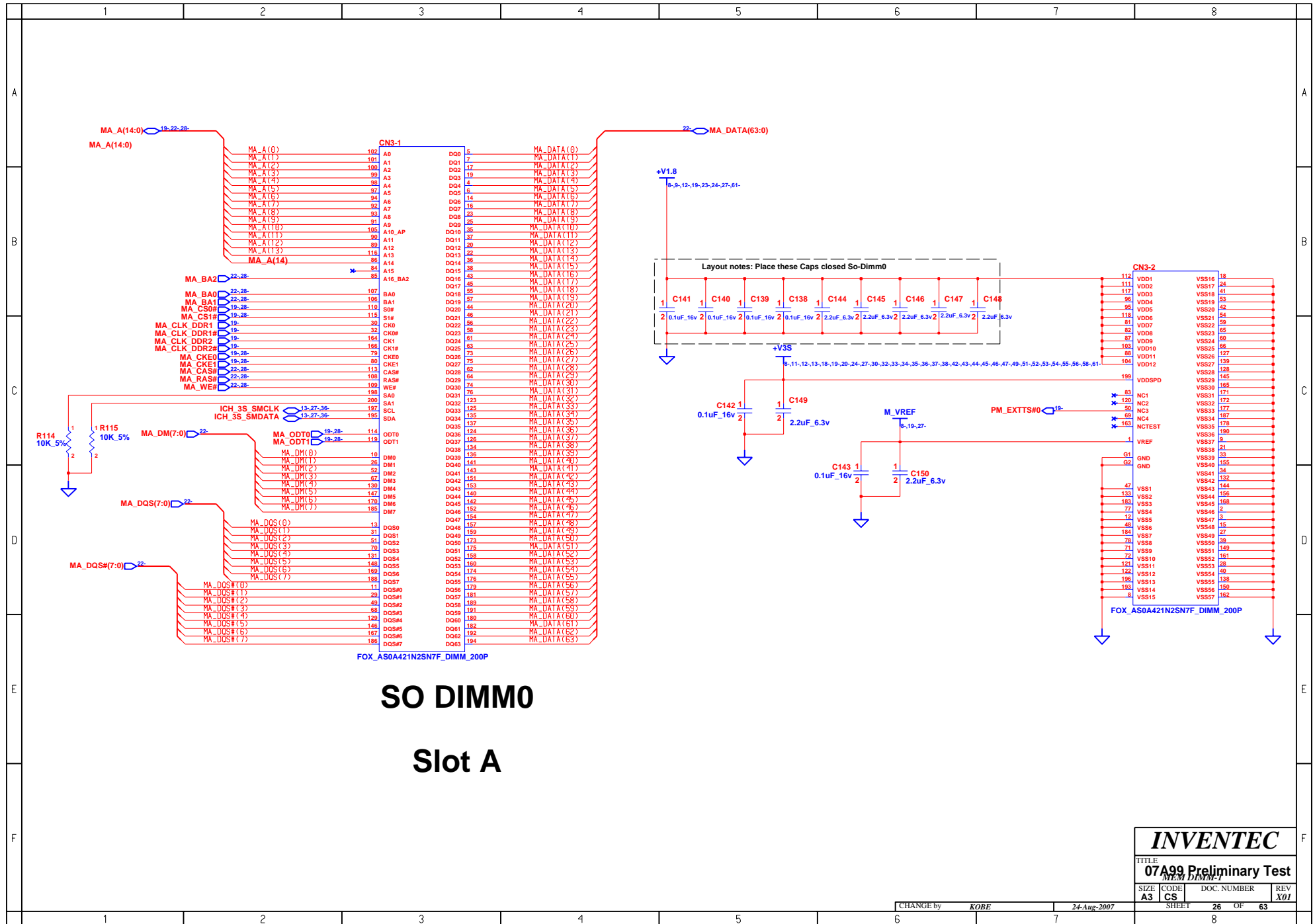


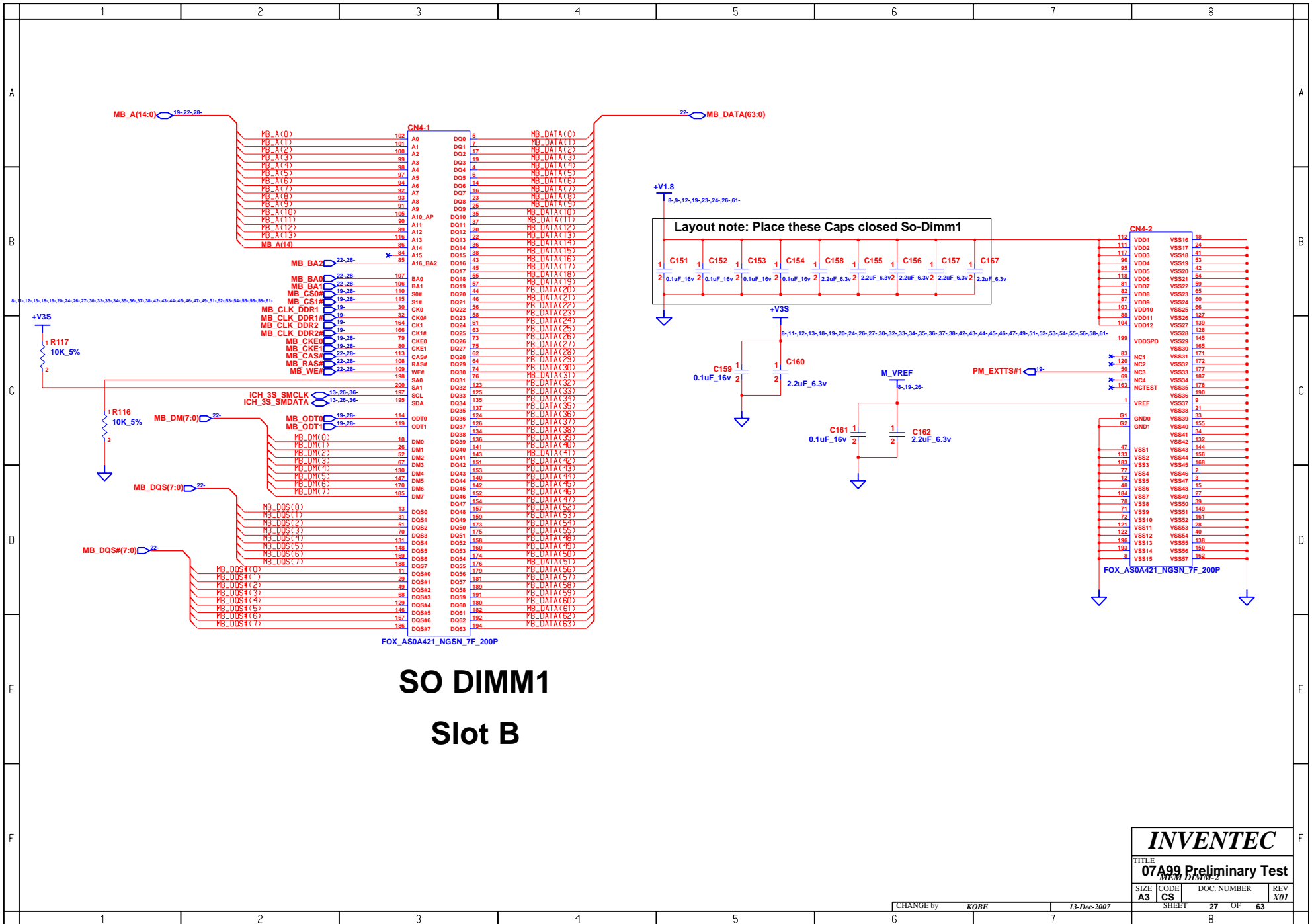


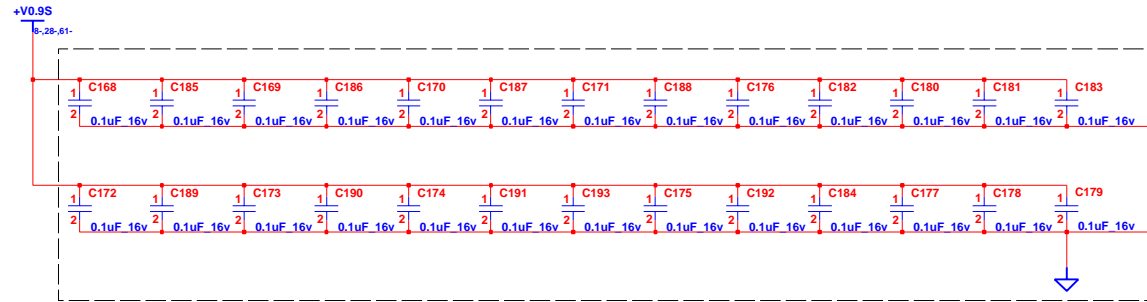




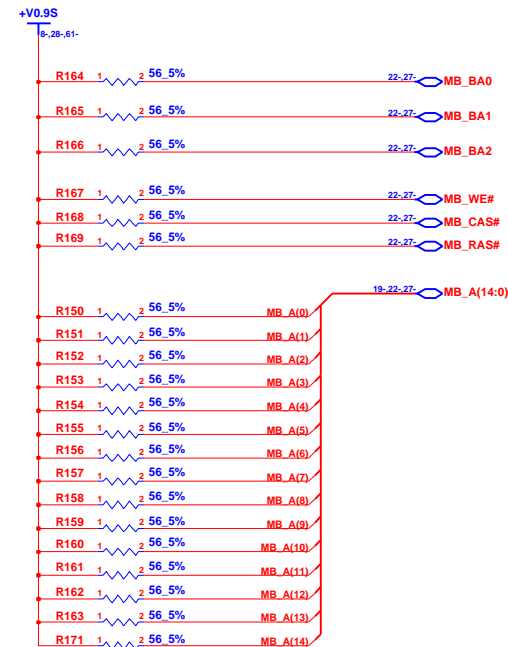
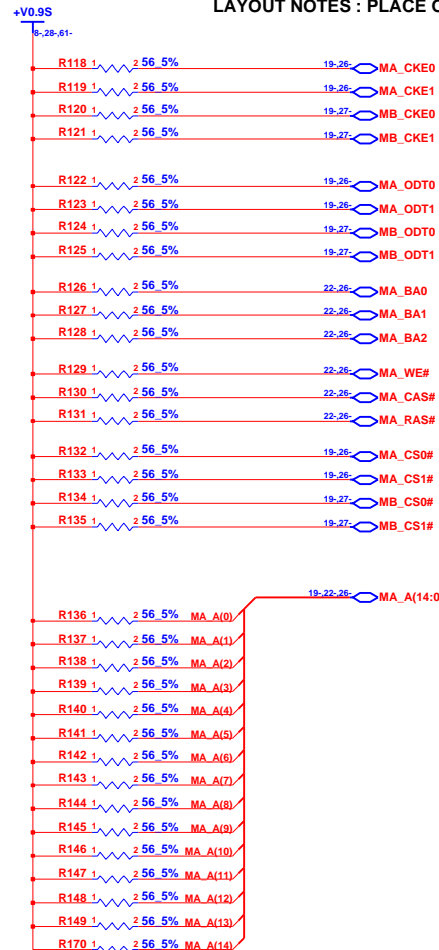








