

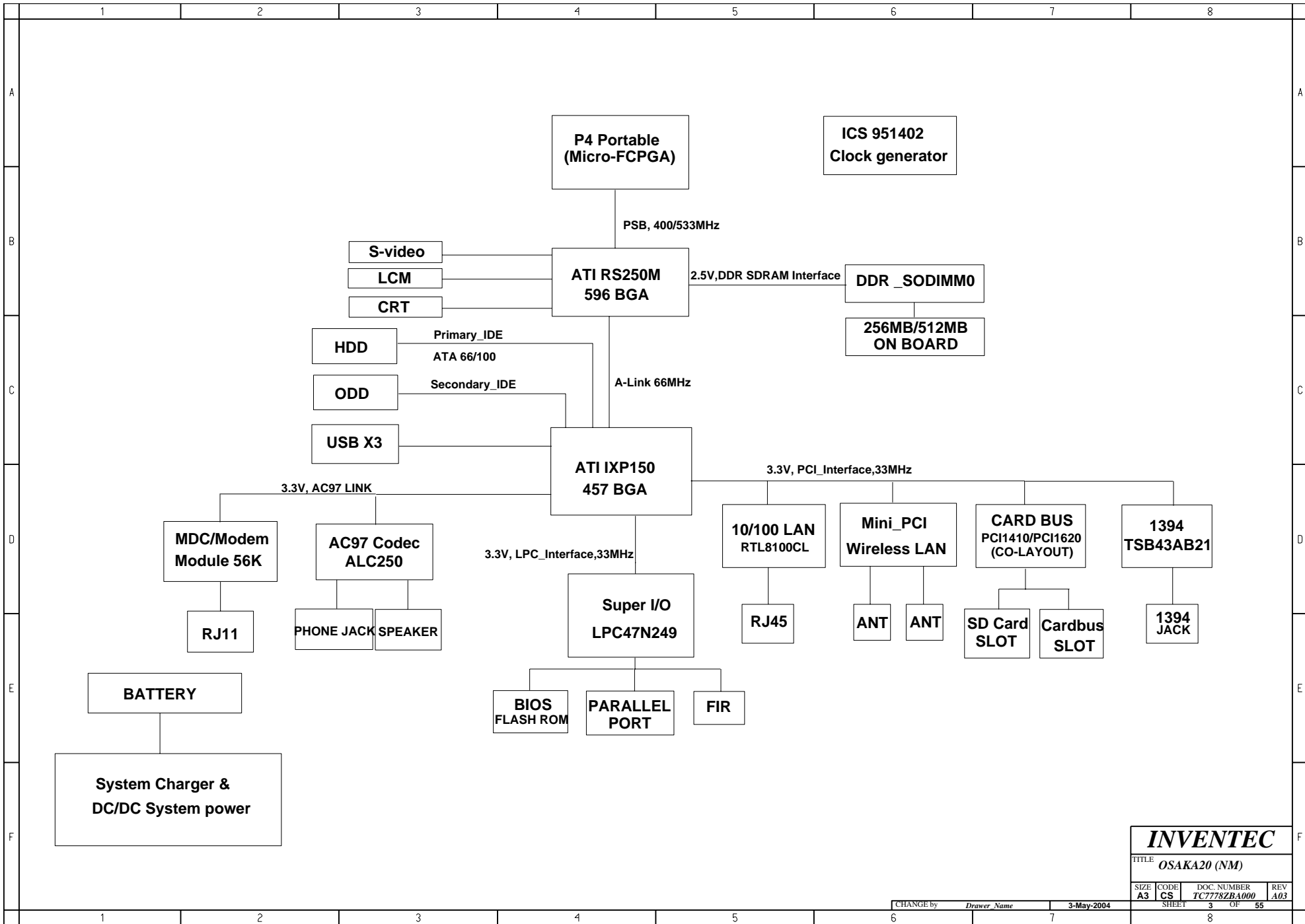
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INVENTEC

TITLE *OSAKA20 (NM)*

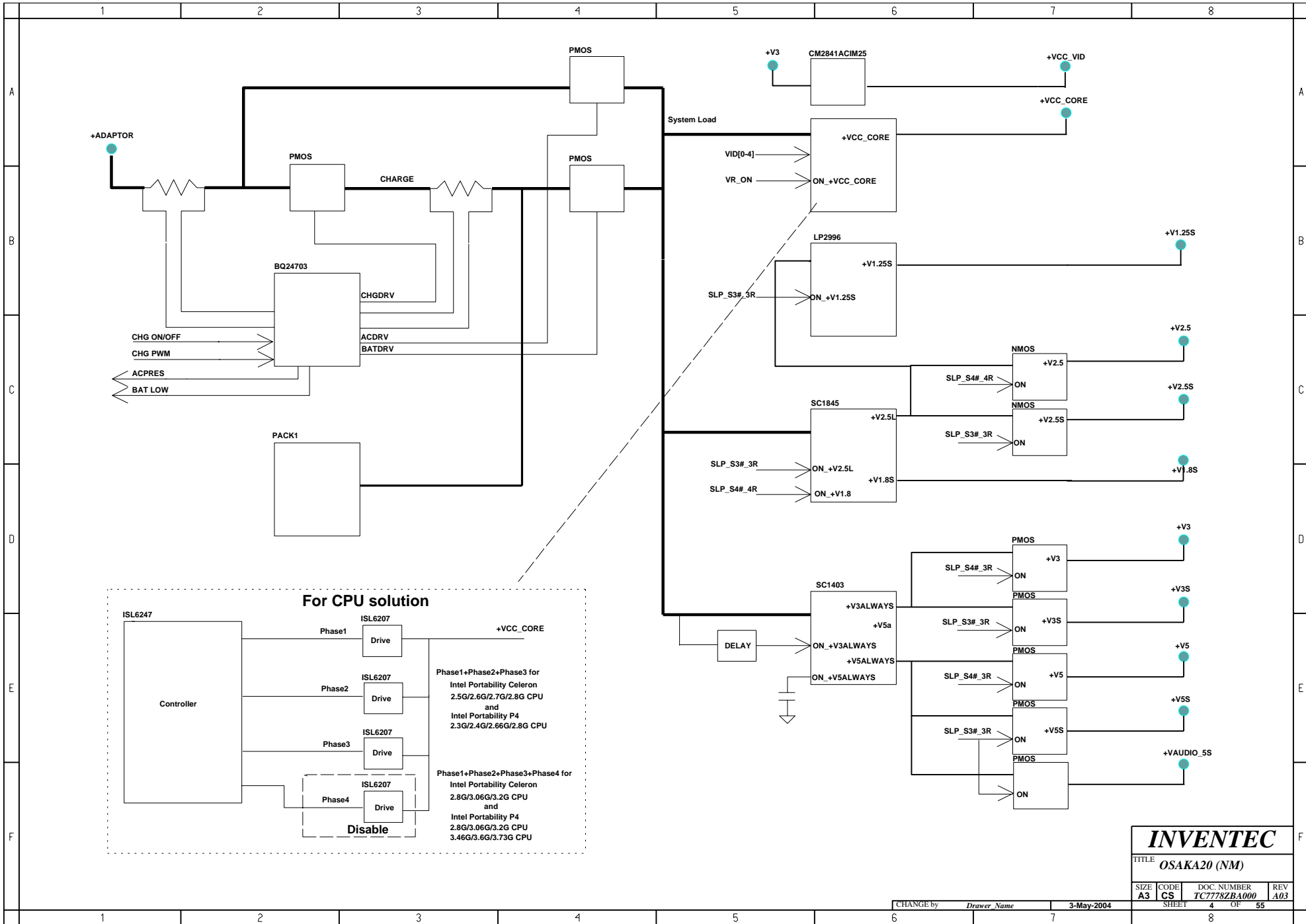
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CHANGE by <i>Drawer Name</i>		3-May-2004	SHEET 2 OF 55



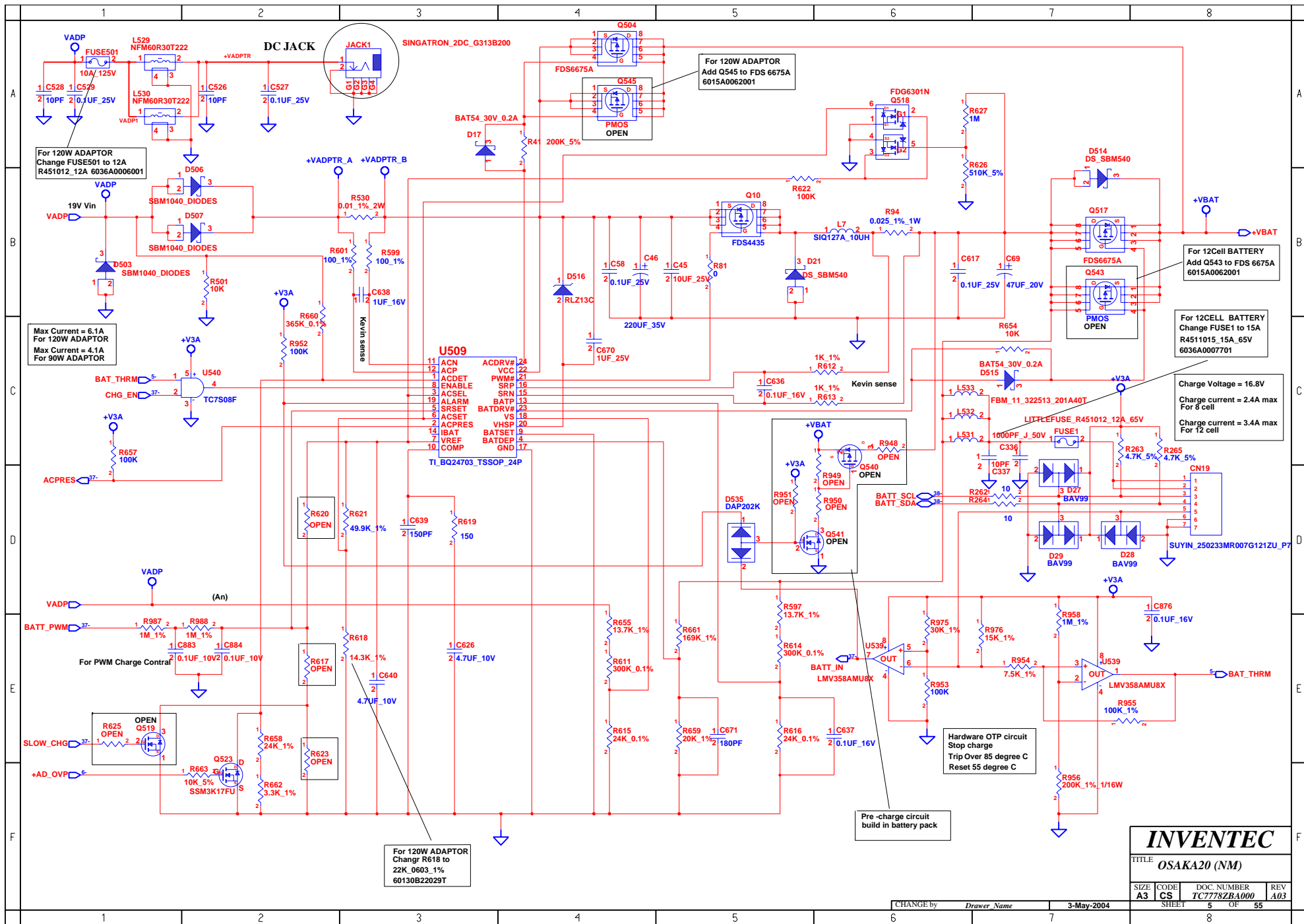
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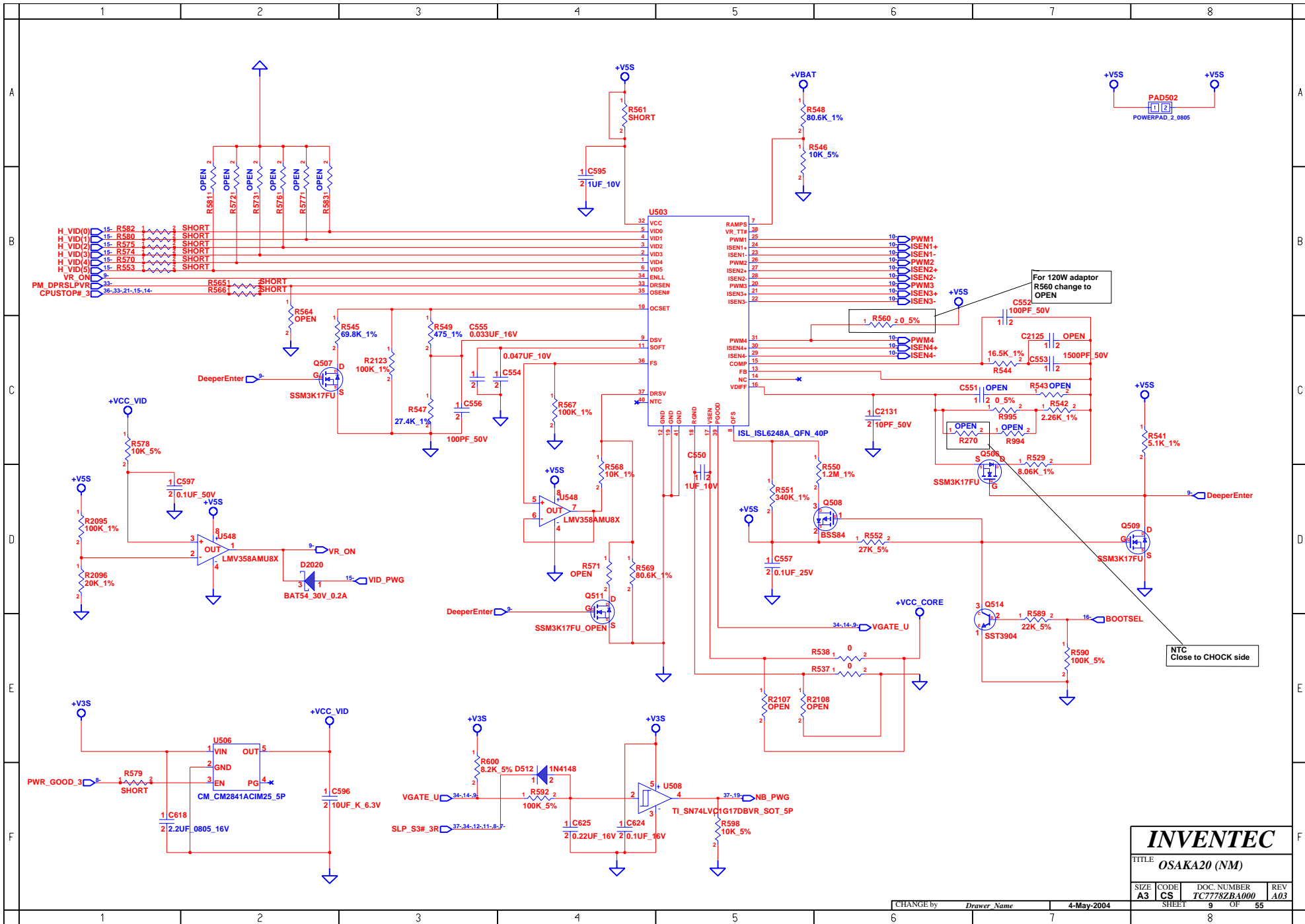
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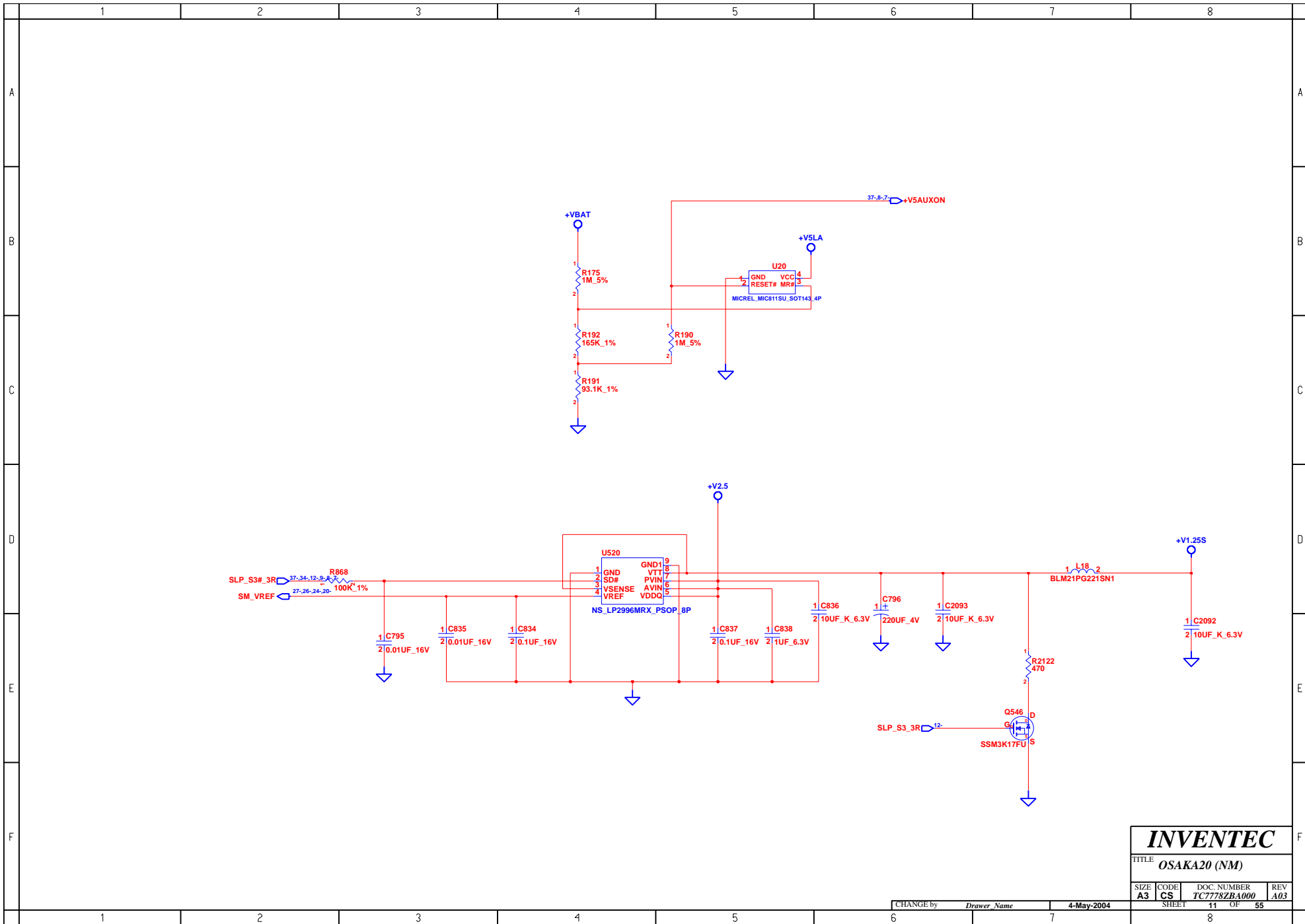
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SIZE A3	CODE CS	DOC. NUMBER TC778ZBA000	REV A03
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INVENTEC			
TITLE OSAKA20 (NM)			
SIZE A3	CODE CS	DOC. NUMBER TC77782BA000	REV A03
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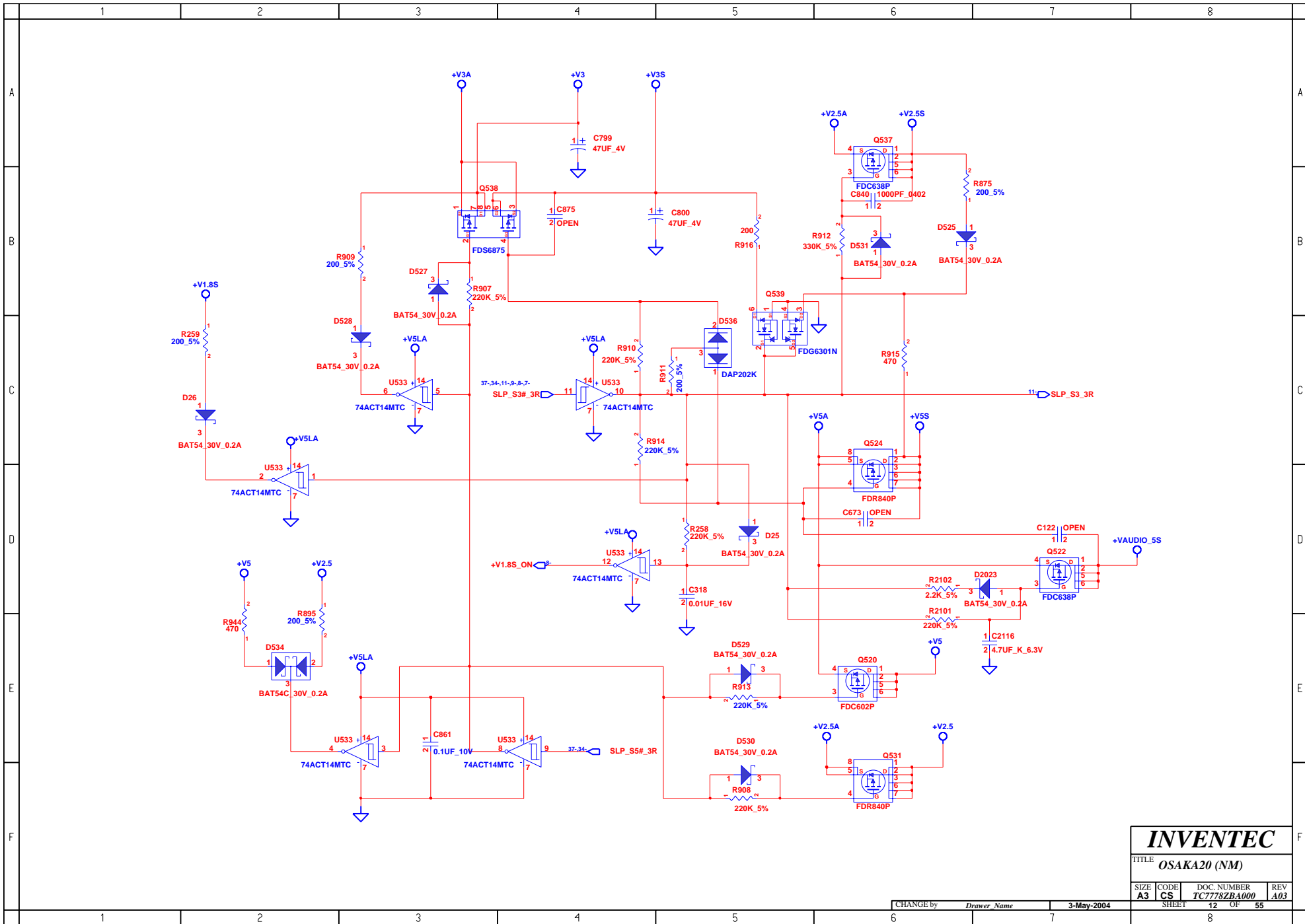