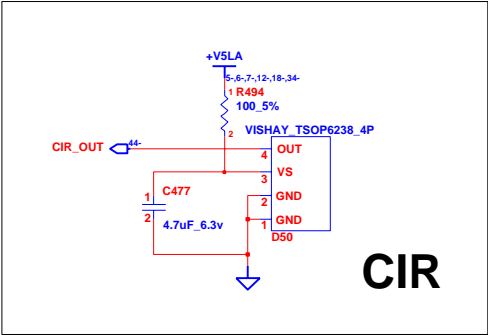
LAYOUT NOTES : PLACE ONE CAP CLOSE TO EVERY 2 PULL UP RESISTOR TERMINATED TO +V0.9S



INVENTEC			
TITLE			
07A99 Preliminary Test			
SIZE	CODE	DOC. NUMBER	REV
A3	CS		

CHANGE by KOBE 24-Aug-2007

SHEET 28 OF 63



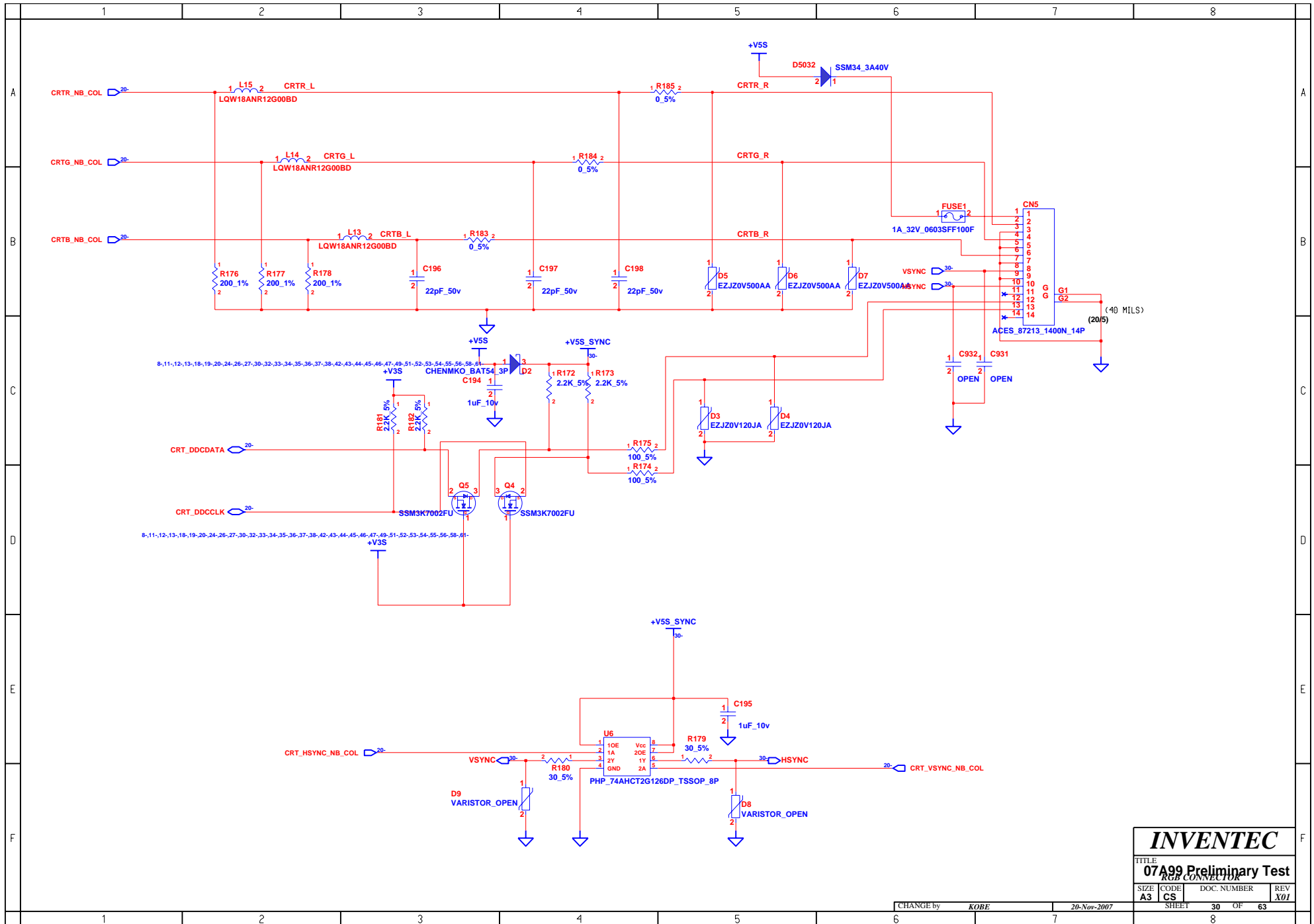
**INVENTEC**

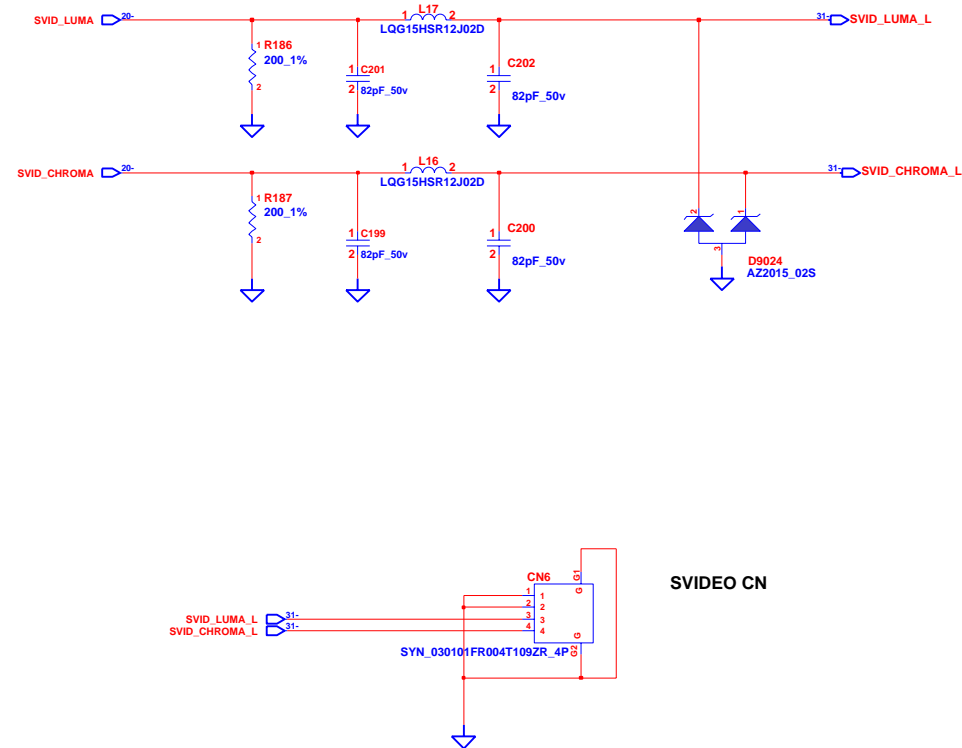
TITLE  
**07A99 Preliminary Test**

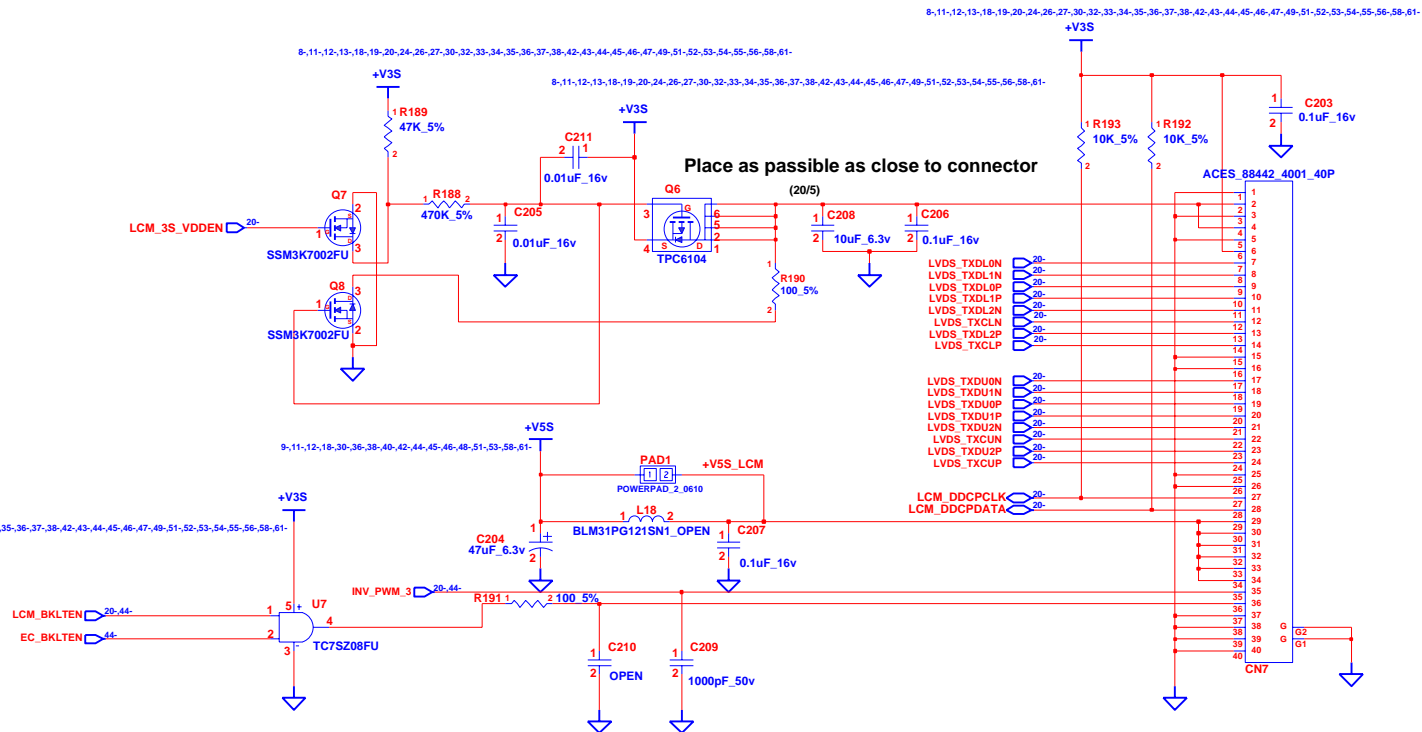
SIZE <b>A3</b>	CODE <b>CS</b>	DOC. NUMBER	REV
-------------------	-------------------	-------------	-----

SHEET	29	OF	63
-------	----	----	----

CHANGE by **KOBE** 19-Sep-2007





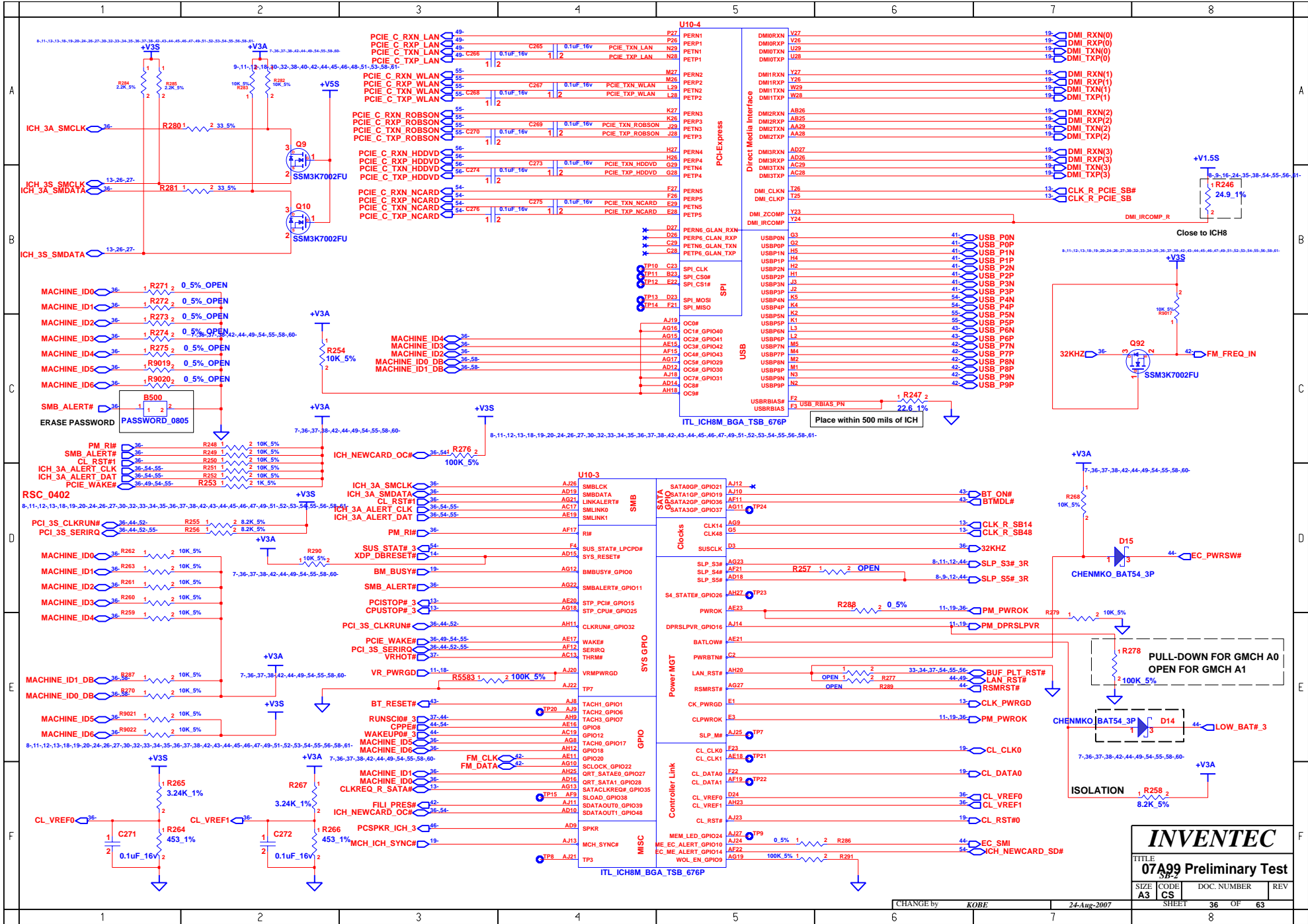








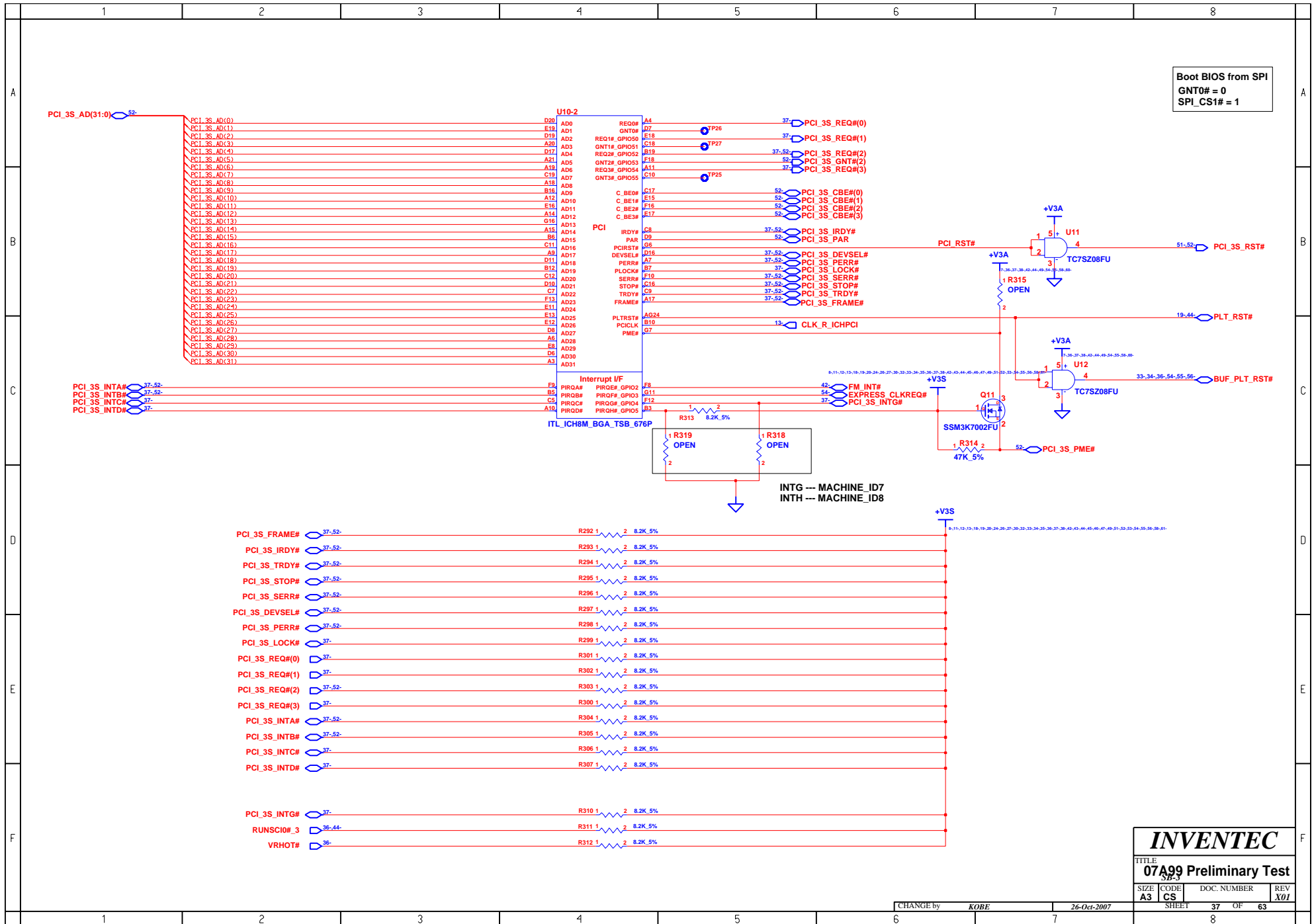




**INVENTEC**

TITLE  
**07A99 Preliminary Test**

SIZE <b>A3</b>	CODE <b>CS</b>	DOC. NUMBER	REV
SHEET		36	OF 63





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

U10-5

A23

VSS001

A5

VSS002

AA2

VSS003

AA3

VSS004

A25

VSS005

AB1

VSS006

AB24

VSS007

AC11

VSS008

AC14

VSS009

AC25

VSS010

AC28

VSS011

AC27

VSS012

AD17

VSS013

AD28

VSS014

AD28

VSS015

VSS016

AD31

VSS017

AD4

VSS018

AD4

VSS019

AE1

VSS020

AE12

VSS021

AE2

VSS022

AE22

VSS023

AD1

VSS024

AE25

VSS025

AE5

VSS026

AE5

VSS027

AE9

VSS028

AF14

VSS029

AF18

VSS030

AF18

VSS031

AF3

VSS032

AF4

VSS033

AG5

VSS034

AG5

VSS035

AH10

VSS036

AH12

VSS037

AH15

VSS038

AH15

VSS039

AH2

VSS040

AF28

VSS041

AH2

VSS042

AH24

VSS043

AH26

VSS044

AH3

VSS045

AH3

VSS046

AH3

VSS047

AJ5

VSS048

B1

VSS049

B14

VSS050

B17

VSS051

B2

VSS052

B22

VSS053

B22

VSS054

B8

VSS055

C24

VSS056

C28

VSS057

C27

VSS058

C6

VSS059

D14

VSS060

D15

VSS061

D18

VSS062

D2

VSS063

D4

VSS064

E21

VSS065

E24

VSS066

E4

VSS067

F1

VSS068

F15

VSS069

E23

VSS070

F28

VSS071

F28

VSS072

F7

VSS073

G1

VSS074

E4

VSS075

G15

VSS076

G13

VSS077

G19

VSS078

G23

VSS079

G25

VSS080

G25

VSS081

G27

VSS082

H25

VSS083

H25

VSS084

H25

VSS085

H3

VSS086

H6

VSS087

J1

VSS088

J25

VSS089

J25

VSS090

J25

VSS091

J25

VSS092

J5

VSS093

K23

VSS094

K23

VSS095

K23

VSS096

K23

VSS097

K6

VSS098

K7

VSS100

L13

VSS101

L15

VSS102

L26

VSS103

L27

VSS104

L4

VSS105

L5

VSS106

M12

VSS107

M13

VSS108

M14

VSS109

M15

VSS110

M16

VSS111

M17

VSS112

M23

VSS113

M28