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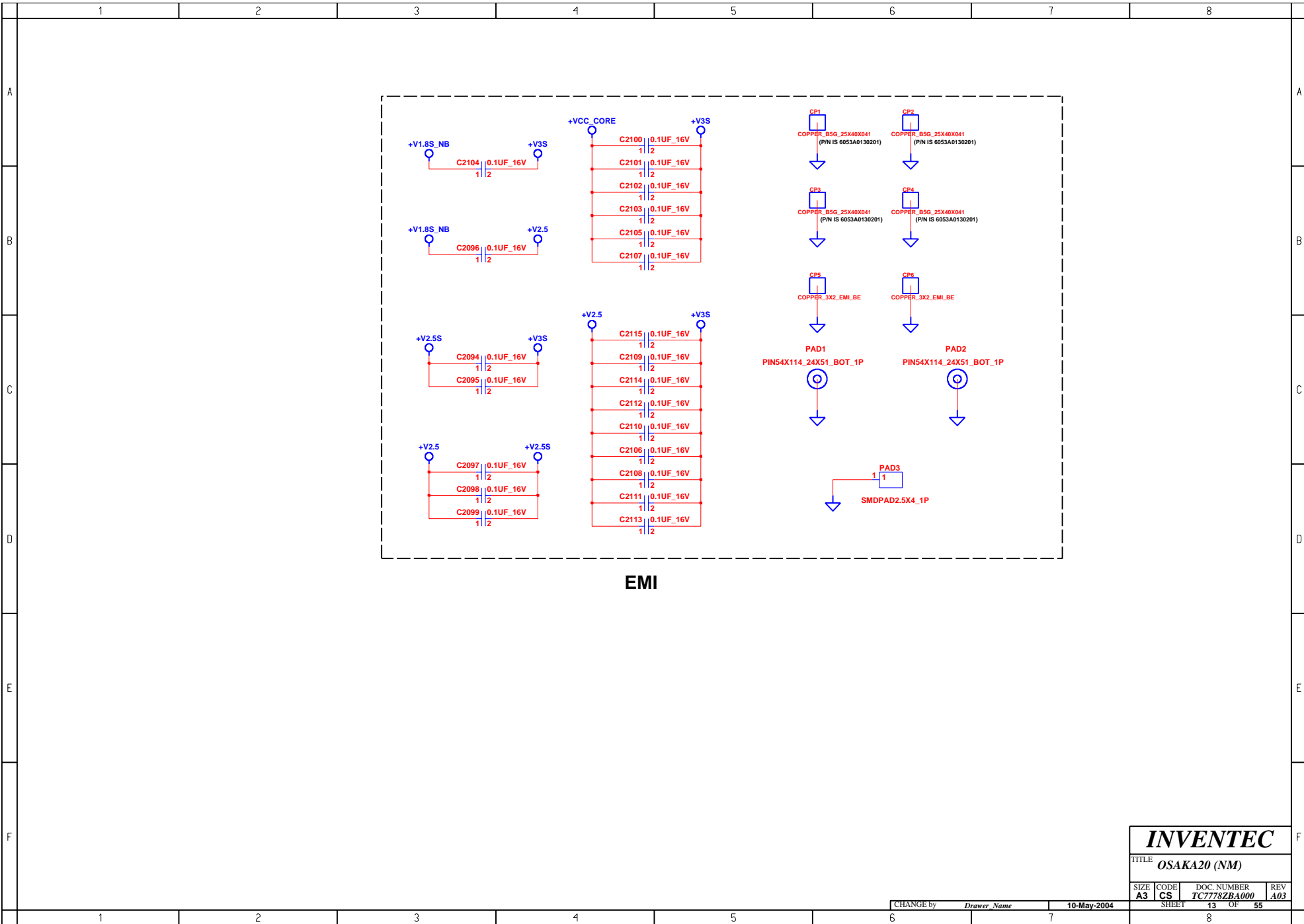
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TITLE OSAKA20 (NM)			
SIZE A3	CODE CS	DOC. NUMBER TC778ZBA000	REV A03
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EMI

INVENTEC

TITLE OSAKA20 (NM)

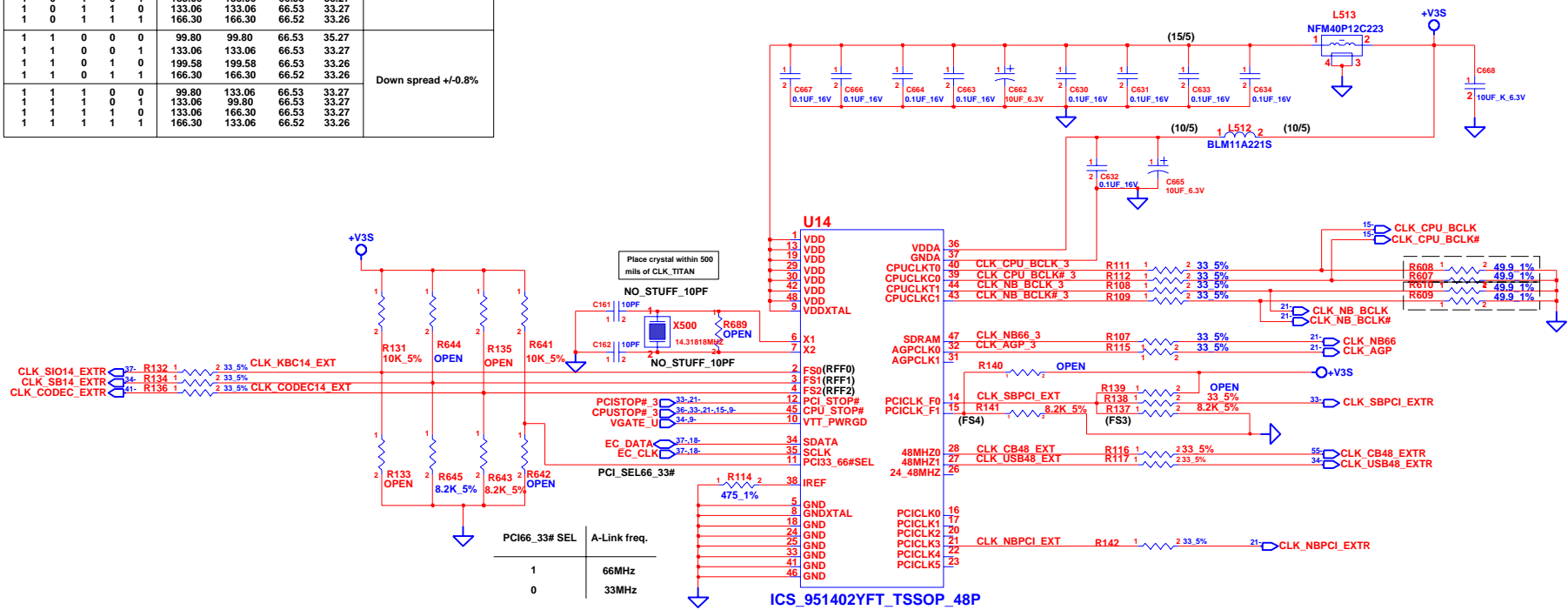
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CHANGE by *Drawer Name* 10-May-2004

SHEET 13 OF 55

EXT CLK FREQUENCY SELECT TABLE

FS4	FS3	FS2	FS1	FS0	CPU MHz	MEM MHz	66MHz	PCI MHz	With Spread Enabled...
0	0	0	0	0	100.01	100.01	66.67	33.34	Spread OFF OR Center spread +/-0.3%
0	0	0	0	1	133.33	133.33	66.67	33.33	
0	0	0	1	0	200.01	200.01	66.67	33.34	
0	0	0	1	1	166.64	166.64	66.66	33.33	
0	0	1	0	0	100.01	133.34	66.67	33.34	
0	0	1	0	1	133.34	100.01	66.67	33.34	
0	0	1	1	0	133.16	166.45	66.58	33.29	
0	0	1	1	1	166.45	133.16	66.58	33.29	
0	1	0	0	0	105.00	105.00	70.00	35.00	
0	1	0	0	1	140.00	140.00	70.00	35.00	
0	1	0	1	0	66.67	66.67	66.67	33.34	
0	1	0	1	1	175.00	175.00	70.00	35.00	
0	1	1	0	0	109.99	109.99	73.33	36.66	
0	1	1	0	1	146.66	146.66	73.33	36.67	
0	1	1	1	0	201.00	201.00	70.00	35.00	
0	1	1	1	1	183.27	183.27	73.31	36.65	
1	0	0	0	0	99.80	99.80	66.53	33.27	
1	0	0	0	1	133.06	133.06	66.53	33.27	
1	0	0	1	0	199.58	199.58	66.53	33.26	
1	0	0	1	1	166.30	166.30	66.52	33.26	
1	0	1	0	0	99.80	133.06	66.53	33.27	
1	0	1	0	1	133.06	133.06	66.53	33.27	
1	0	1	1	0	133.06	133.06	66.53	33.27	
1	0	1	1	1	166.30	166.30	66.52	33.26	
1	1	0	0	0	99.80	99.80	66.53	35.27	
1	1	0	0	1	133.06	133.06	66.53	33.27	
1	1	0	1	0	199.58	199.58	66.53	33.26	
1	1	0	1	1	166.30	166.30	66.52	33.26	
1	1	1	0	0	99.80	133.06	66.53	33.27	
1	1	1	0	1	133.06	99.80	66.53	33.27	
1	1	1	1	0	133.06	166.30	66.53	33.27	
1	1	1	1	1	166.30	133.06	66.52	33.26	



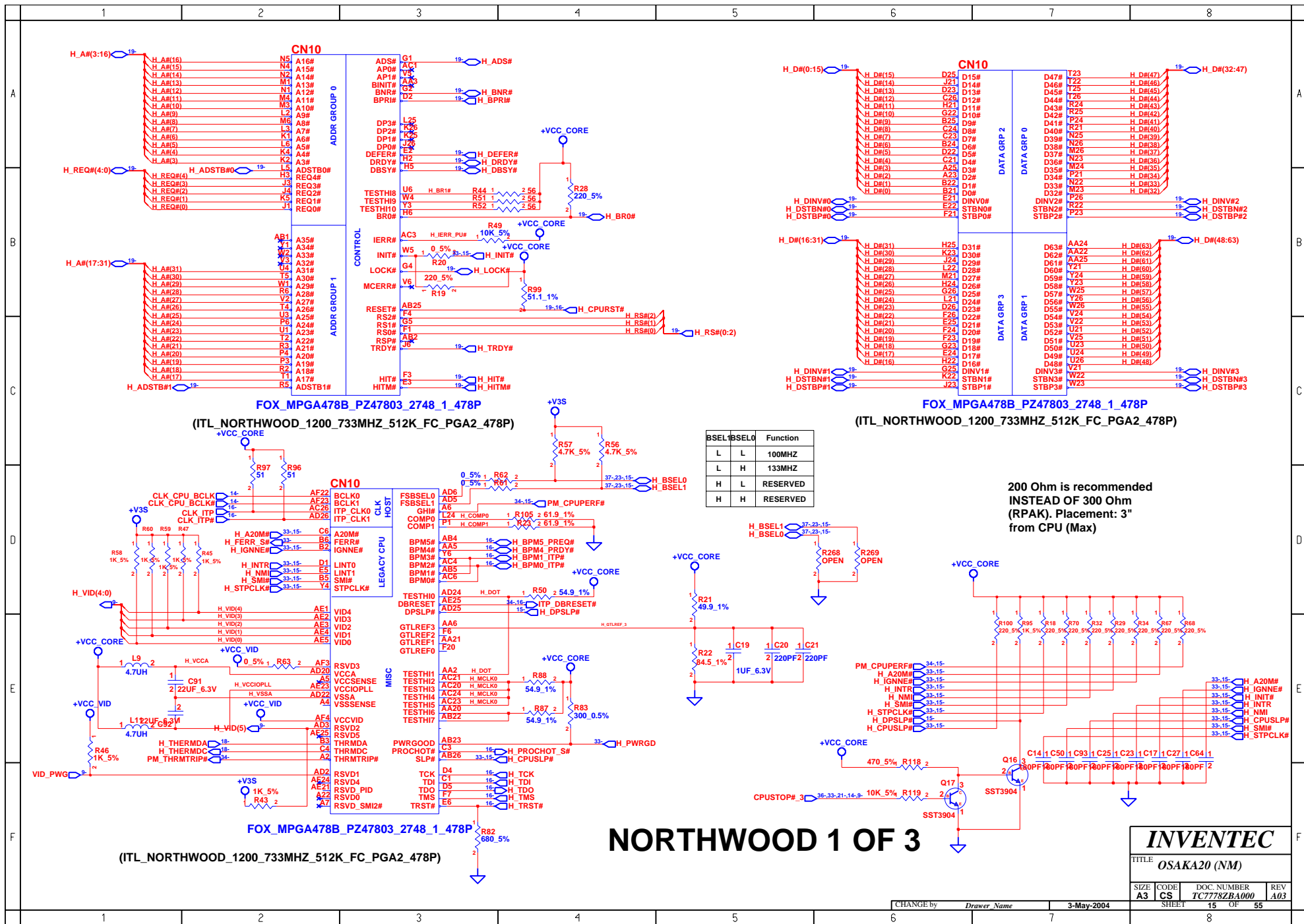
PCI66_33# SEL	A-Link freq.
1	66MHz
0	33MHz