VSS114

M29

VSS115

M9

VSS116

N1

VSS117

N11

VSS118

N12

VSS119

N13

VSS120

N14

VSS121

N15

VSS122

N16

VSS123

N17

VSS124

N18

VSS125

N26

VSS126

N27

VSS127

N4

VSS128

N5

VSS129

N6

VSS130

P12

VSS131

P13

VSS132

P14

VSS133

P15

VSS134

P16

VSS135

P17

VSS136

P23

VSS137

P28

VSS138

P29

VSS139

R11

VSS140

R12

VSS141

R13

VSS142

R14

VSS143

R15

VSS144

R16

VSS145

R17

VSS146

R18

VSS147

R28

VSS148

R4

VSS149

T12

VSS150

T13

VSS151

T14

VSS152

T15

VSS153

T16

VSS154

T17

VSS155

T2

VSS156

T2

VSS157

U12

VSS158

U13

VSS159

U14

VSS160

U15

VSS161

U16

VSS162

U17

VSS163

U23

VSS164

U26

VSS165

U27

VSS166

U3

VSS167

U5

VSS168

V13

VSS169

V15

VSS170

V28

VSS171

V29

VSS172

W2

VSS173

W26

VSS174

W27

VSS175

Y28

VSS176

Y29

VSS177

Y4

VSS178

AB4

VSS179

AB23

VSS180

AB5

VSS181

AB6

VSS182

AD5

VSS183

U4

VSS184

W24

VSS185

A1

VSS186

A2

VSS187

A28

VSS188

A29

VSS189

AH1

VSS190

AH23

VSS191

AJ1

VSS192

AJ2

VSS193

AJ28

VSS194

AJ29

VSS195

B1

VSS196

B29

ITL\_ICH8M\_BGA\_TSB\_676P

CHANGE by

KOBE

24-Aug-2007

INVENTEC

TITLE

07A99 Preliminary Test

SB-3

SIZE

A3

CODE

CS

DOC. NUMBER

39

OF

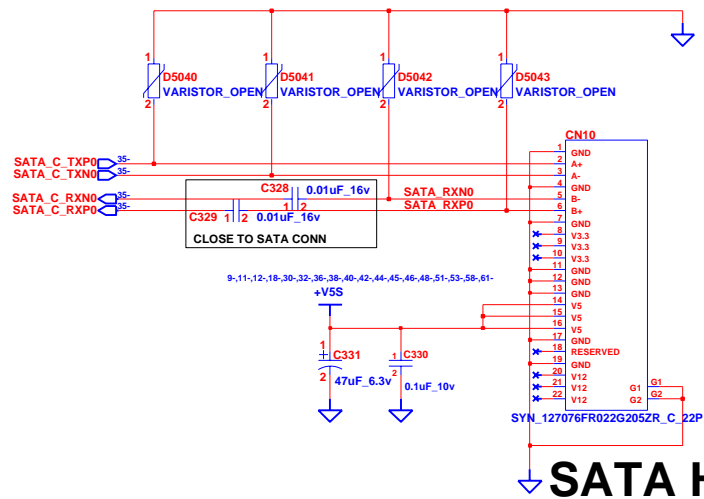
63

REV

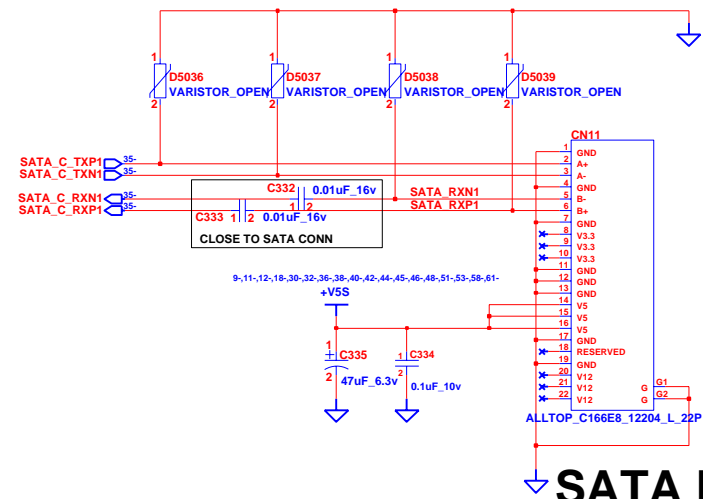
X01

SHEET

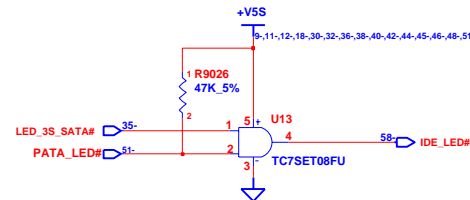
8



**SATA HDD01**



**SATA HDD02**

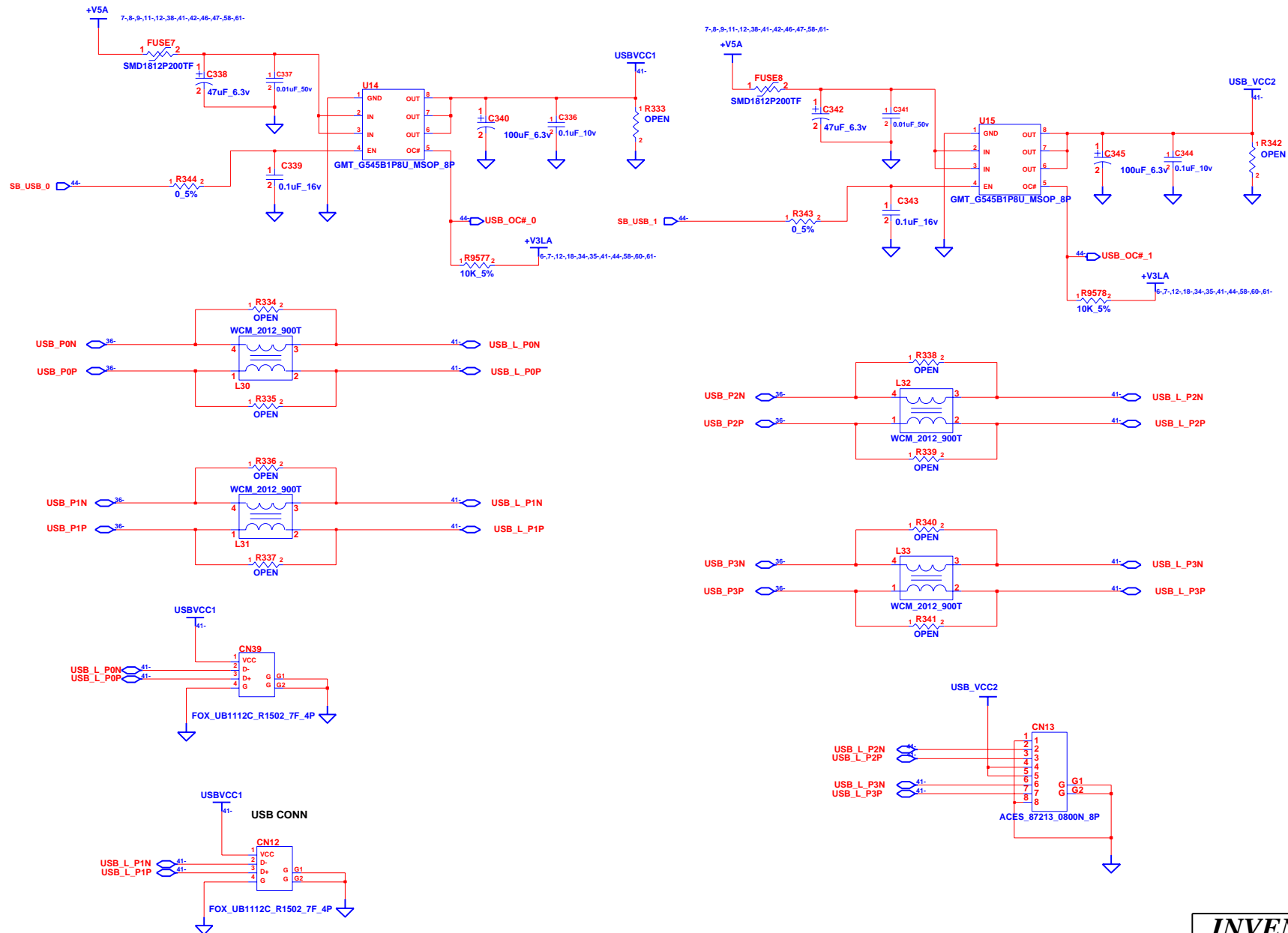


INVENTEC			
TITLE			
07A99 Preliminary Test			
SIZE	CODE	DOC. NUMBER	REV
A3	CS		X01

CHANGE by KOBE 13-Dec-2007

SHEET 40 OF 63

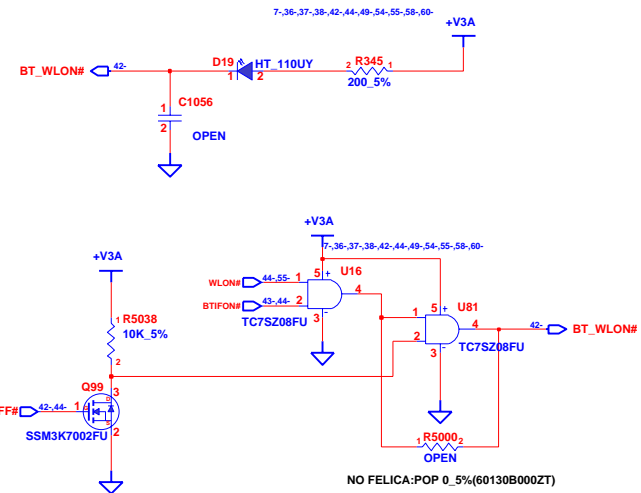
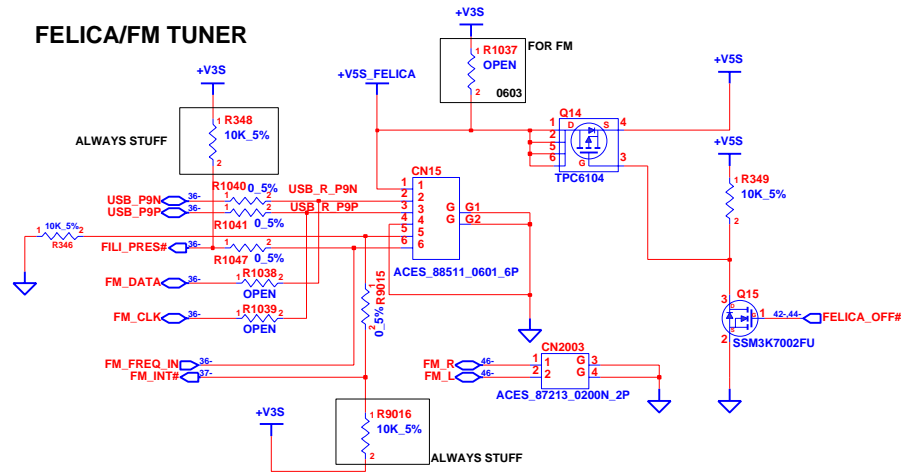




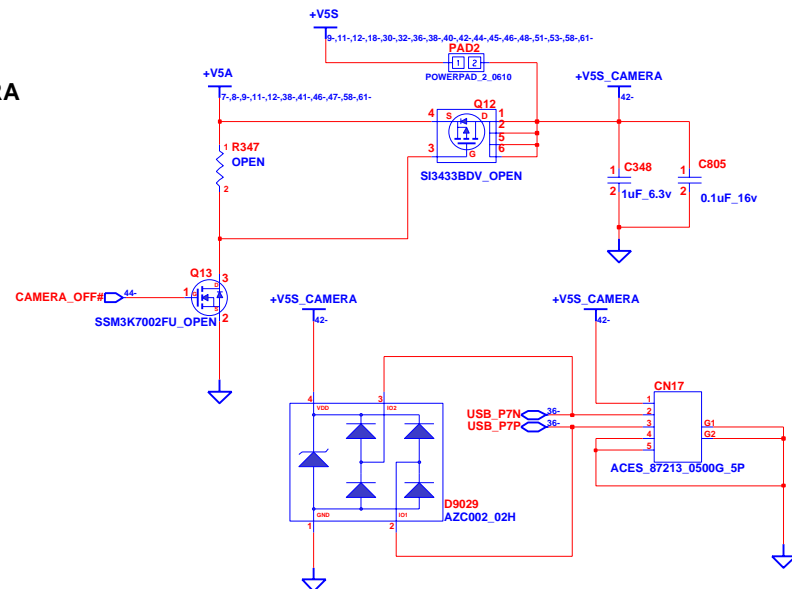
INVENTEC			
TITLE			
07A99 Preliminary Test			
USB CONN			
SIZE	CODE	DOC. NUMBER	REV
A3	CS		
SHEET 41 OF 63			

CHANGE by KOBE 24-Aug-2007

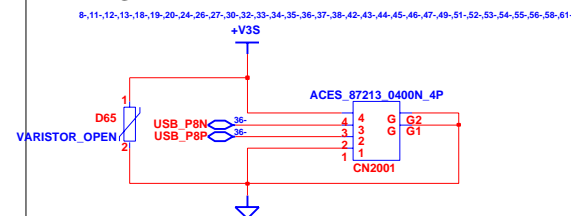
## FELICA/FM TUNER



## CAMERA



## FINGER PRINT



**INVENTEC**

TITLE  
**07A99 Preliminary Test**

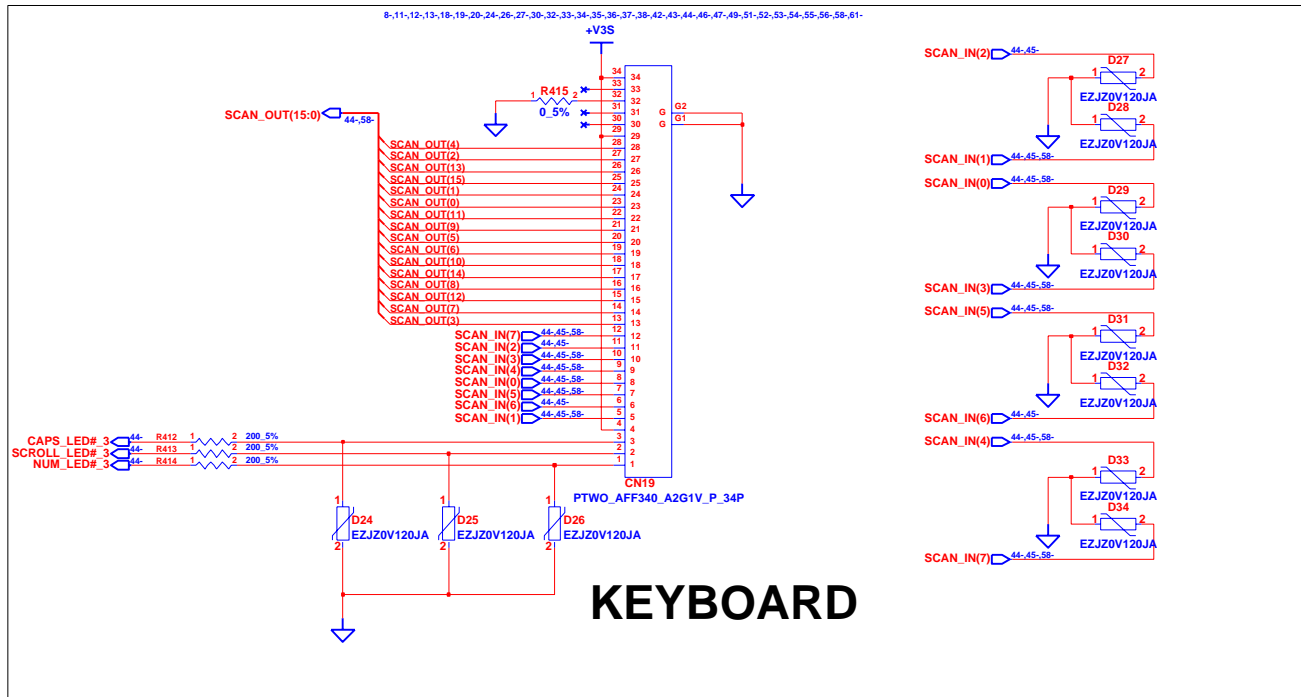
SIZE CODE DOC. NUMBER REV  
**A3 CS**

CHANGE by **KOBE** 24-Oct-2007

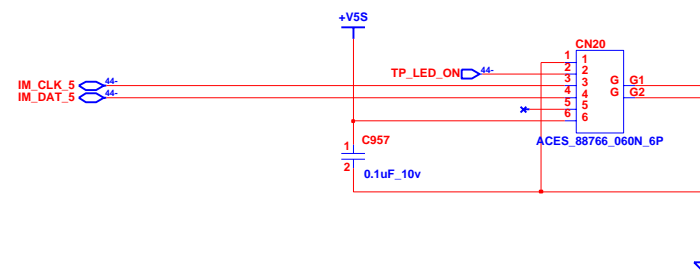
SHEET 42 OF 63







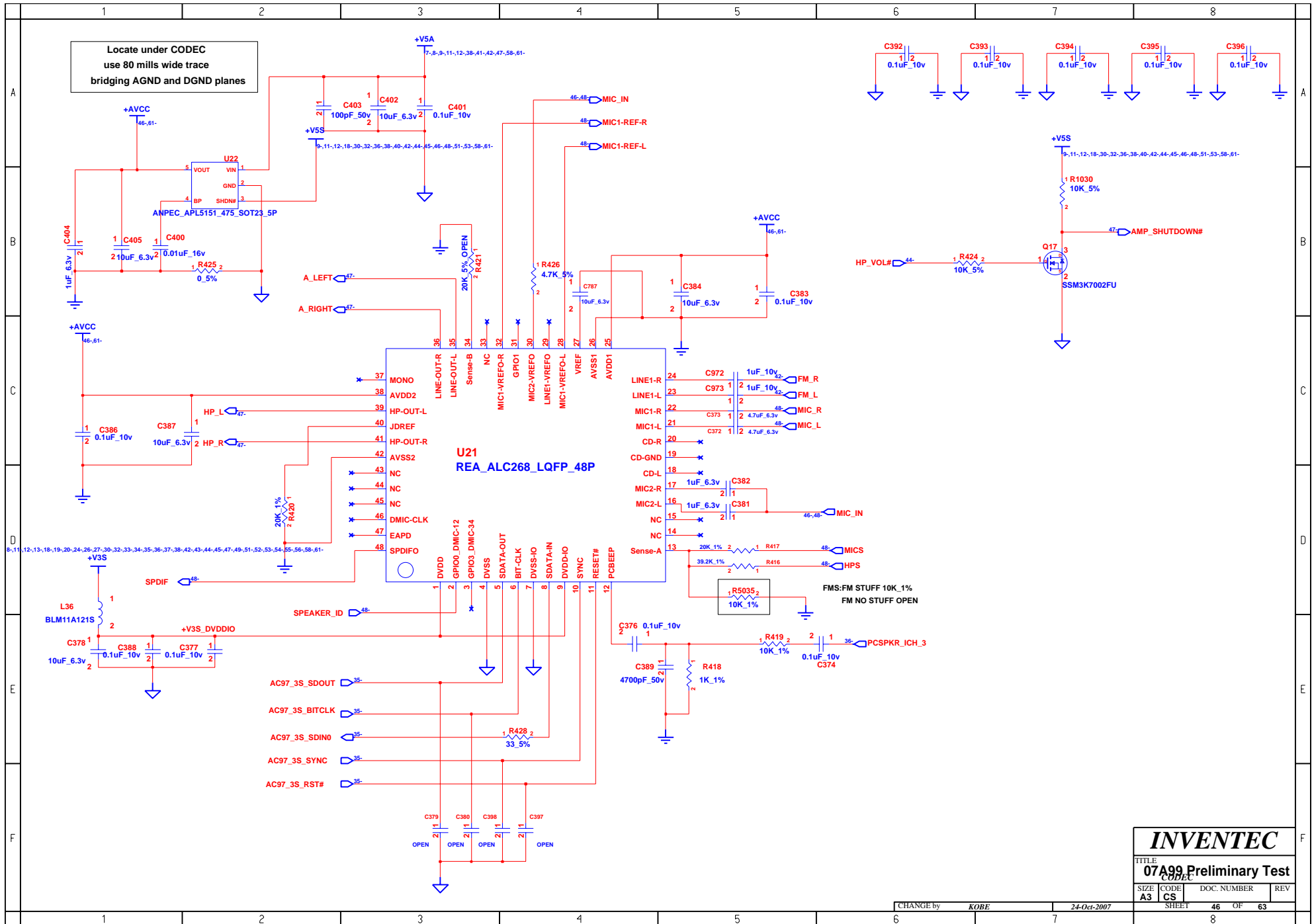
## KEYBOARD

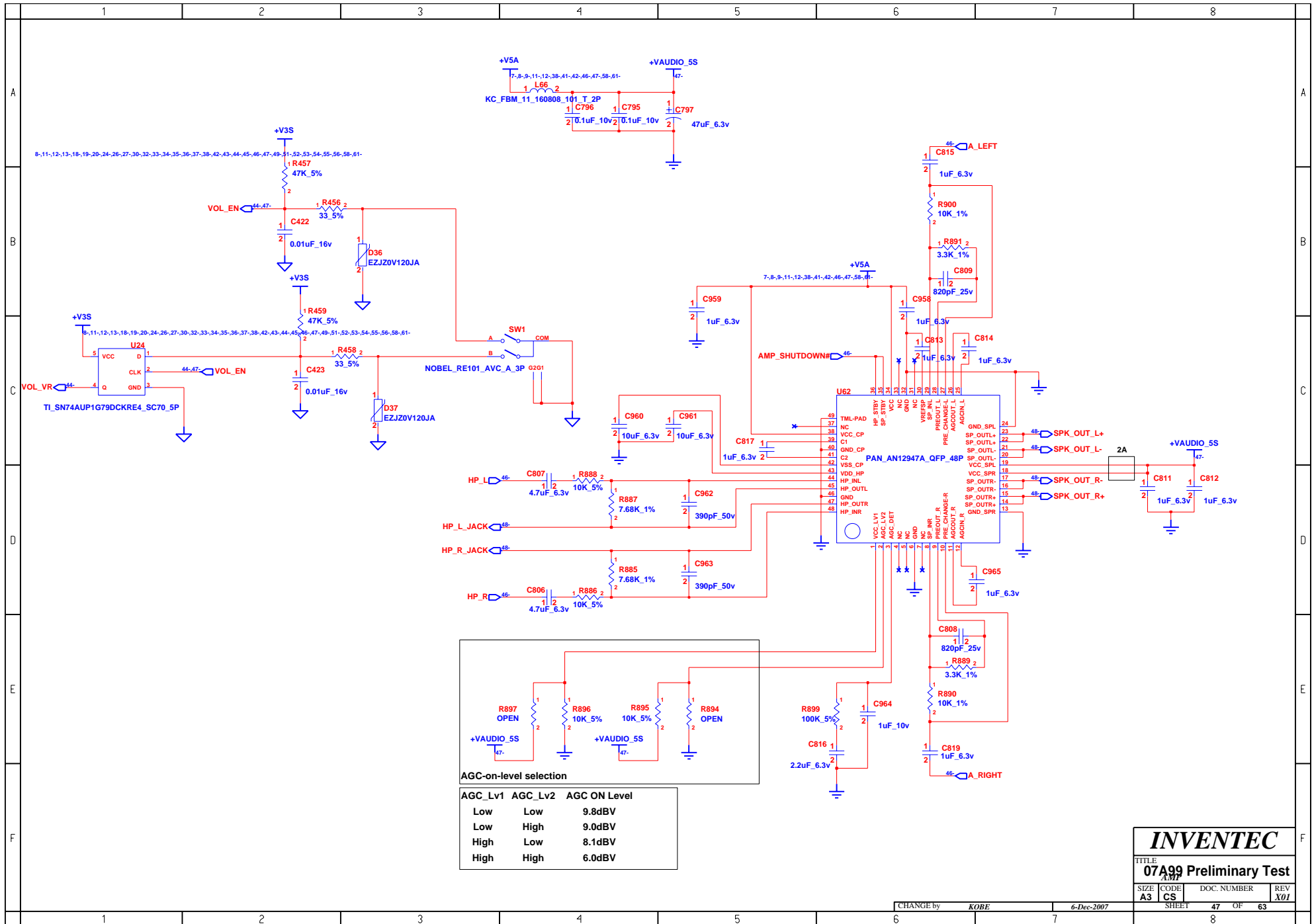


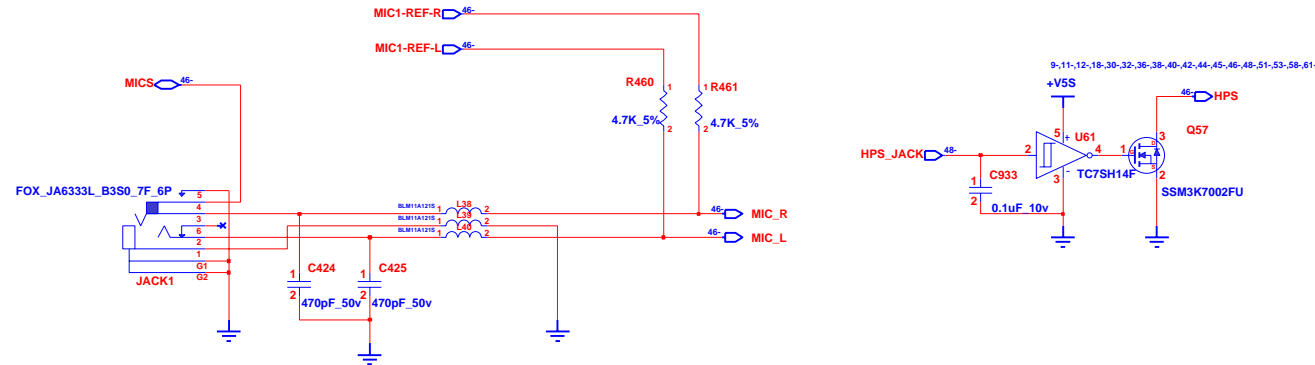
INVENTEC			