INVENTEC

TITLE
OSAKA20 (NM)

SIZE A3	CODE CS	DOC. NUMBER TC77782BA000	REV A03
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CHANGE by *Drawer Name* 3-May-2004 SHEET 14 OF 55

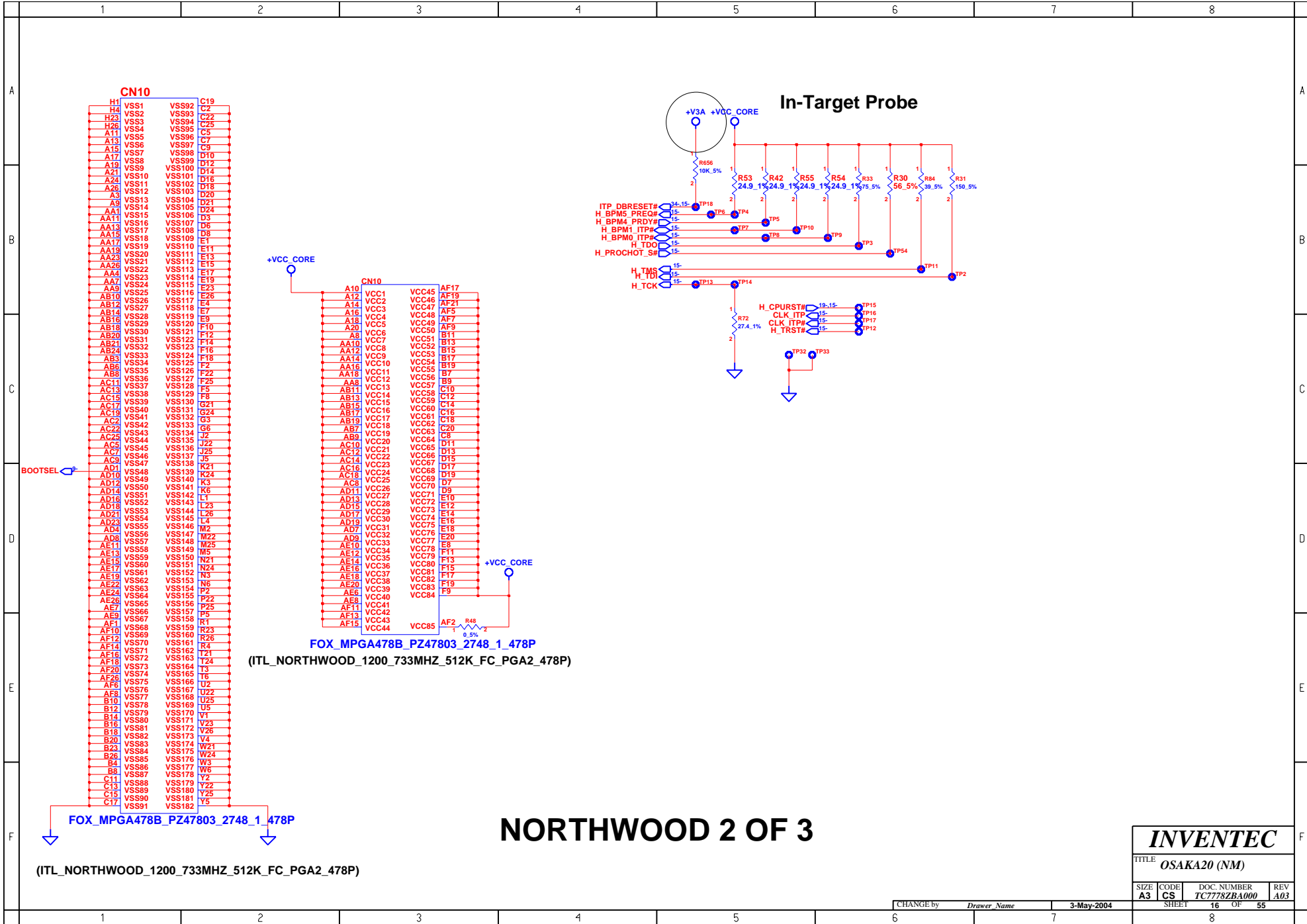


BSEL	BSEL0	Function
L	L	100MHZ
L	H	133MHZ
H	L	RESERVED
H	H	RESERVED

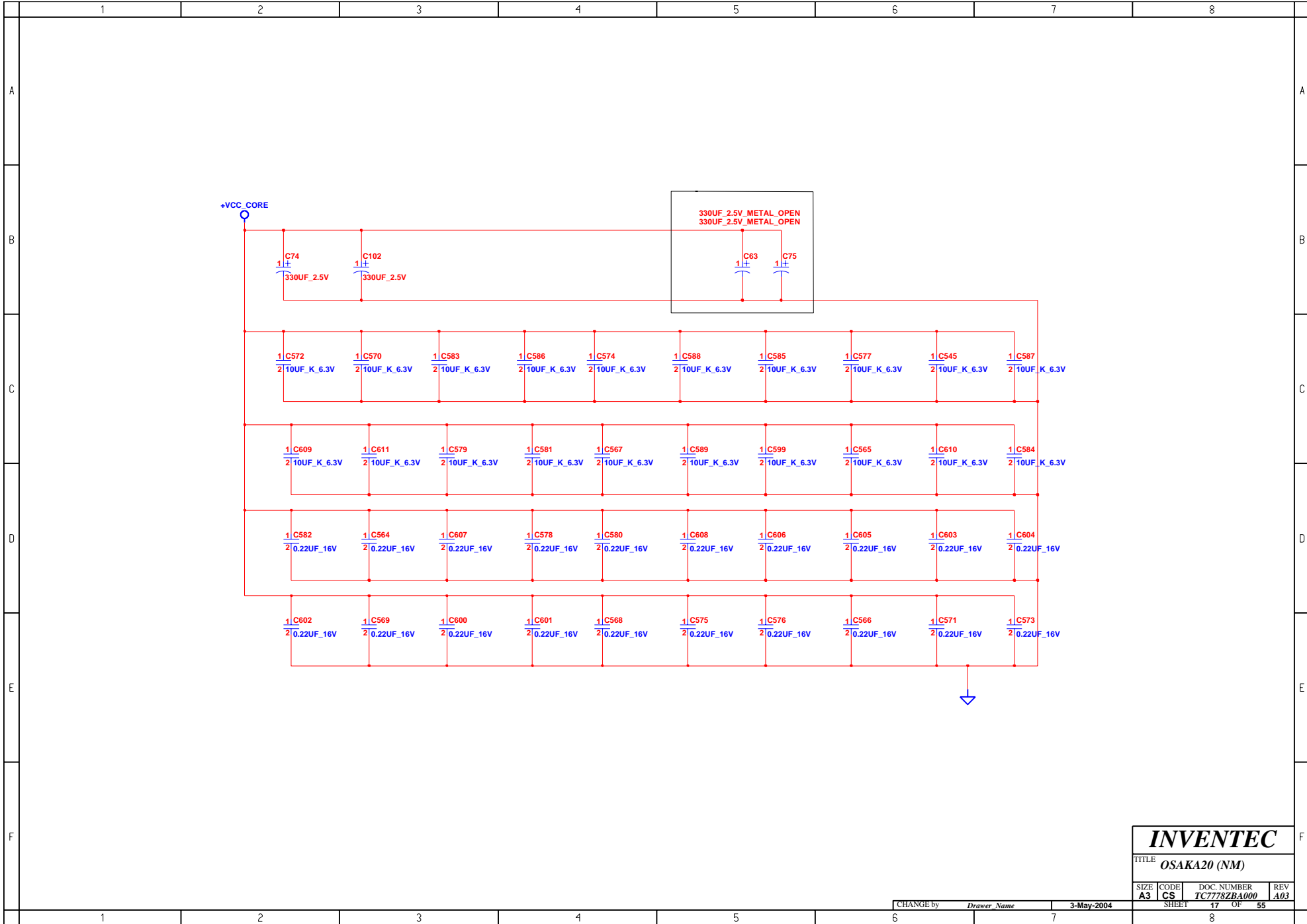
200 Ohm is recommended
INSTEAD OF 300 Ohm
(RPAK). Placement: 3"
from CPU (Max)

NORTHWOOD 1 OF 3

INVENTEC			
TITLE OSAKA20 (NM)			
SIZE A3	CODE CS	DOC. NUMBER TC7778ZBA000	REV A03
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TITLE OSAKA20 (NM)			
SIZE A3	CODE CS	DOC. NUMBER TC7778ZBA000	REV A03
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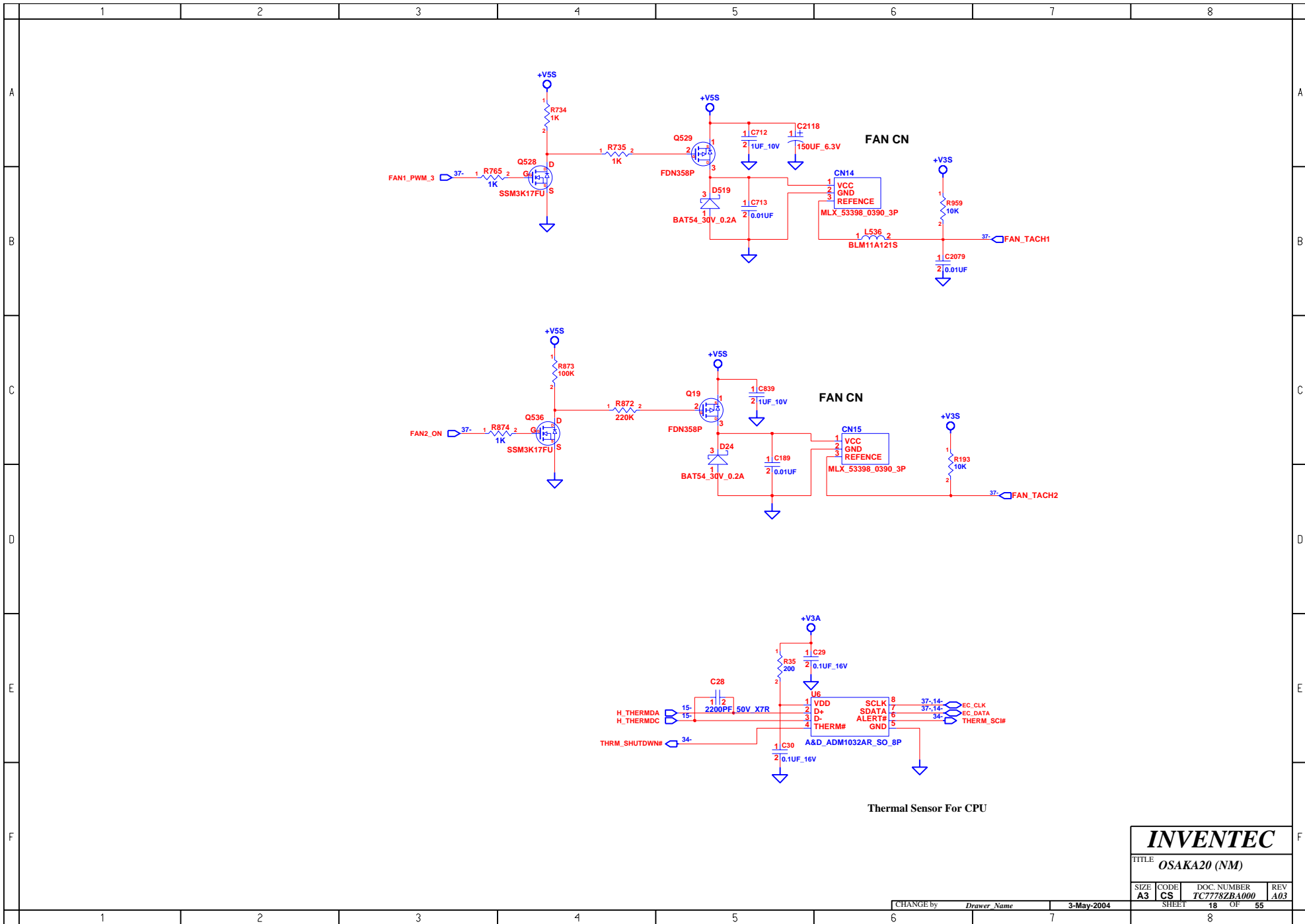
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TITLE OSAKA20 (NM)

SIZE A3	CODE CS	DOC. NUMBER TC778ZBA000	REV A03
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CHANGE by *Drawer Name* 3-May-2004

SHEET 17 OF 55



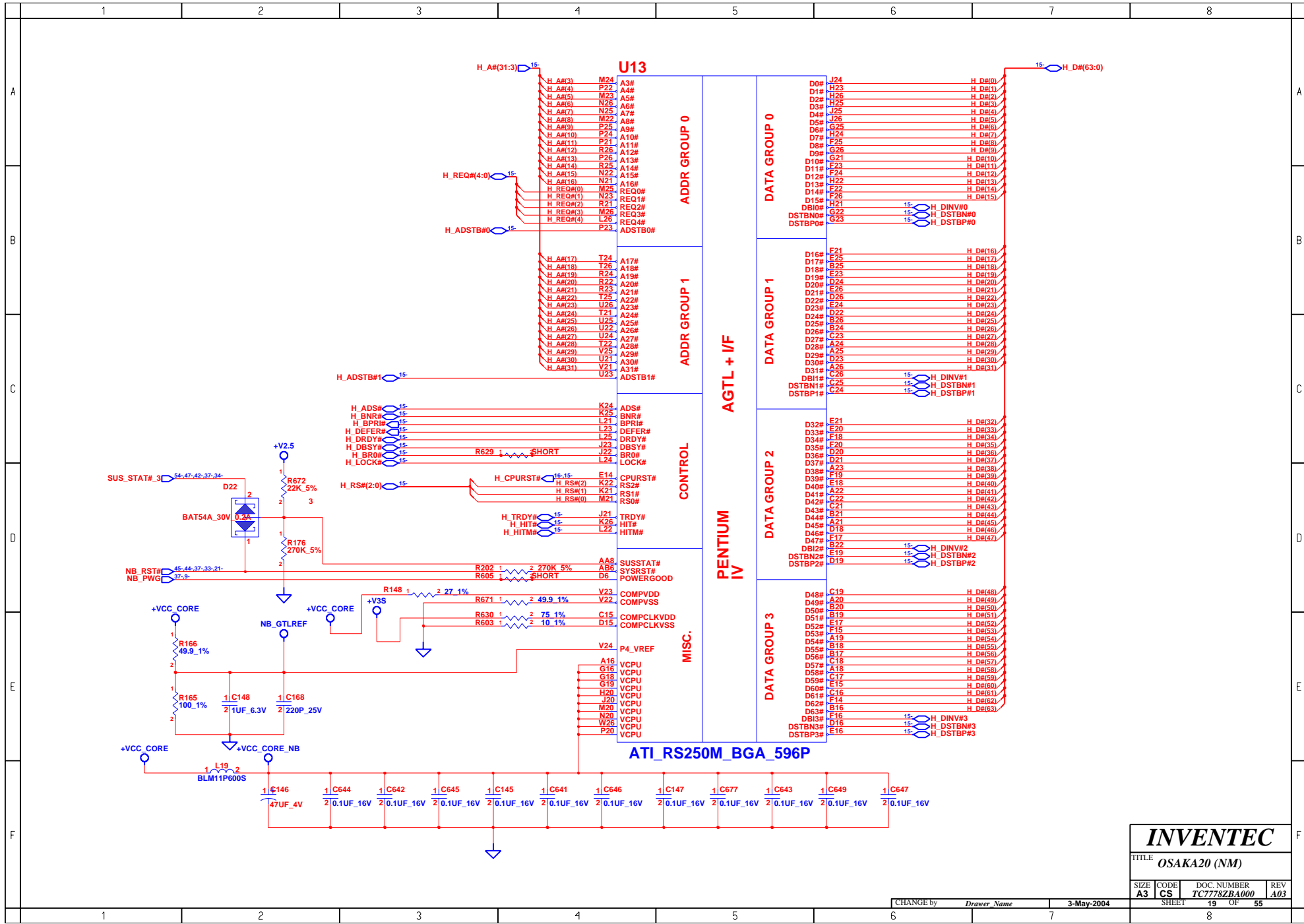
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TITLE OSAKA20 (NM)