TITLE			
07A99 Preliminary Test			
INT.KB/POINT DEVICE			
SIZE	CODE	DOC. NUMBER	REV
A3	CS		

CHANGE by KOBE 3-Sep-2007

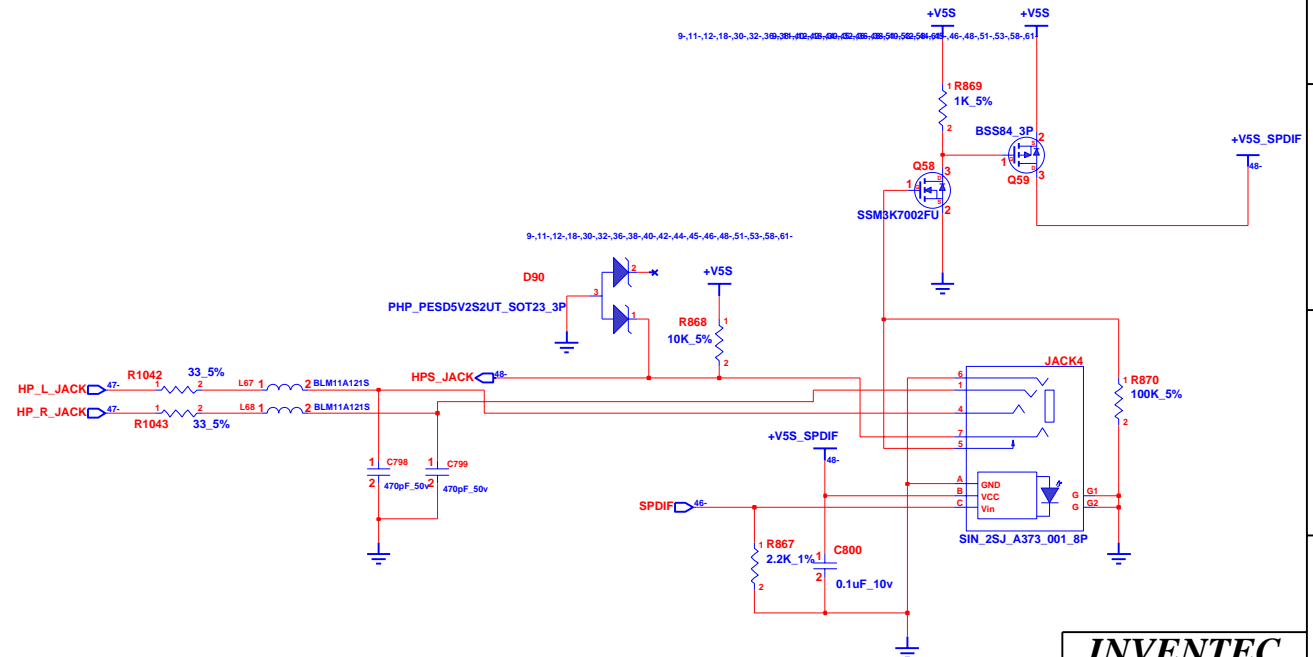
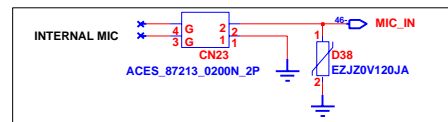
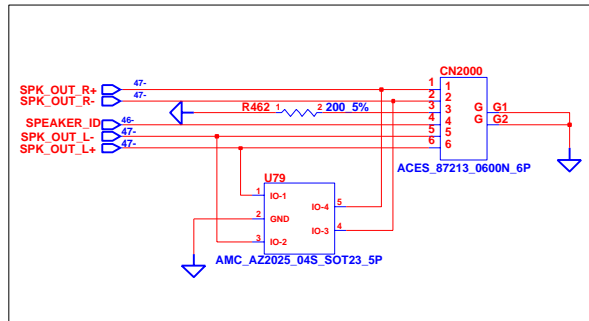
SHEET 45 OF 63







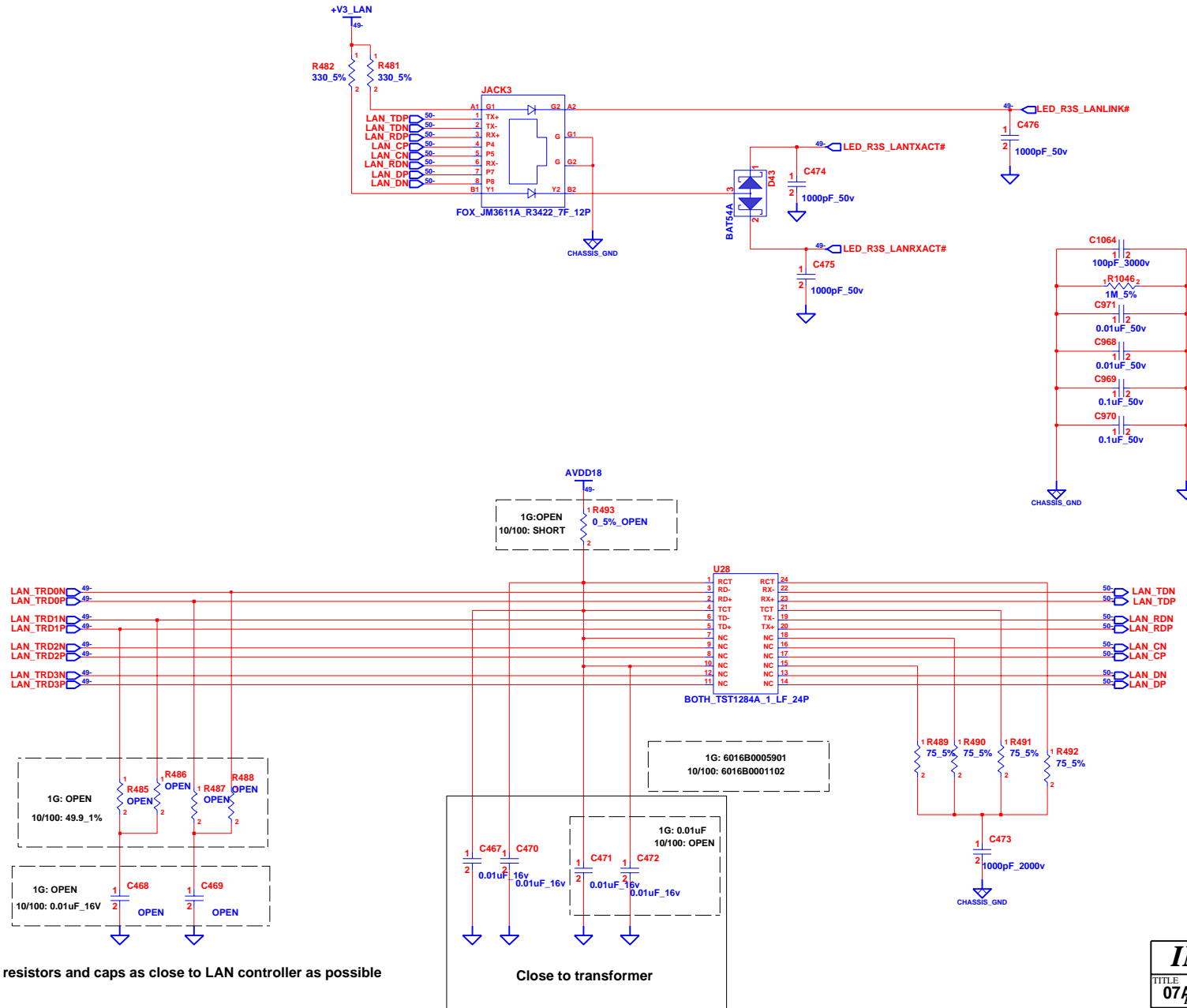
# INTERNAL SPEAKER



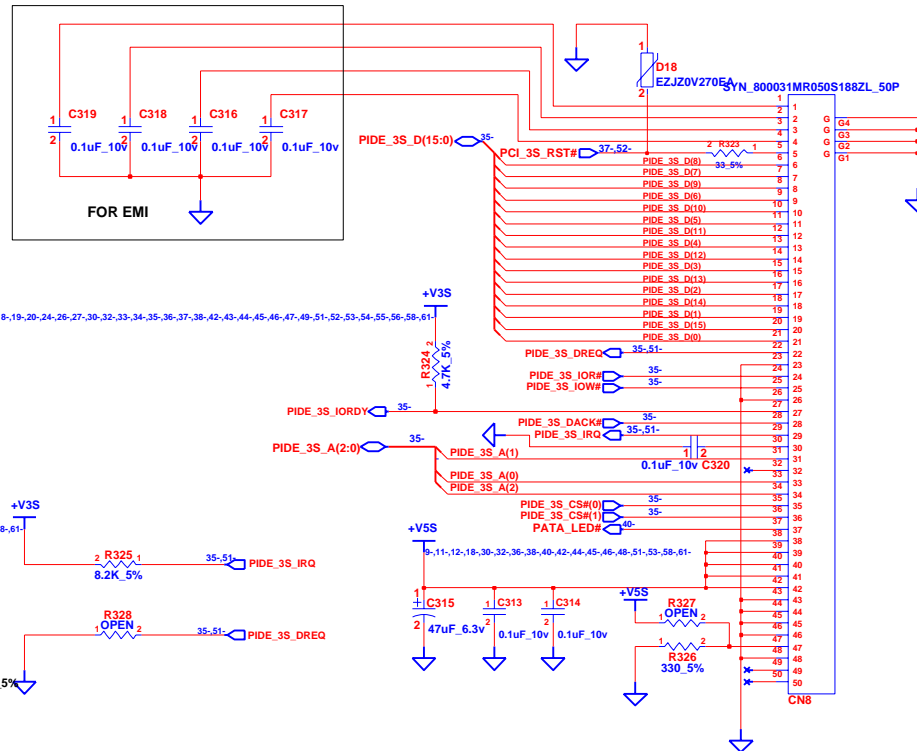
INVENTEC			
TITLE			
07A99 Preliminary Test			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	48 OF 63	X01