SIZE	CODE	DOC. NUMBER	REV
A3	CS	TC7778ZBA000	A03

CHANGE by *Drawer Name* 3-May-2004

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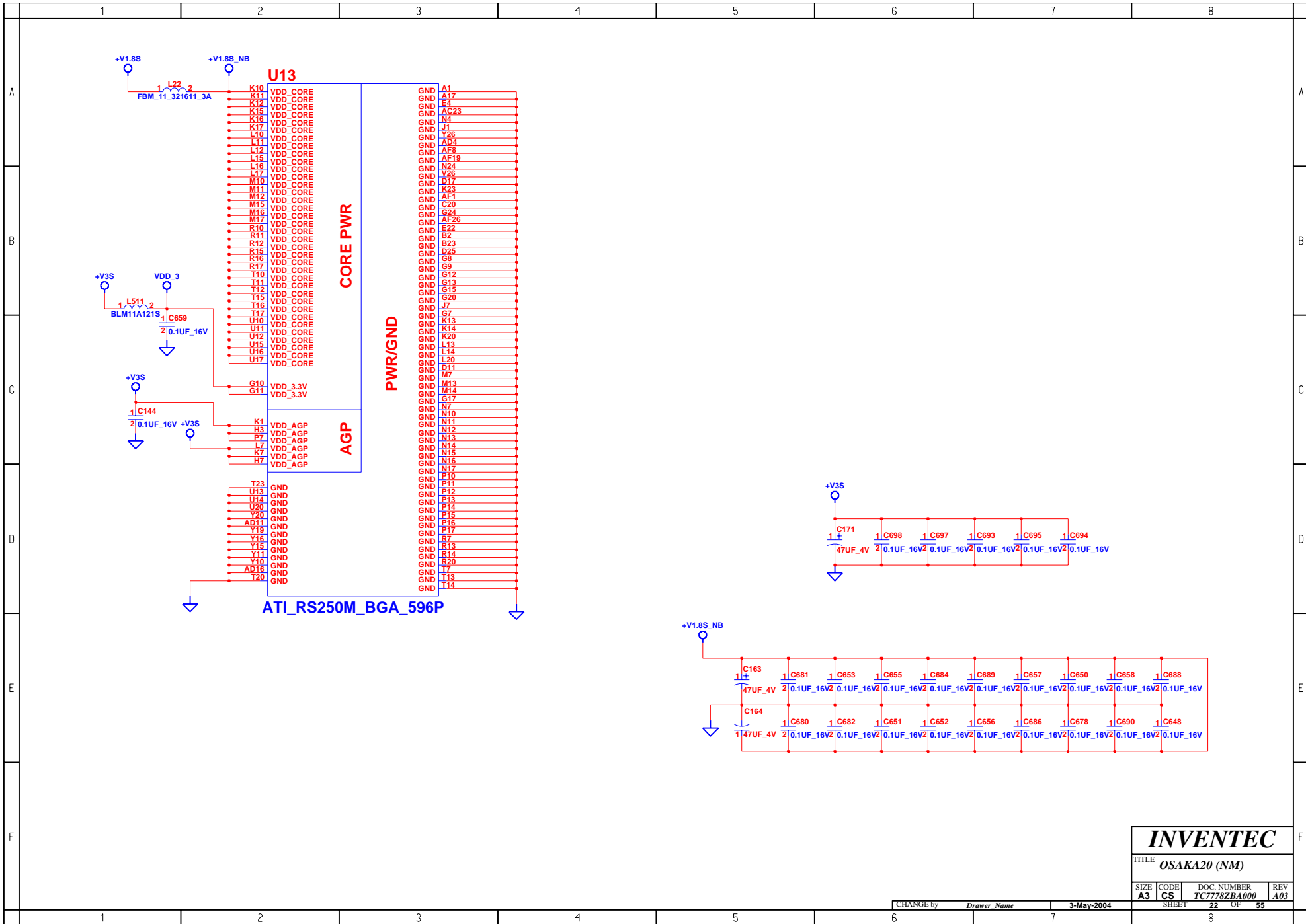
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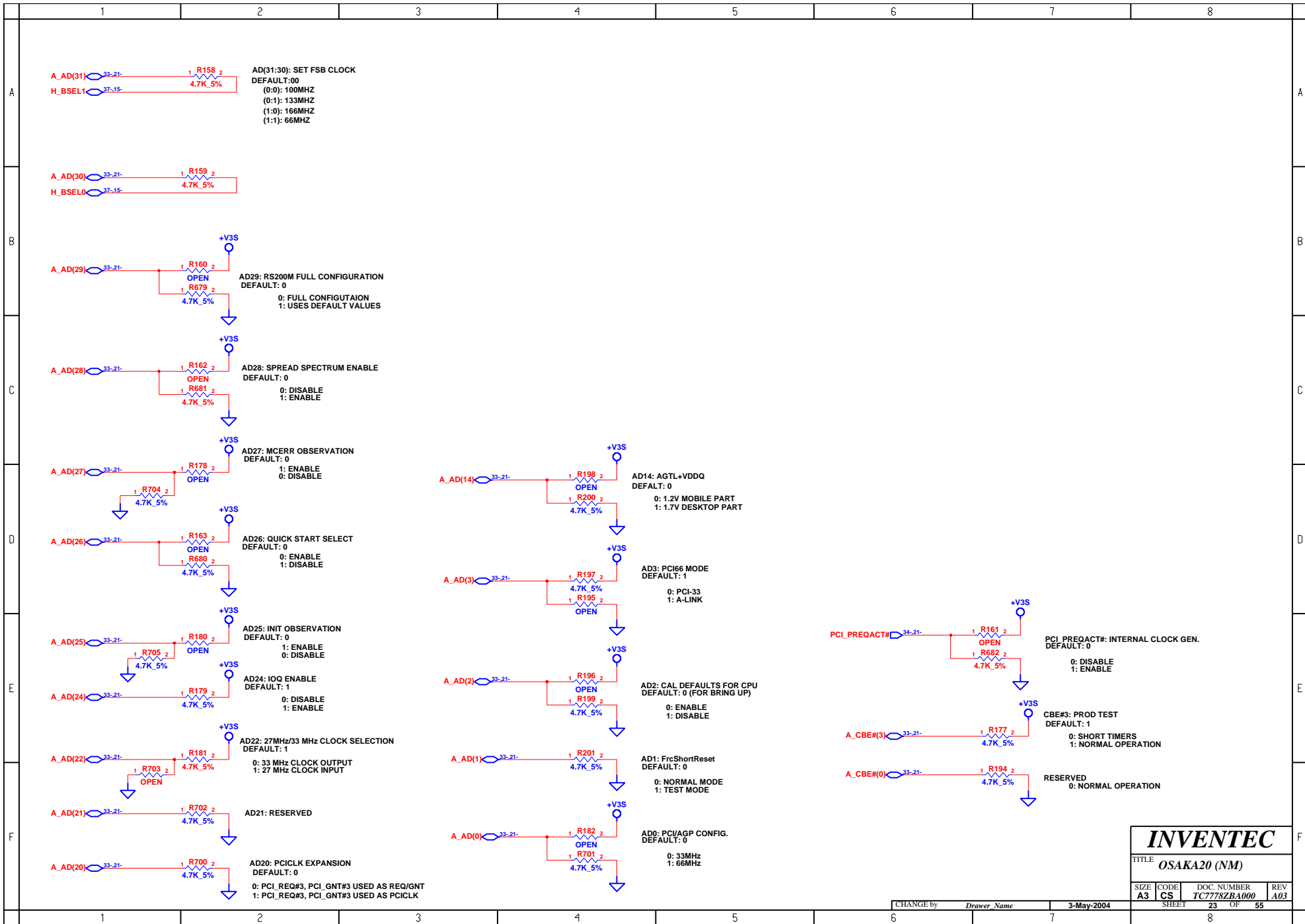
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A3	CS	TC778ZBA000	A03

CHANGE by: *Drawer Name* 3-May-2004

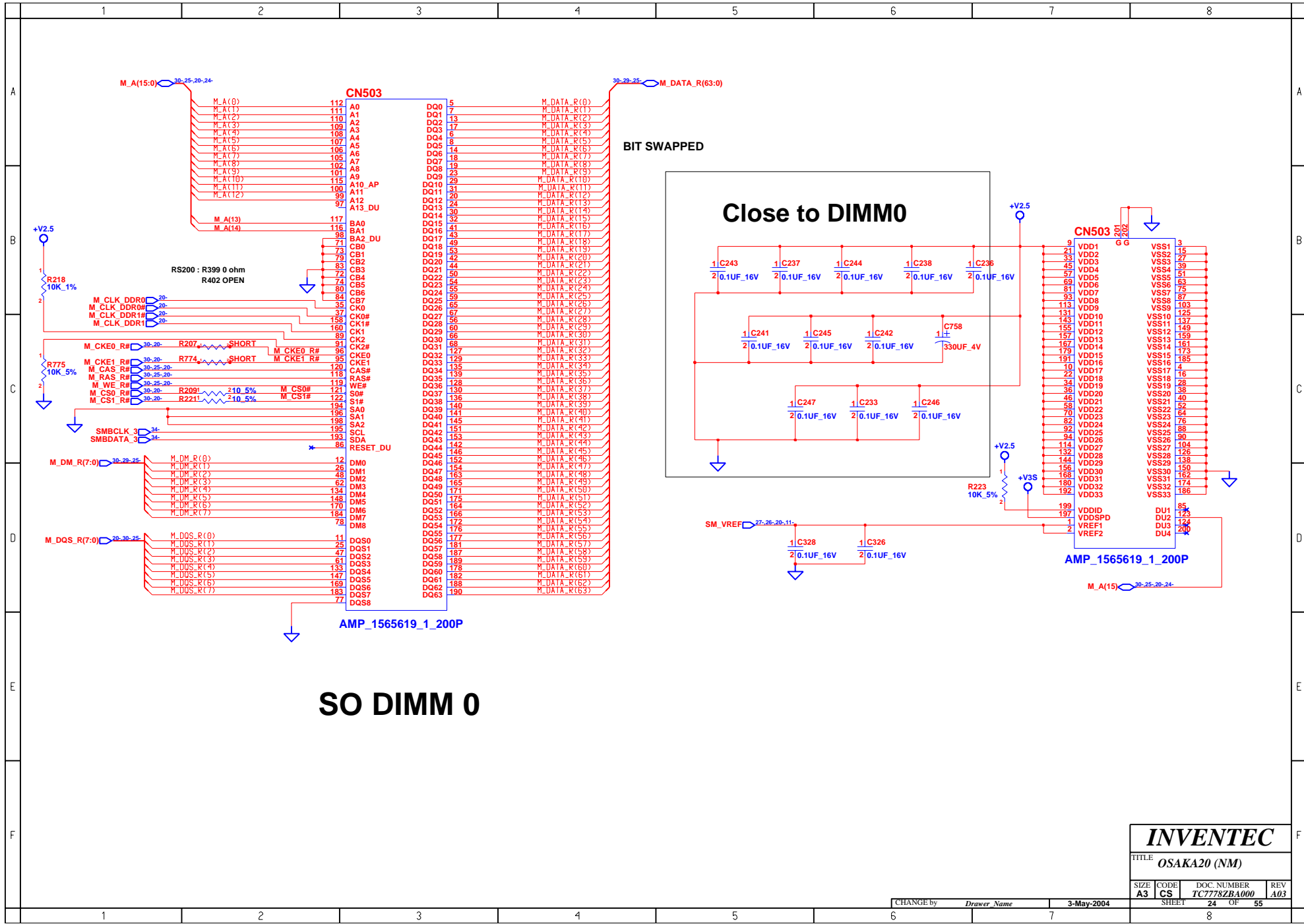
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TITLE OSAKA20 (NM)			
SIZE A3	CODE CS	DOC. NUMBER TC778ZBA000	REV A03
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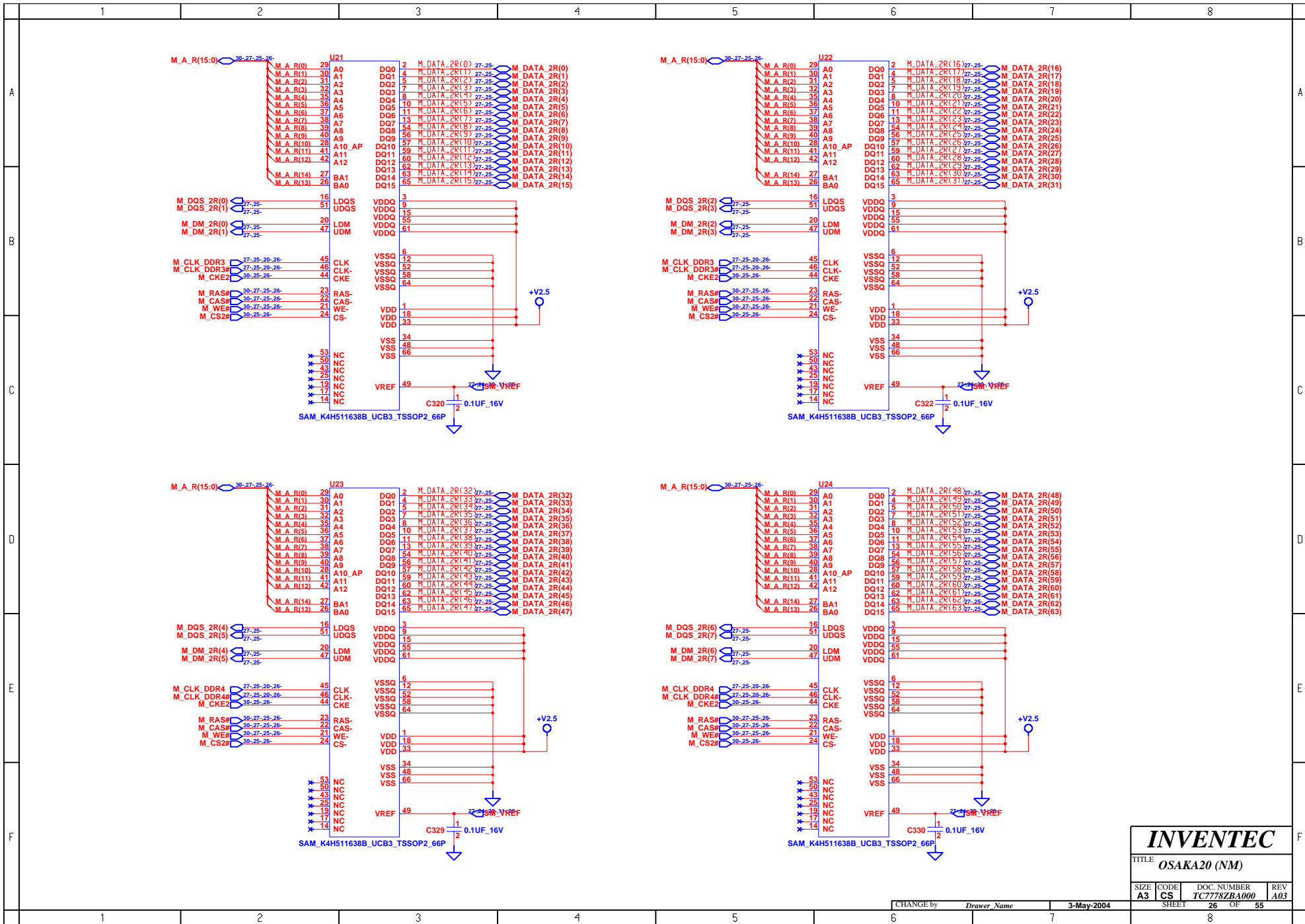
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BIT SWAPPED

Close to DIMM0

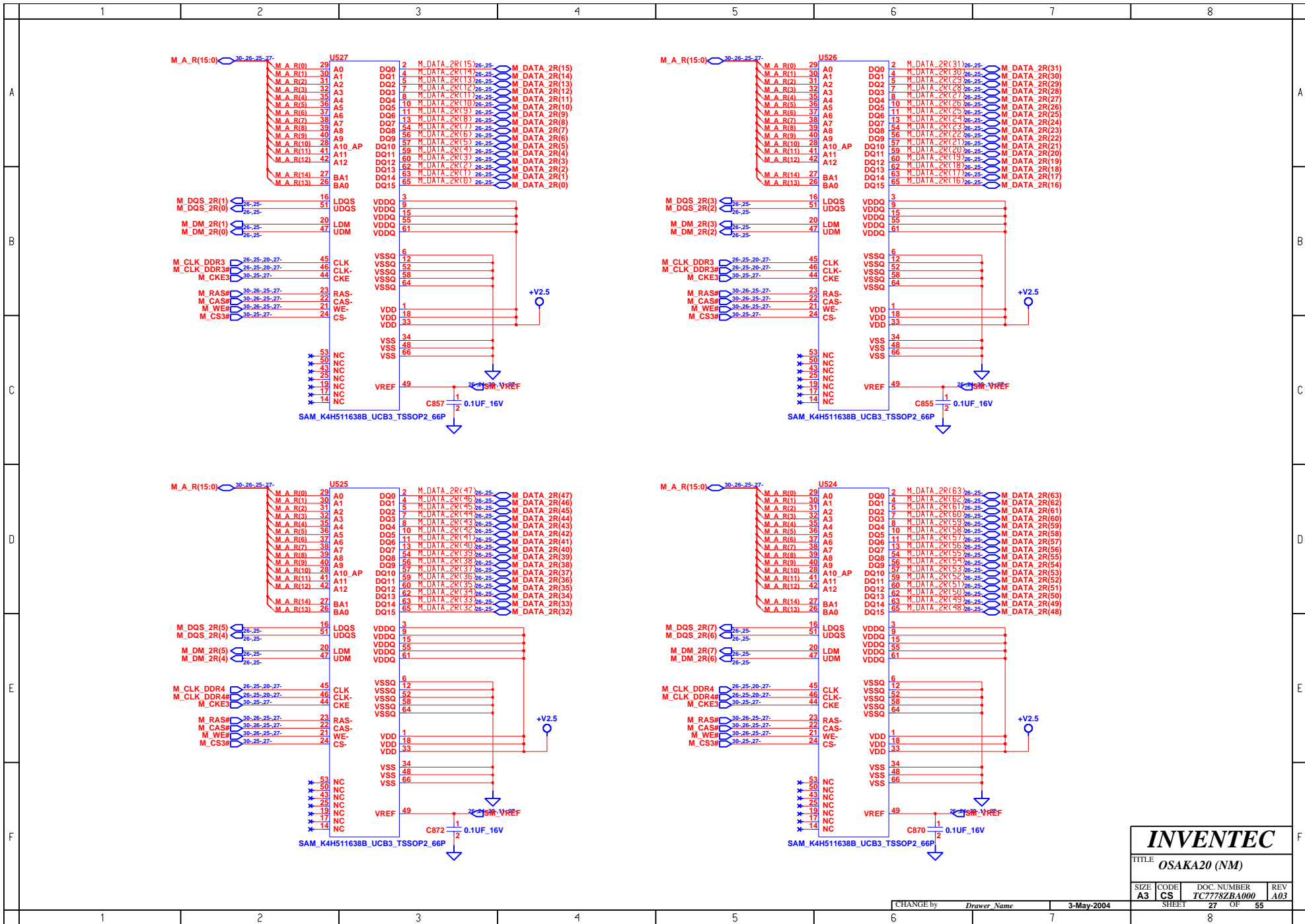
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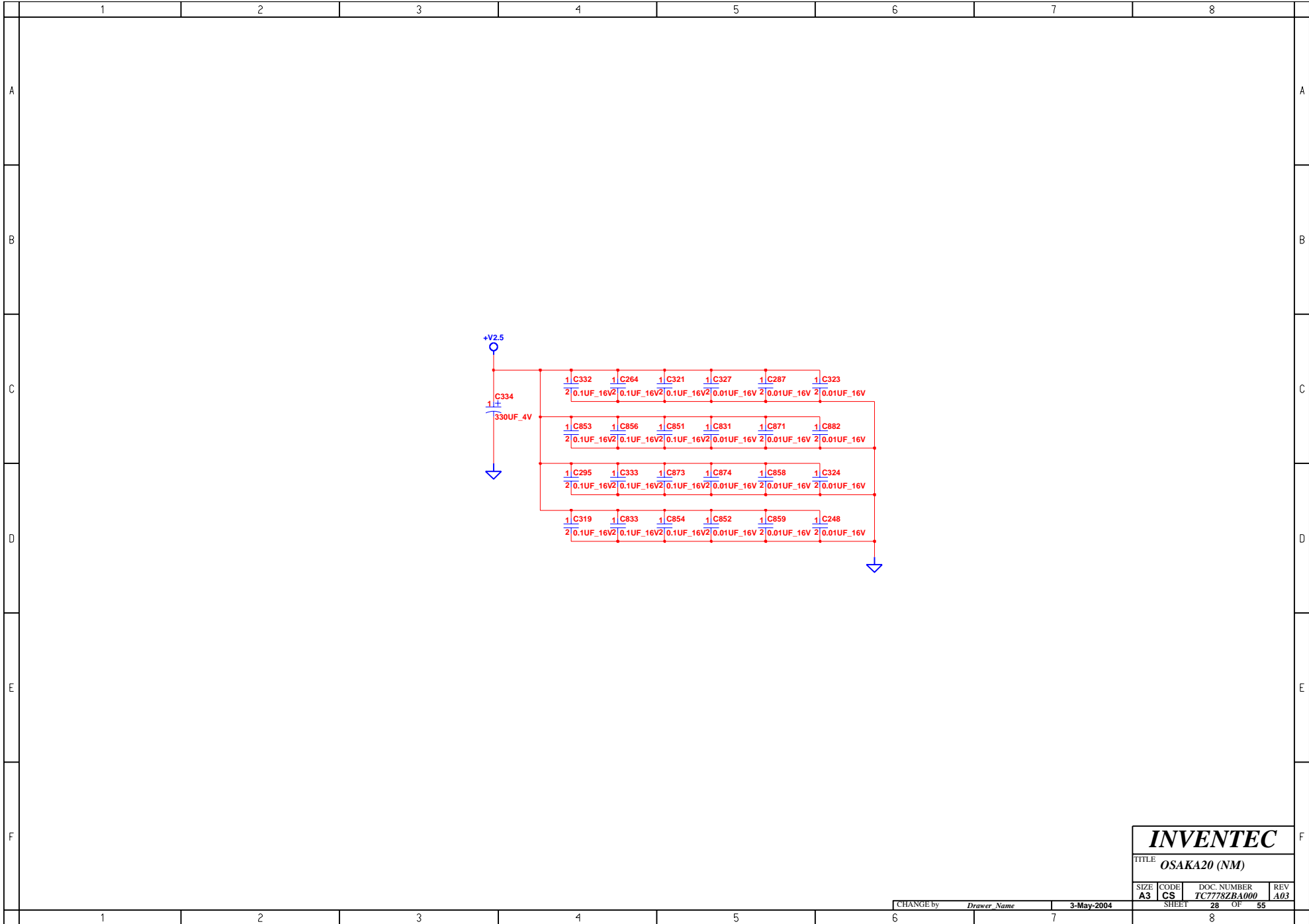
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TITLE
OSAKA20 (NM)

SIZE A3	CODE CS	DOC. NUMBER TC7782BA00	REV A03
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INVENTEC			
TITLE OSAKA20 (NM)			
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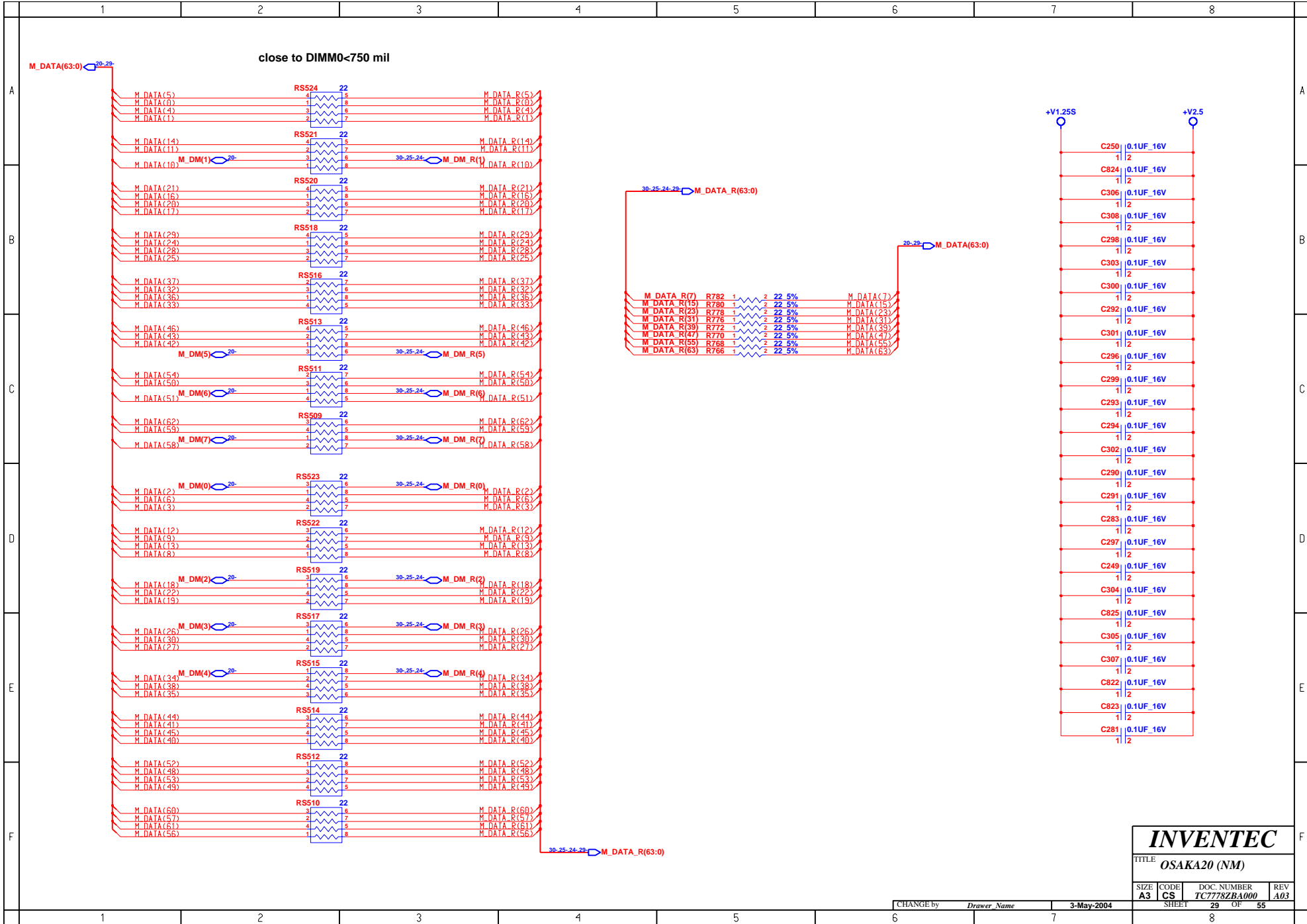
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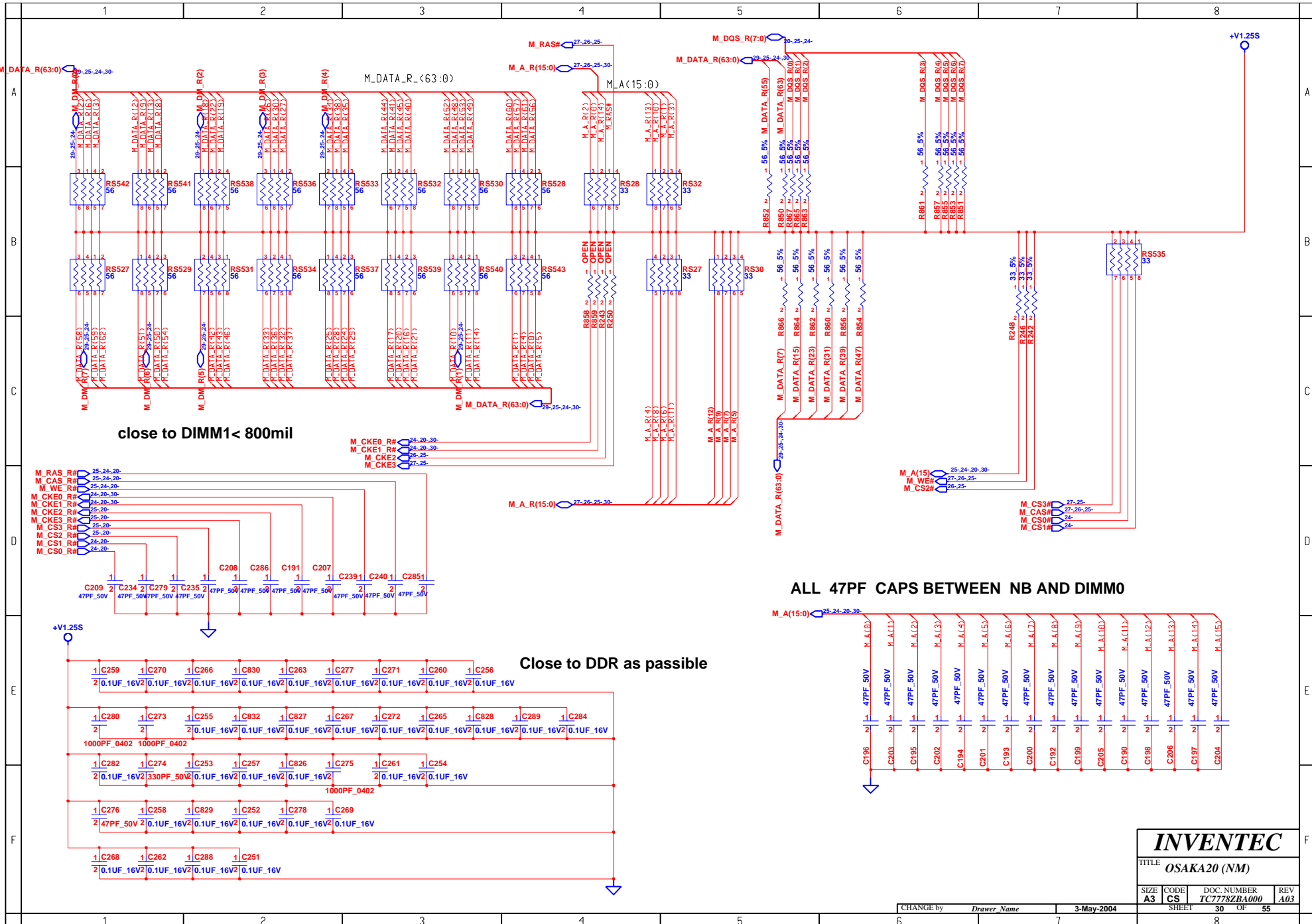
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CHANGE by *Drawer Name* 3-May-2004

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INVENTEC			
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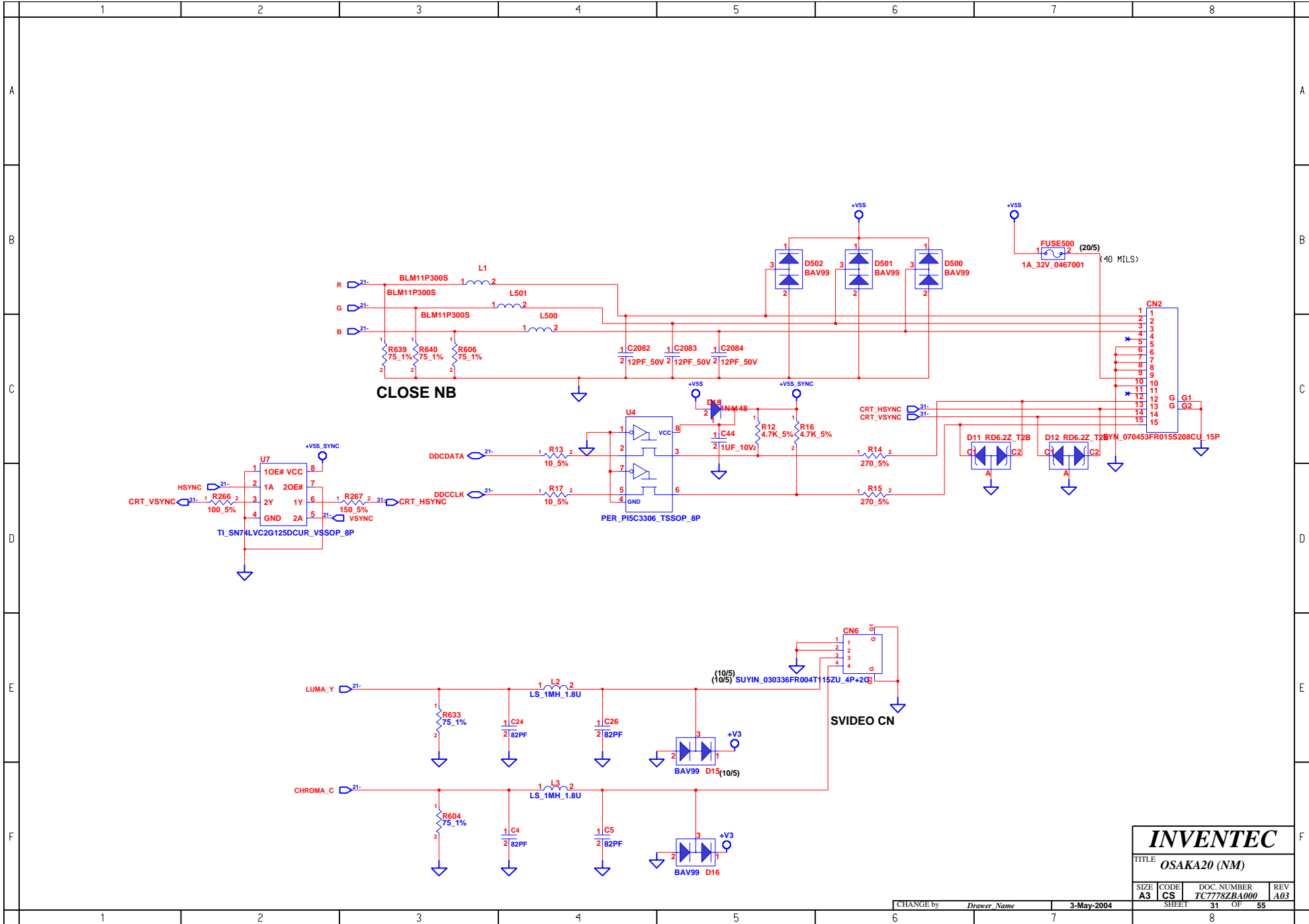


close to DIMM1 < 800mil

ALL 47PF CAPS BETWEEN NB AND DIMM0

Close to DDR as possible

INVENTEC			
TITLE OSAKA20 (NM)			
SIZE A3	CODE CS	DOC. NUMBER 1C7778ZBA000	REV A03
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INVENTEC

TITLE OSAKA20 (NM)