INVENTEC			
TITLE			
07A99 Preliminary Test			
LAN RJ45 CONN			
SIZE	CODE	DOC. NUMBER	REV
A3	CS		
CHANGE by		11-Dec-2007	
SHEET		50	OF 63
		8	

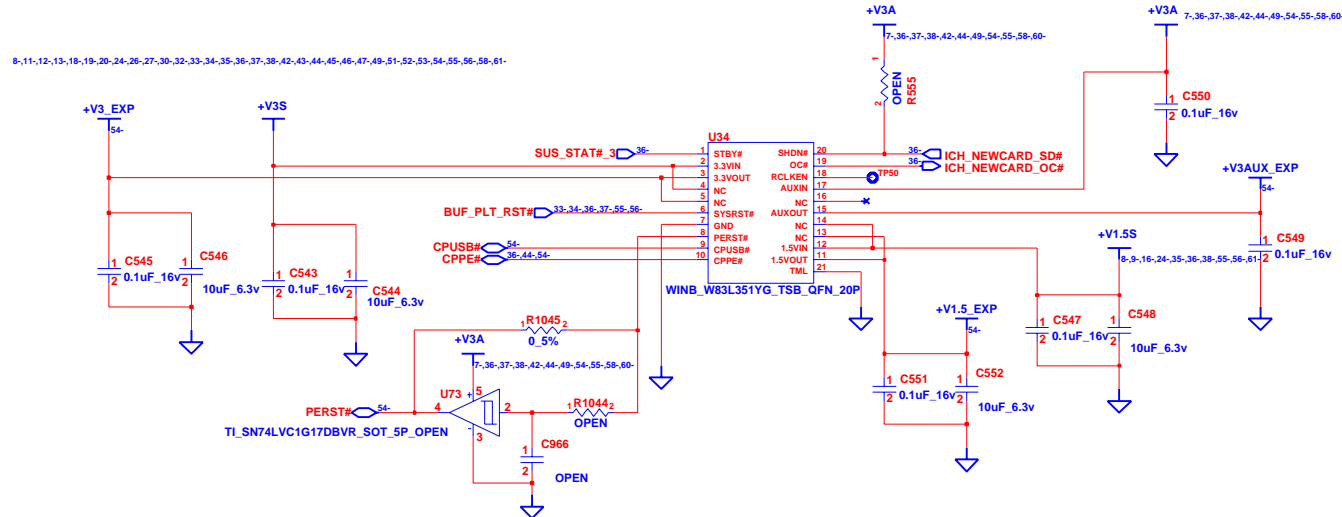
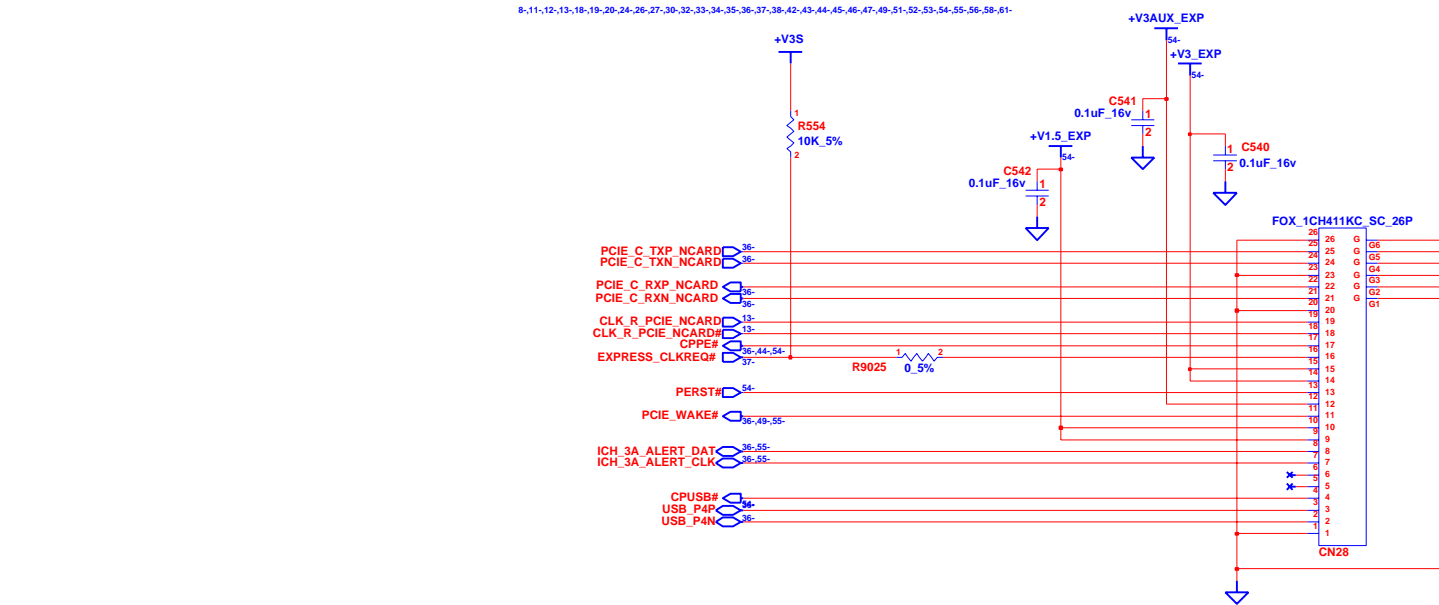


INVENTEC			
TITLE			
07A99 Preliminary Test			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	51 OF 63	X01
SHEET			

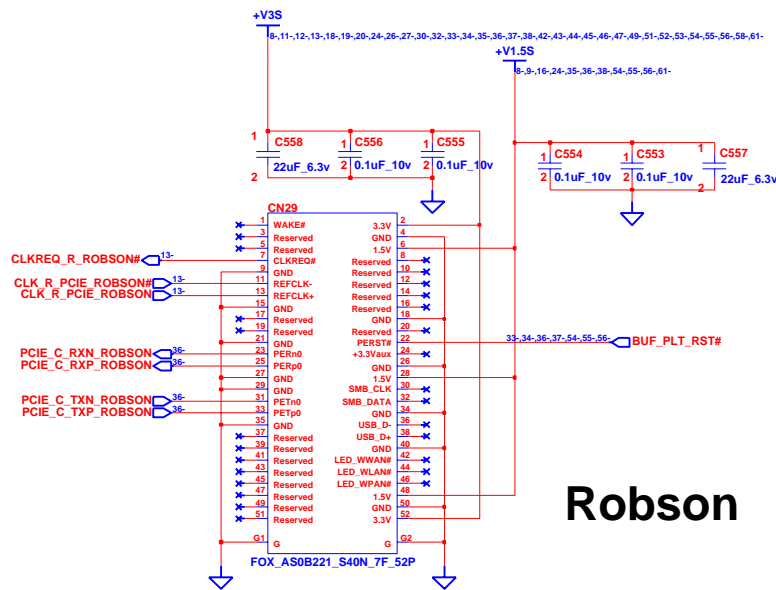
CHANGE by KOBE 24-Aug-2007



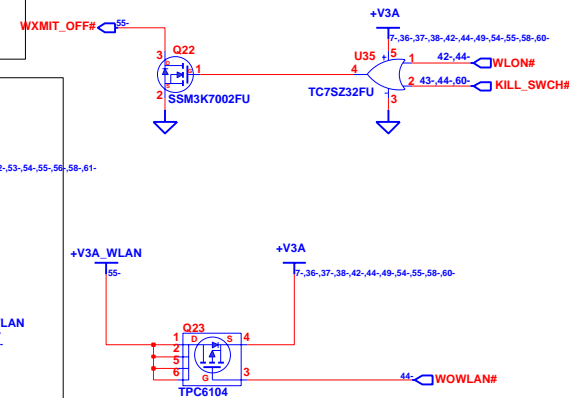
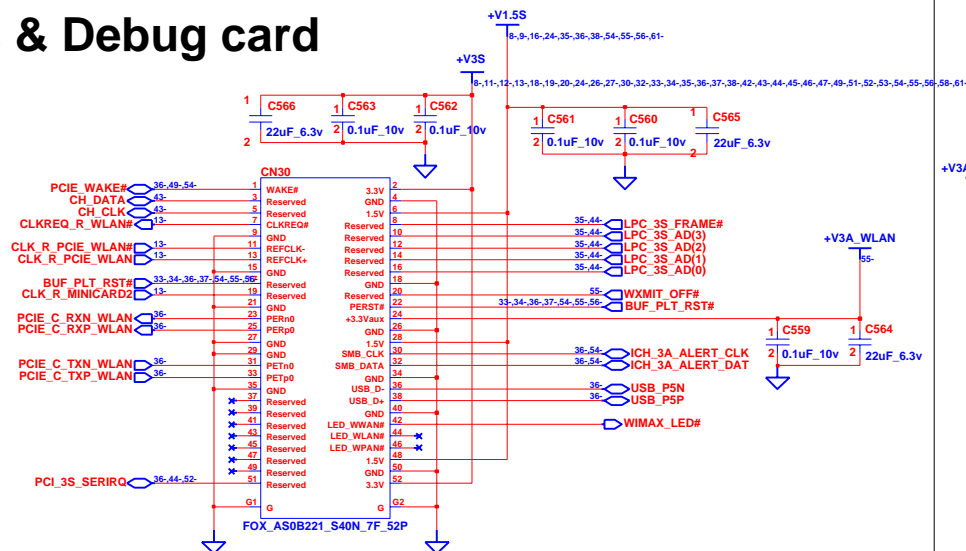




INVENTEC			
TITLE			
07A99 Preliminary Test			
EXPRESS CARD			
SIZE	CODE	DOC. NUMBER	REV
A3	CS		X01
CHANGE by		3-Dec-2007	
SHEET		54	OF 63