SIZE A3	CODE CS	DOC. NUMBER TC7778ZBA000	REV A03
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CHANGE by *Drawer Name* 3-May-2004

SHEET 31 OF 55

A

B

C

D

E

F

A

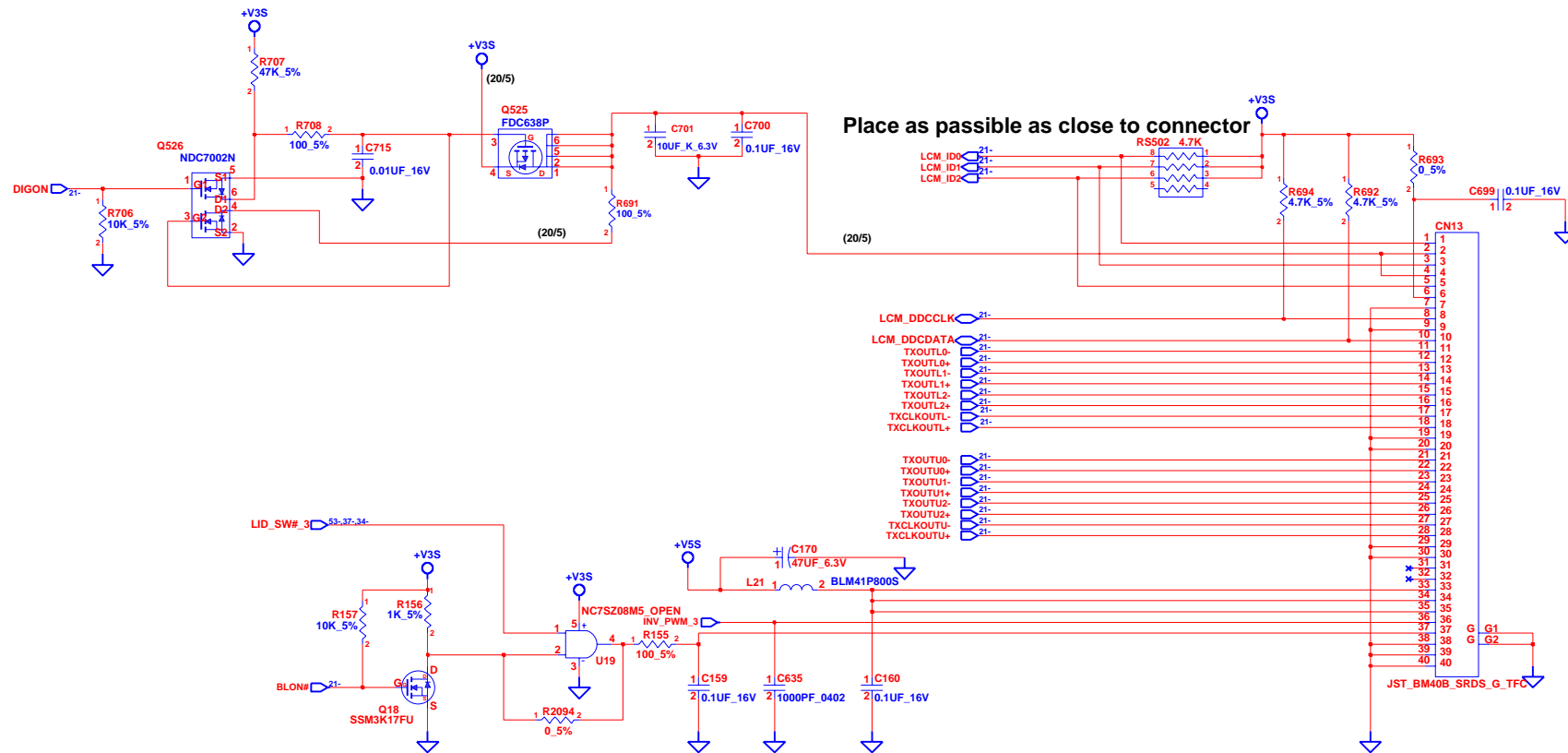
B

C

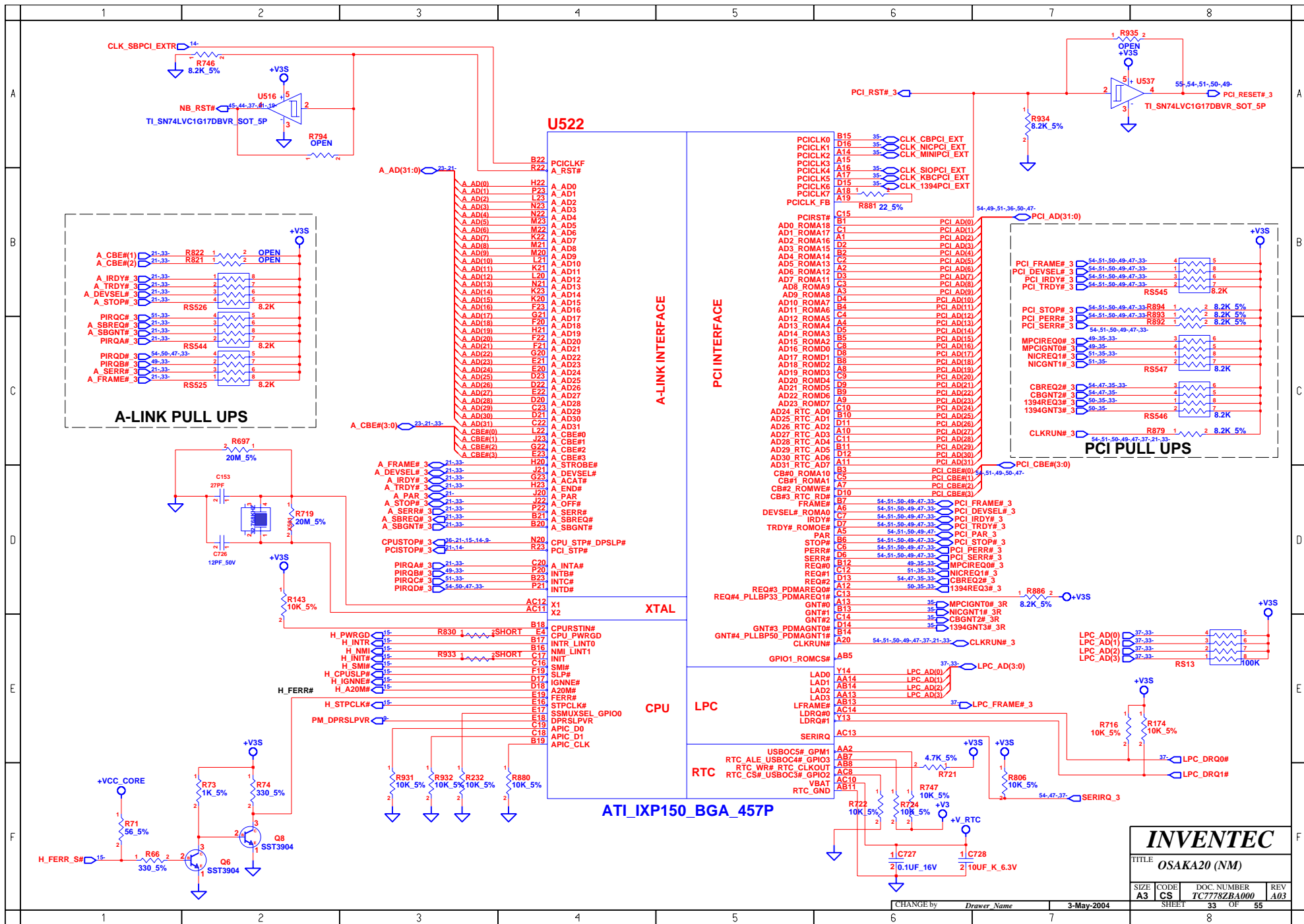
D

E

F



INVENTEC			
TITLE OSAKA20 (NM)			
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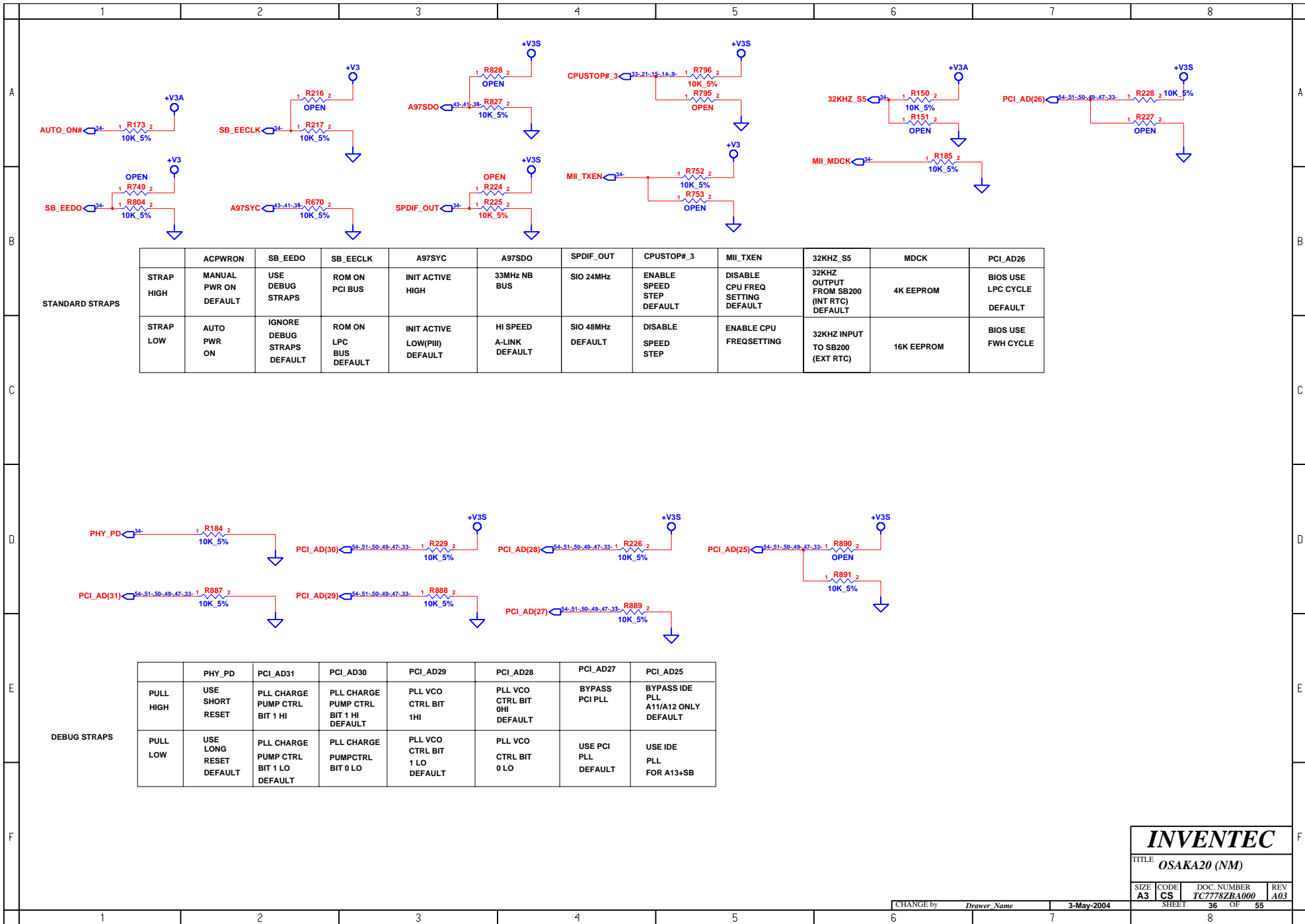


INVENTEC

TITLE: OSAKA20 (NM)

SIZE	CODE	DOC. NUMBER	REV
A3	CS	TC7782BA000	A03

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STANDARD STRAPS

	ACPWRON	SB_EEDO	SB_EECLK	A97SYC	A97SDO	SPDIF_OUT	CPUSTOP#_3	MII_TXEN	32KHZ_S5	MDCK	PCI_AD26
STRAP HIGH	MANUAL PWR ON DEFAULT	USE DEBUG STRAPS	ROM ON PCI BUS	INIT ACTIVE HIGH	33MHz NB BUS	SIO 24MHz	ENABLE SPEED STEP DEFAULT	DISABLE CPU FREQ SETTING DEFAULT	32KHZ OUTPUT FROM SB200 (INT RTC) DEFAULT	4K EEPROM	BIOS USE LPC CYCLE DEFAULT
STRAP LOW	AUTO PWR ON	IGNORE DEBUG STRAPS DEFAULT	ROM ON LPC BUS DEFAULT	INIT ACTIVE LOW(PHII) DEFAULT	HI SPEED A-LINK DEFAULT	SIO 48MHz DEFAULT	DISABLE SPEED STEP	ENABLE CPU FREQSETTING	32KHZ INPUT TO SB200 (EXT RTC)	16K EEPROM	BIOS USE FW CYCLE

DEBUG STRAPS

	PHY_PD	PCI_AD31	PCI_AD30	PCI_AD29	PCI_AD28	PCI_AD27	PCI_AD25
PULL HIGH	USE SHORT RESET	PLL CHARGE PUMP CTRL BIT 1 HI	PLL CHARGE PUMP CTRL BIT 1 HI DEFAULT	PLL VCO CTRL BIT 1HI	PLL VCO CTRL BIT 0HI DEFAULT	BYPASS PCI PLL	BYPASS IDE PLL A11/A12 ONLY DEFAULT
PULL LOW	USE LONG RESET DEFAULT	PLL CHARGE PUMP CTRL BIT 1 LO DEFAULT	PLL CHARGE PUMPCTRL BIT 0 LO	PLL VCO CTRL BIT 1 LO DEFAULT	PLL VCO CTRL BIT 0 LO	USE PCI PLL DEFAULT	USE IDE PLL FOR A13+SB

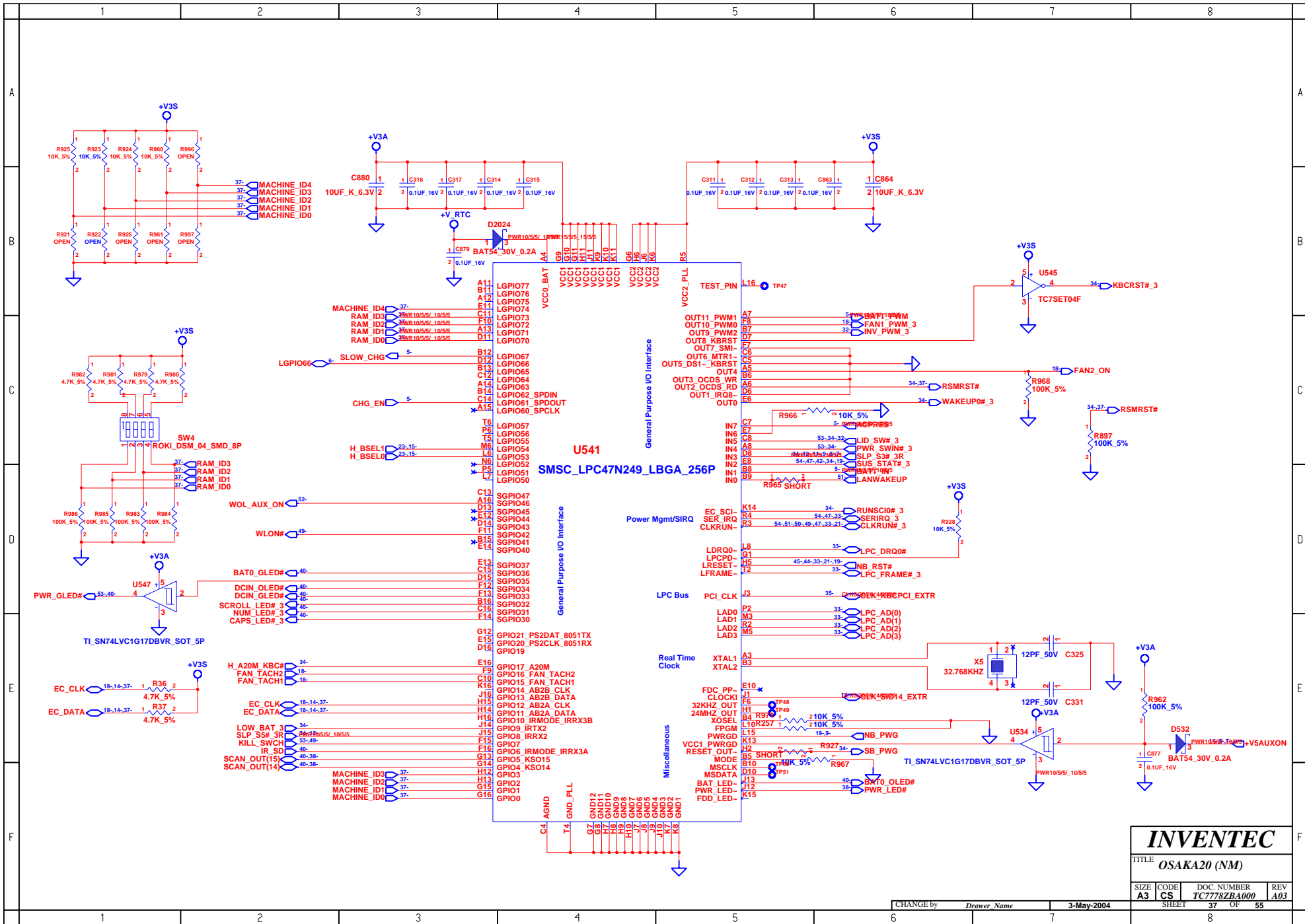
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TITLE OSAKA20 (NM)