## Wireless & Debug card

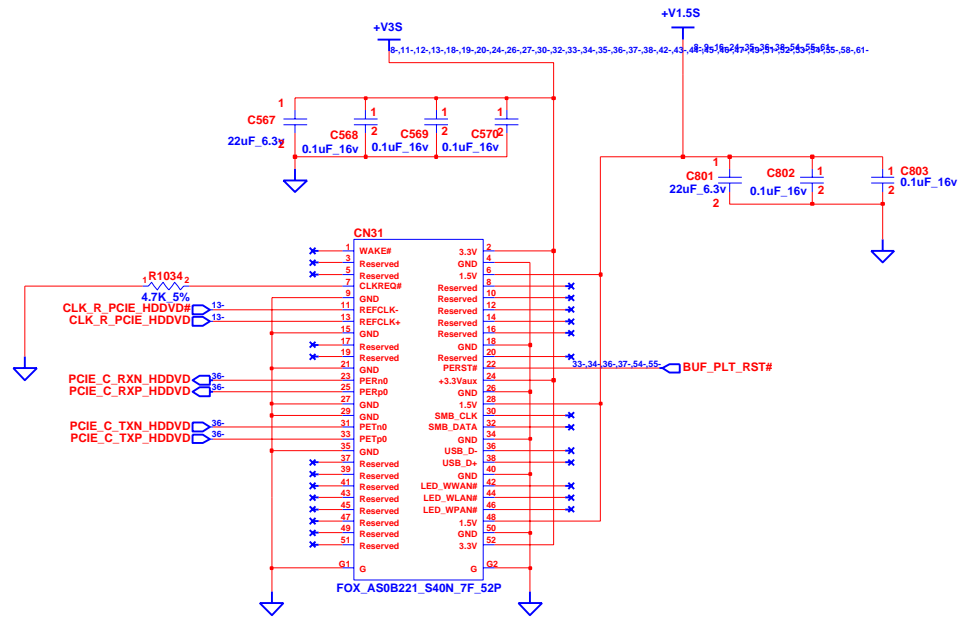


INVENTEC			
TITLE			
07A99 Preliminary Test			
ROBSON & WIRELESS			
SIZE	CODE	DOC. NUMBER	REV
A3	CS		

CHANGE by **KOBE** 20-Nov-2007

SHEET 55 OF 63

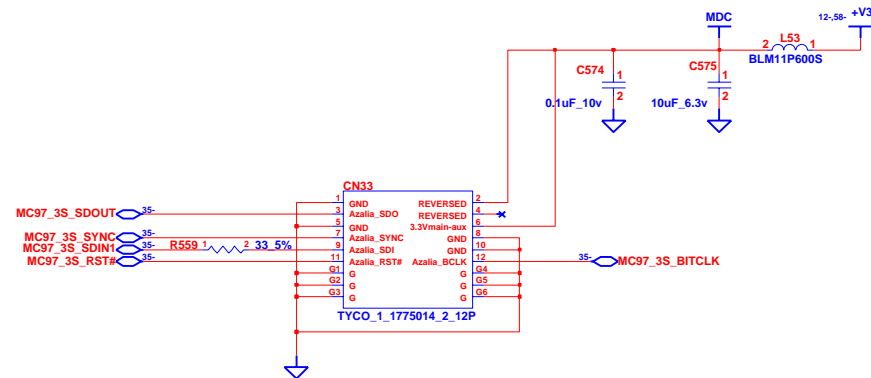
# HD-DVD



INVENTEC			
TITLE			
07A99 Preliminary Test			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	SHEET 56 OF 63	X01

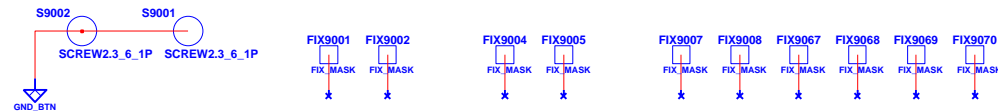
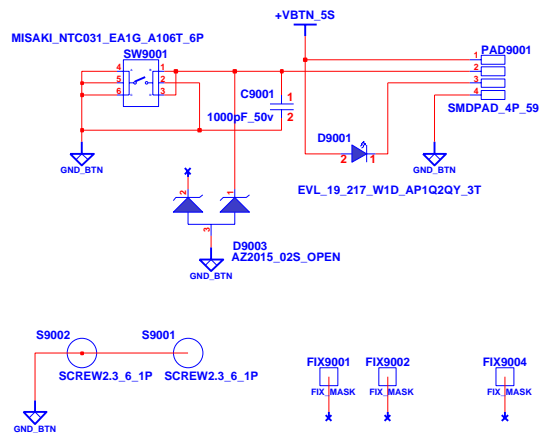
CHANGE by KOBE 12-Sep-2007





INVENTEC			
TITLE			
07A99 Preliminary Test			
SIZE	CODE	DOC. NUMBER	REV
A3	CS		X01
CHANGE by		3-Dec-2007	
SHEET		57	OF 63

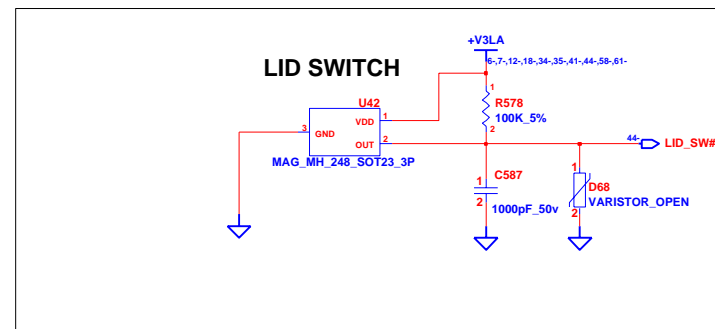
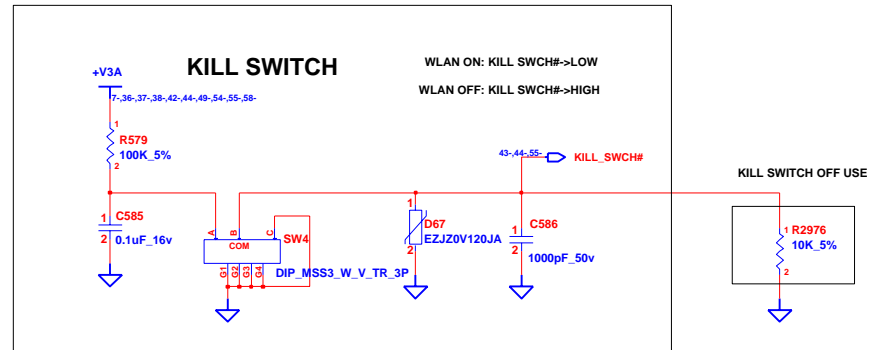




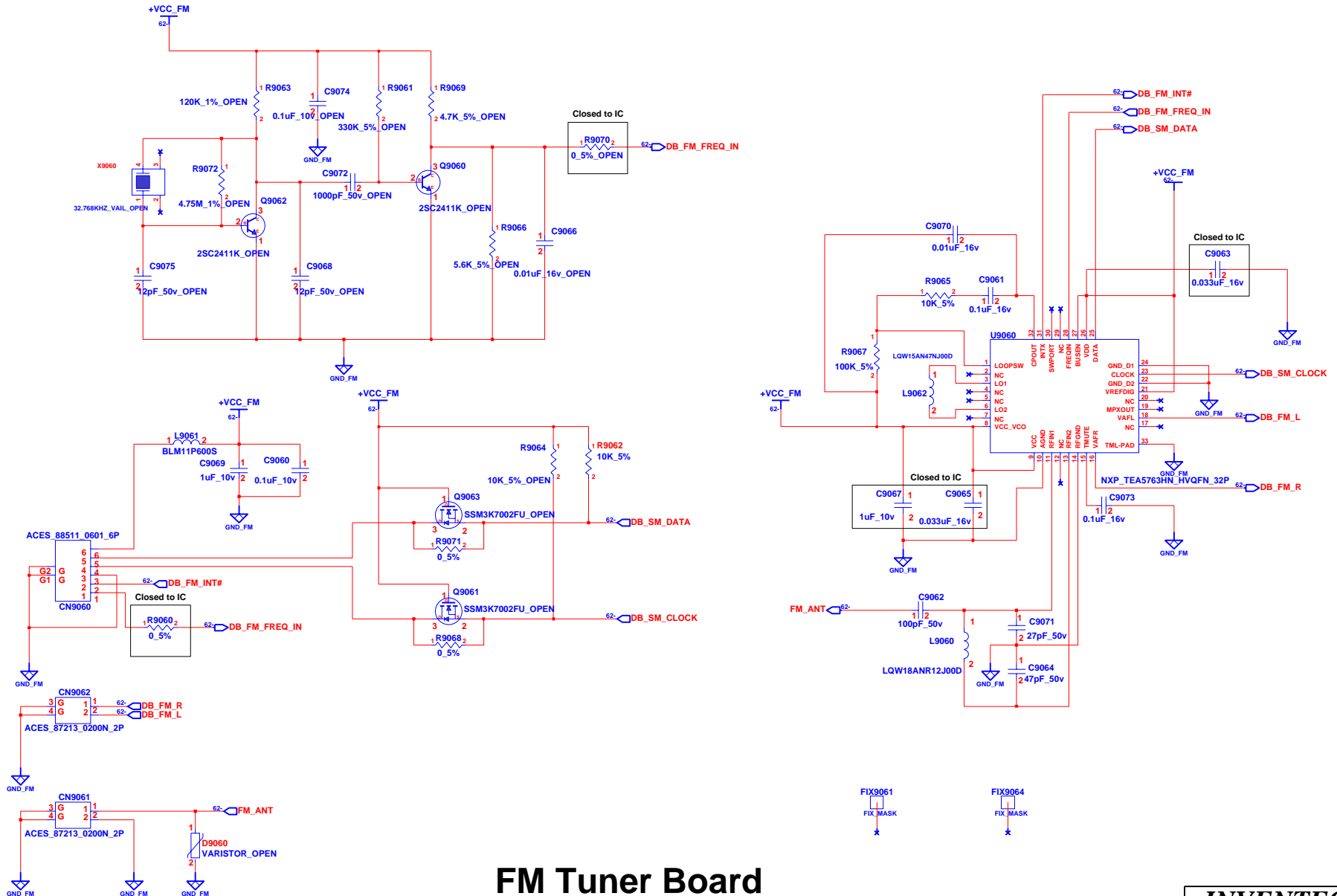
## POWER BOARD

INVENTEC			
TITLE			
07A99 Preliminary Test			
SIZE	CODE	DOC. NUMBER	REV
A3	CS		
SHEET		59	OF 63

CHANGE by KOBE 22-Oct-2007







FM Tuner Board

INVENTEC			
TITLE			
07A99 Preliminary Test			
SIZE	CODE	DOC. NUMBER	REV
A3	CS		
SHEET 62 OF 63			

CHANGE by PT10S 13-Dec-2007

The schematic diagram illustrates the electrical connections for a Finger Print Reader DB. Key components include:

- ICs:** U9031 (AUT\_AES1610\_C\_DF\_TR\_NI00\_BGA\_40P), U9032 (FAIR\_FPF2005\_SC70\_5P), U9033 (MXIC\_MX25L4005AMC\_SOP\_8P), U9034 (BLM11P600S VARISTOR\_OPEN), U9035 (FND336P), U9036 (AMC\_AZ1015\_02N\_SOT143\_4P).
- Resistors:** R9031, R9032, R9033, R9034, R9035, R9036, R9037, R9038, R9039.
- Capacitors:** C9031, C9032, C9033, C9034, C9035, C9036, C9037, C9038, C9039.
- Inductors:** L9031.
- Diodes:** D9031.
- Connectors:** PIN1 +V3S, PIN2 D-, PIN3 D+, PIN4 G.

The circuit includes various power supply rails (+FP\_VDD, +FP\_VDDA, +FP\_V3S) and ground connections (FP\_GND). It also features several callouts such as "Close to IC pin B3 & B6", "Close to IC pin D6 & D7", "Trace length 20mil MAX Use 3 via to FP\_GND", and "Close to PADS".

## Finger Print Reader DB

CHANGE by		PT10S	23-Jan-2008
SHEET	63	OF	63

**INVENTEC**  
 TITLE  
**07A99 Preliminary Test**  
 SIZE CODE DOC. NUMBER REV  
 A3 CS 8

[illegible]