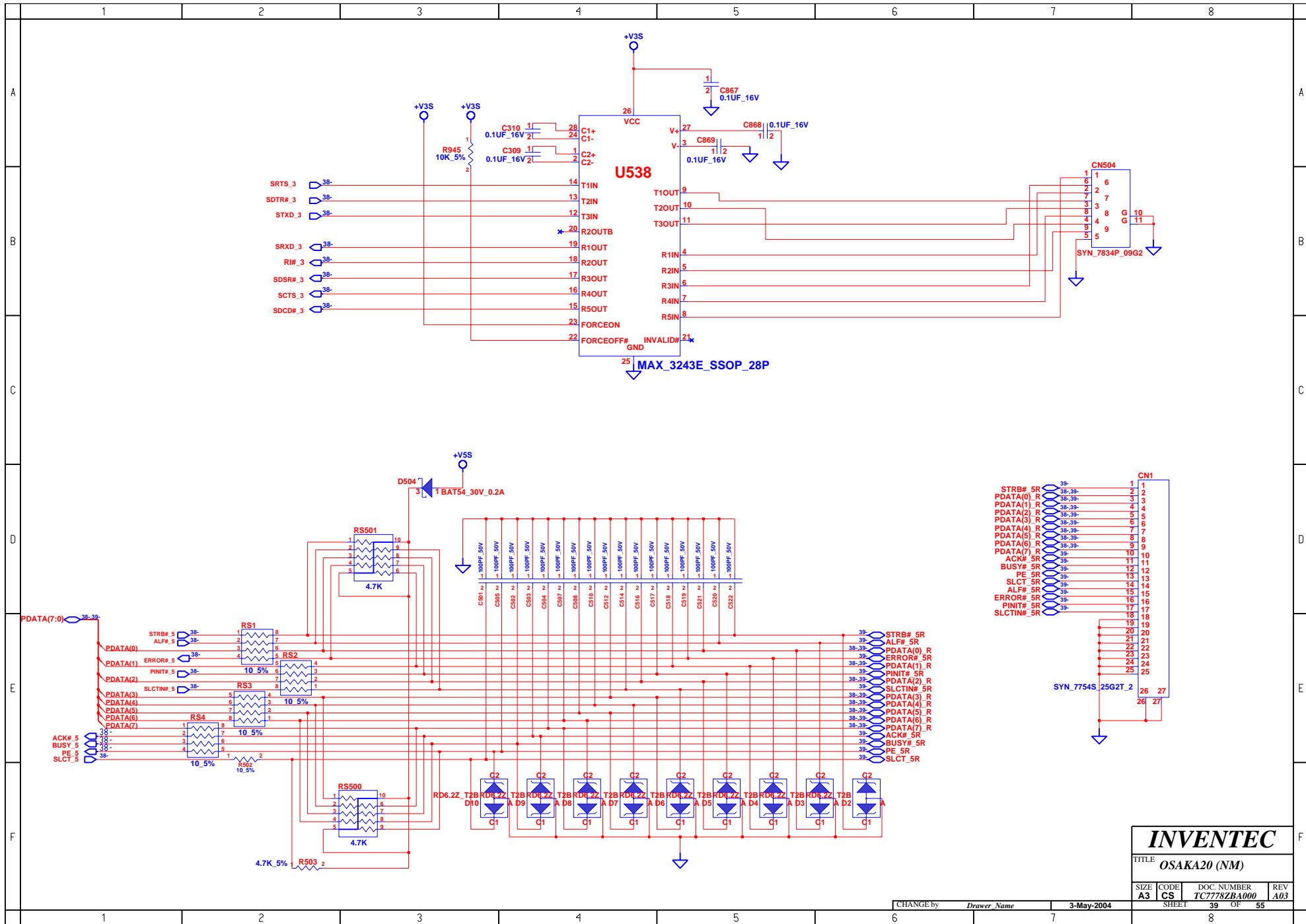
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A3 CS TC7778ZBA000 A03

CHANGE by Drawer Name 3-May-2004

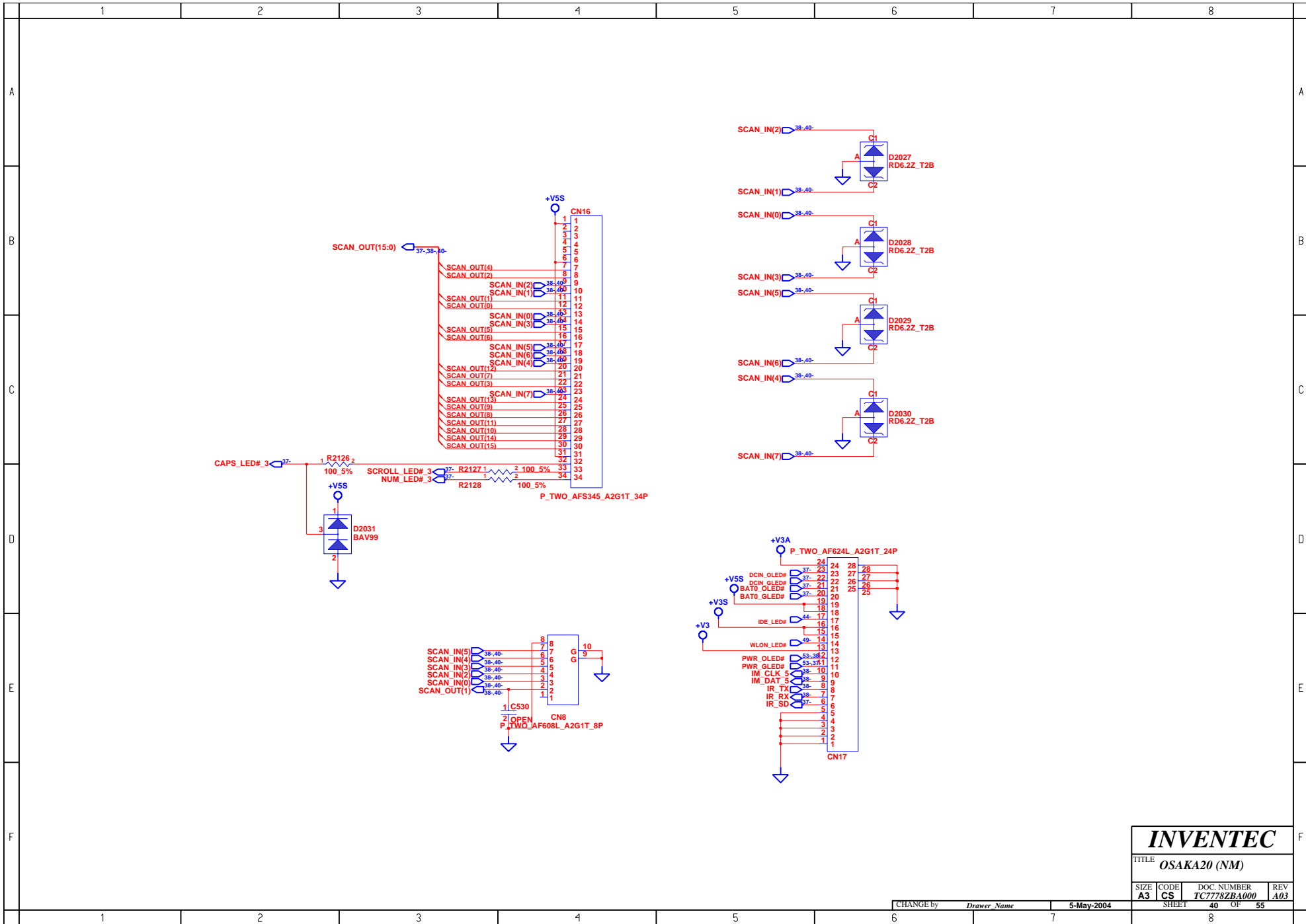
SHEET 36 OF 55



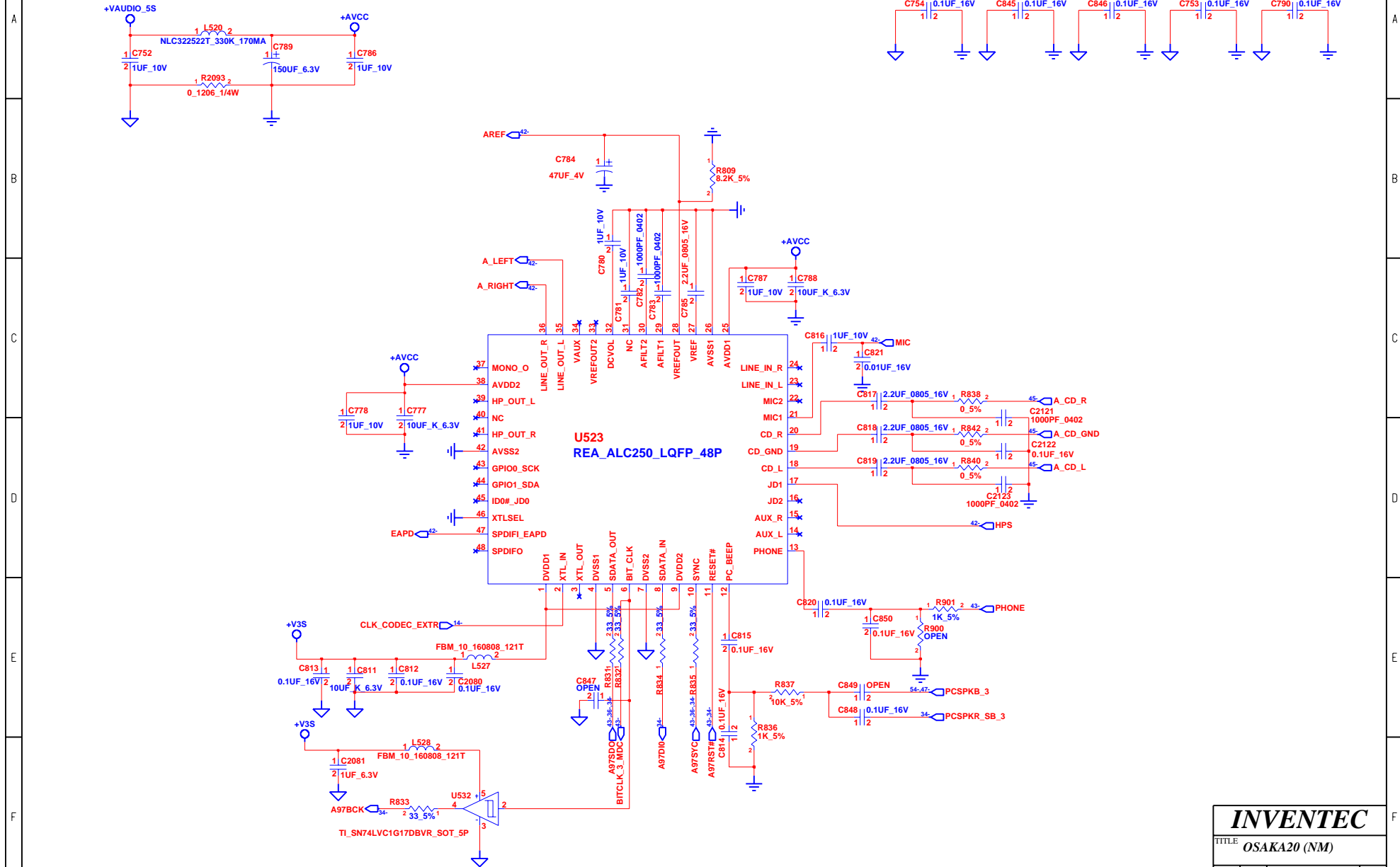
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SIZE A3	CODE CS	DOC. NUMBER TC7782BA000	REV A03
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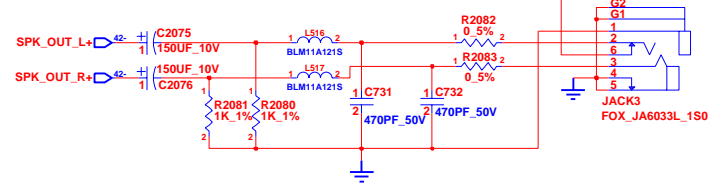
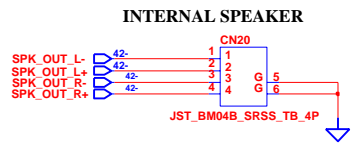
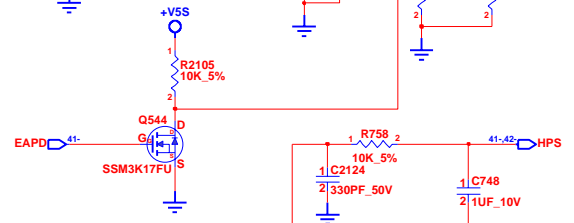
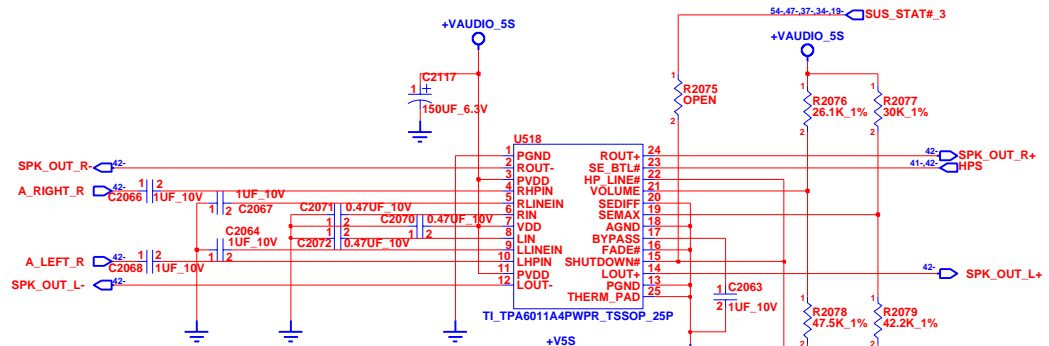
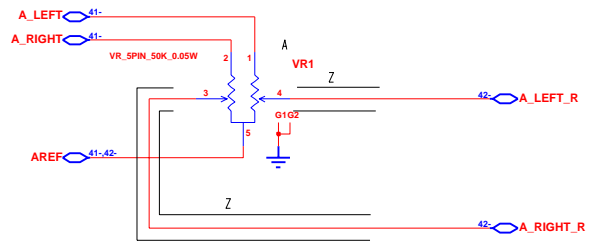
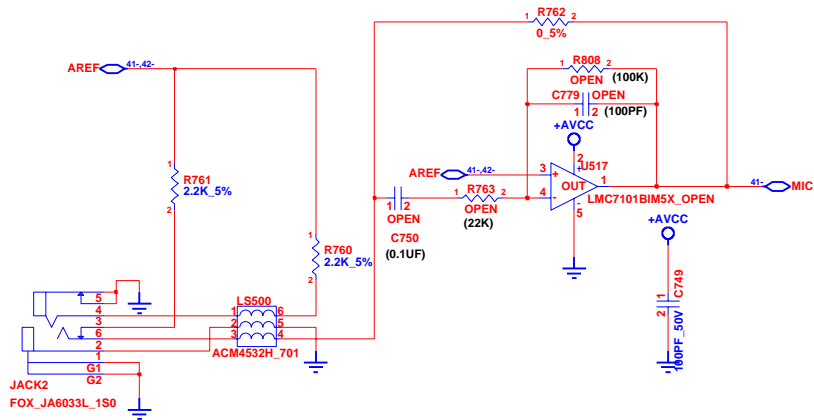
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SIZE A3	CODE CS	DOC. NUMBER TC778ZBA000	REV A03
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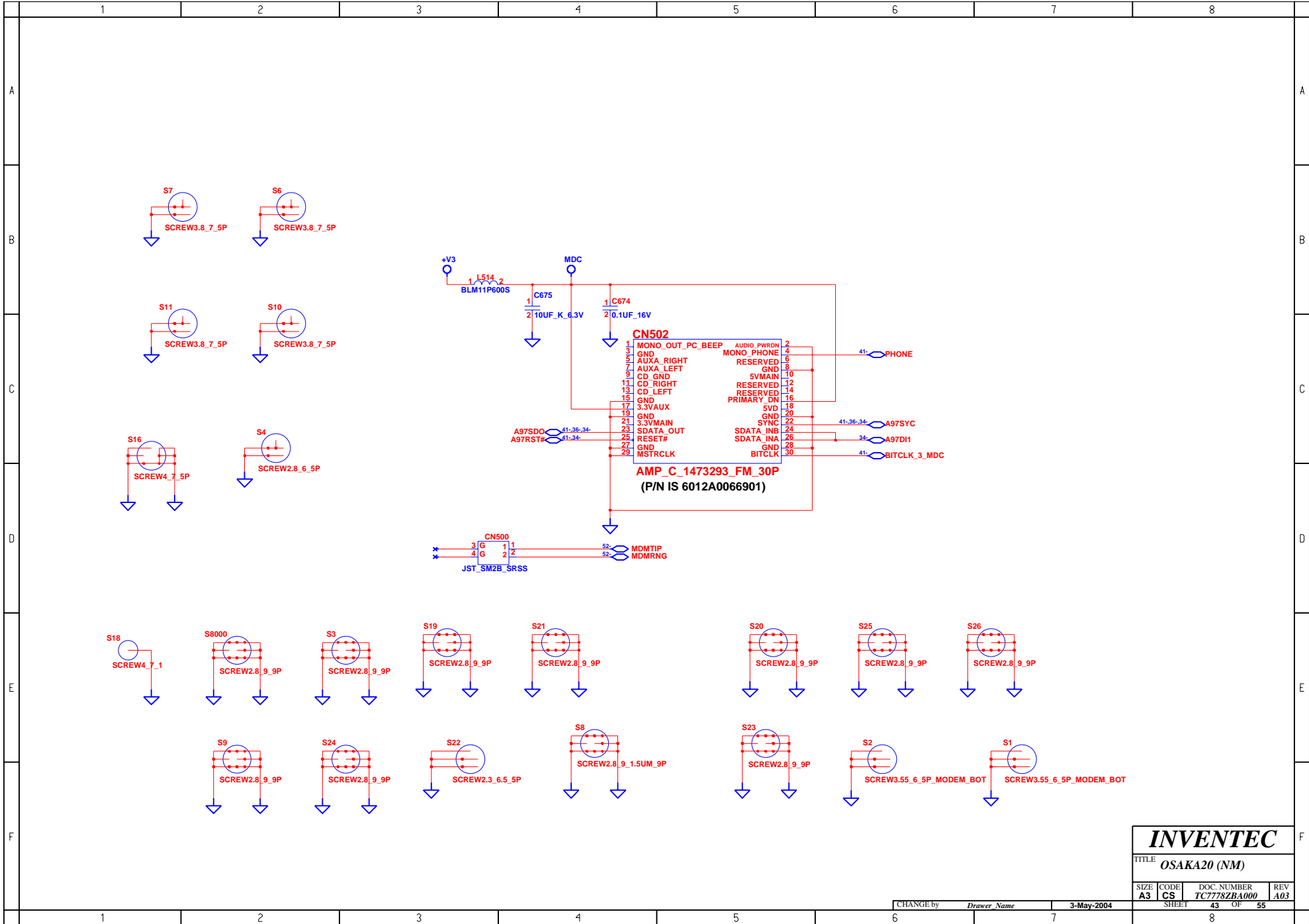
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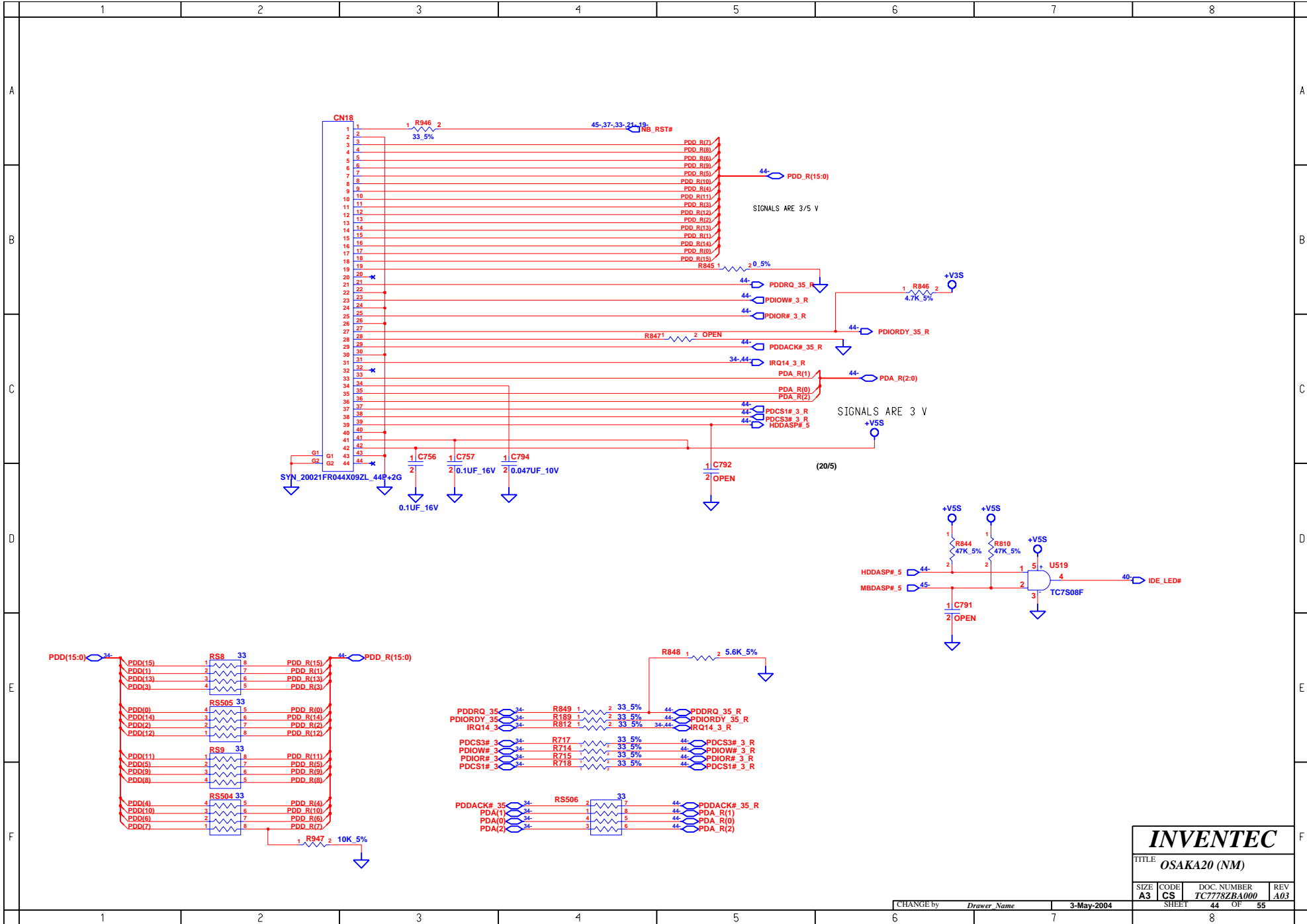
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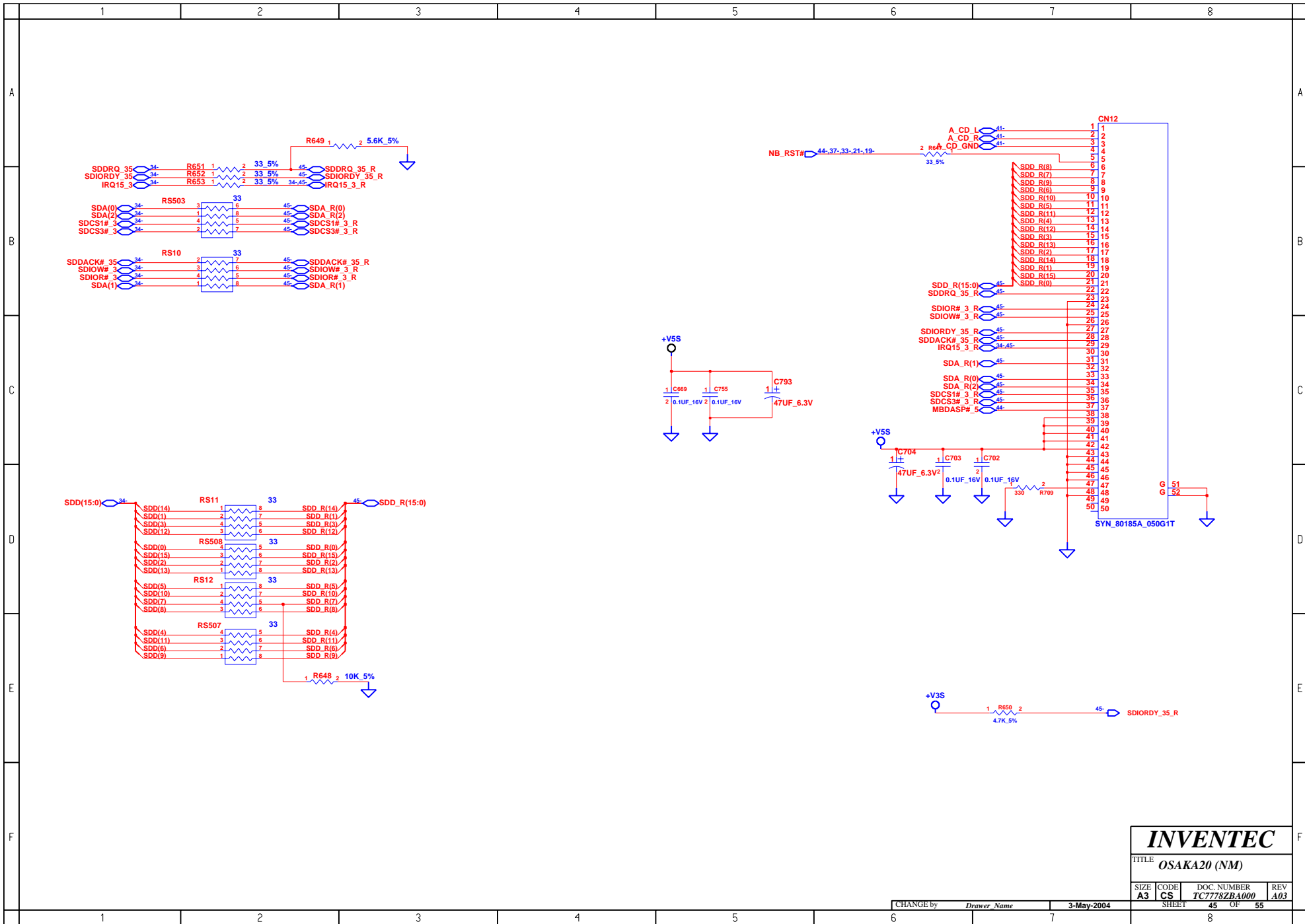
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TITLE OSAKA20 (NM)			
SIZE A3	CODE CS	DOC. NUMBER TC7778ZBA000	REV A03
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INVENTEC			
TITLE OSAKA20 (NM)			
SIZE A3	CODE CS	DOC. NUMBER TC778ZBA000	REV A03
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INVENTEC			
TITLE OSAKA20 (NM)			
SIZE A3	CODE CS	DOC. NUMBER TC7778ZBA000	REV A03
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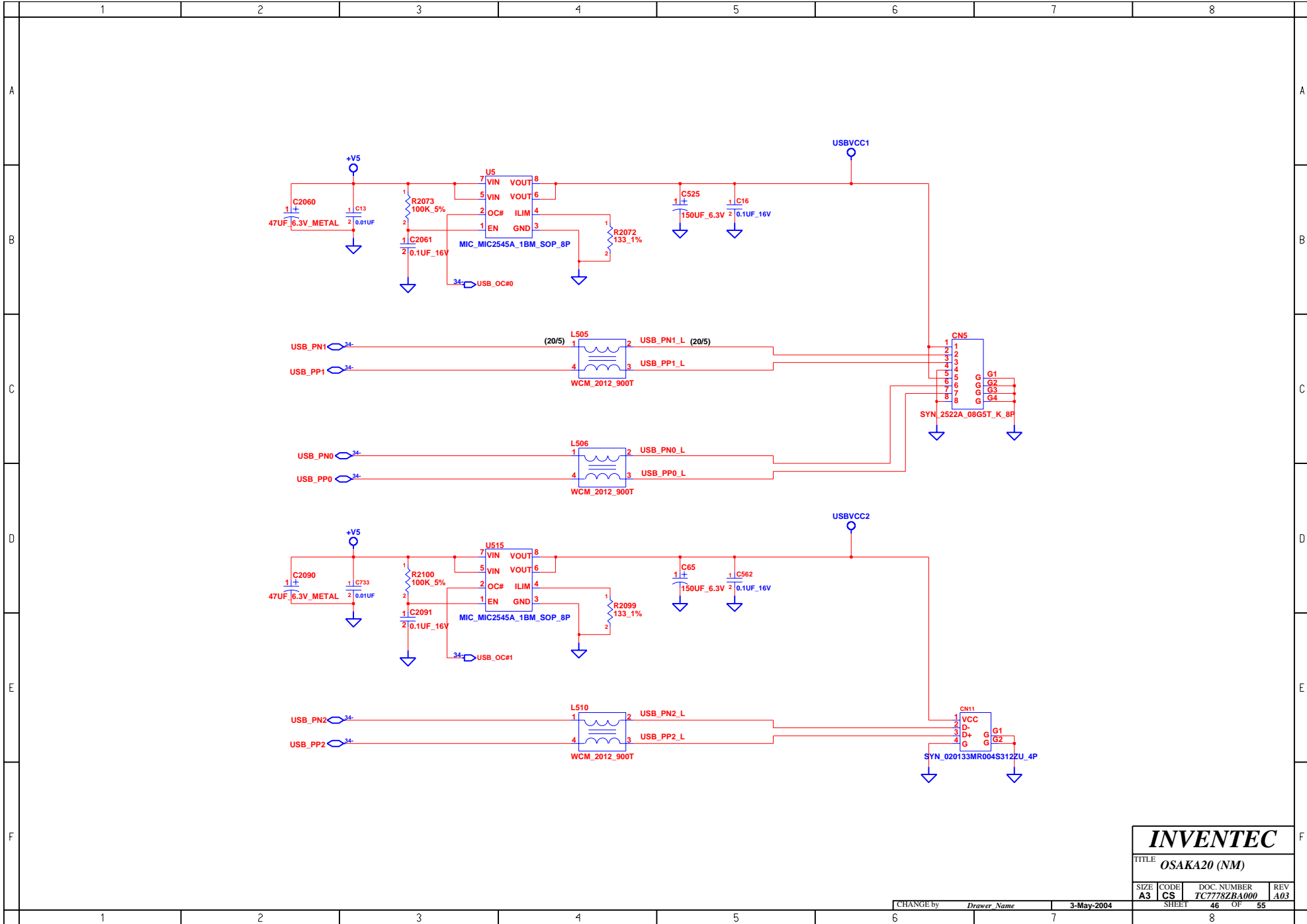


INVENTEC

TITLE OSAKA20 (NM)

SIZE	CODE	DOC. NUMBER	REV
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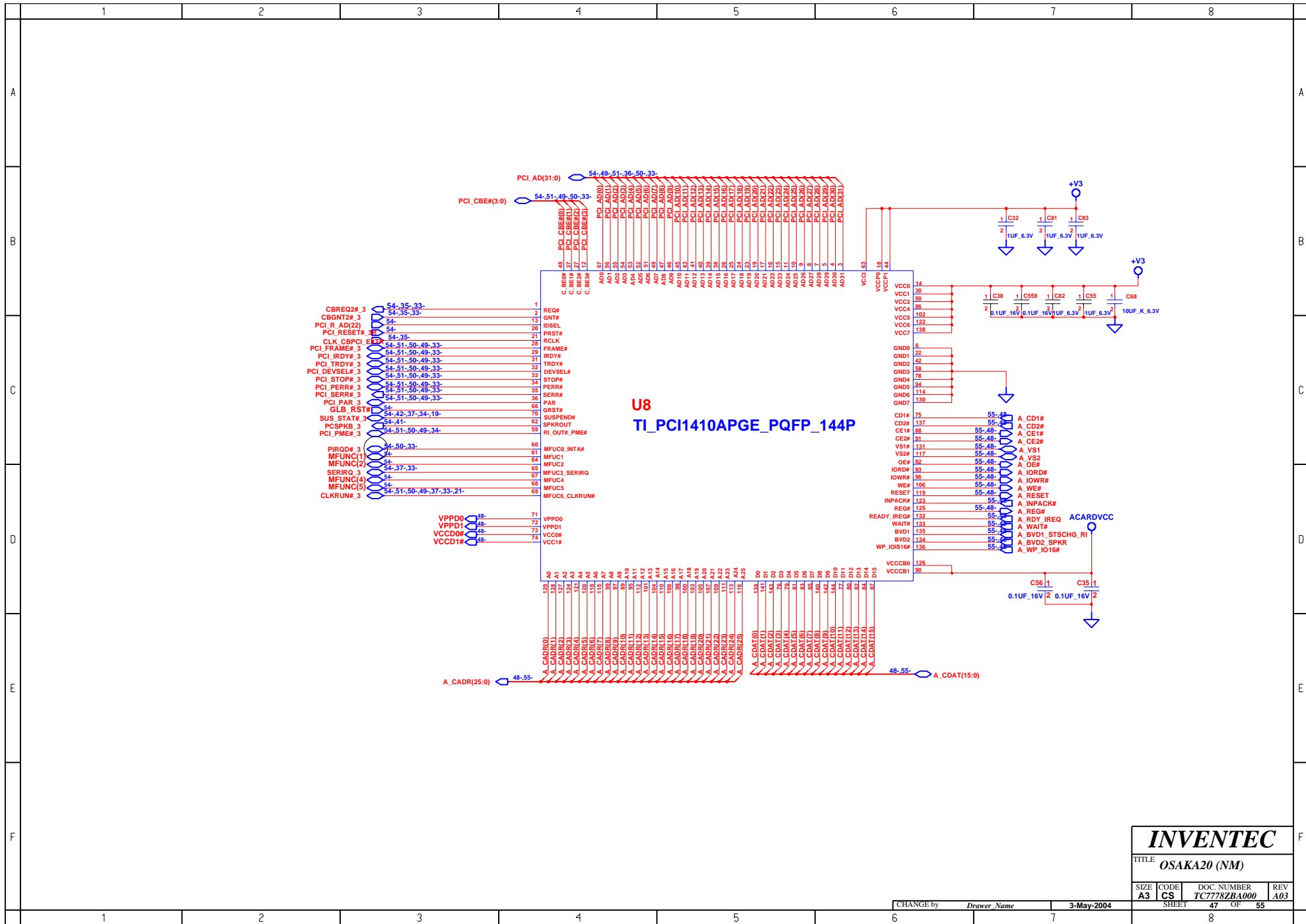
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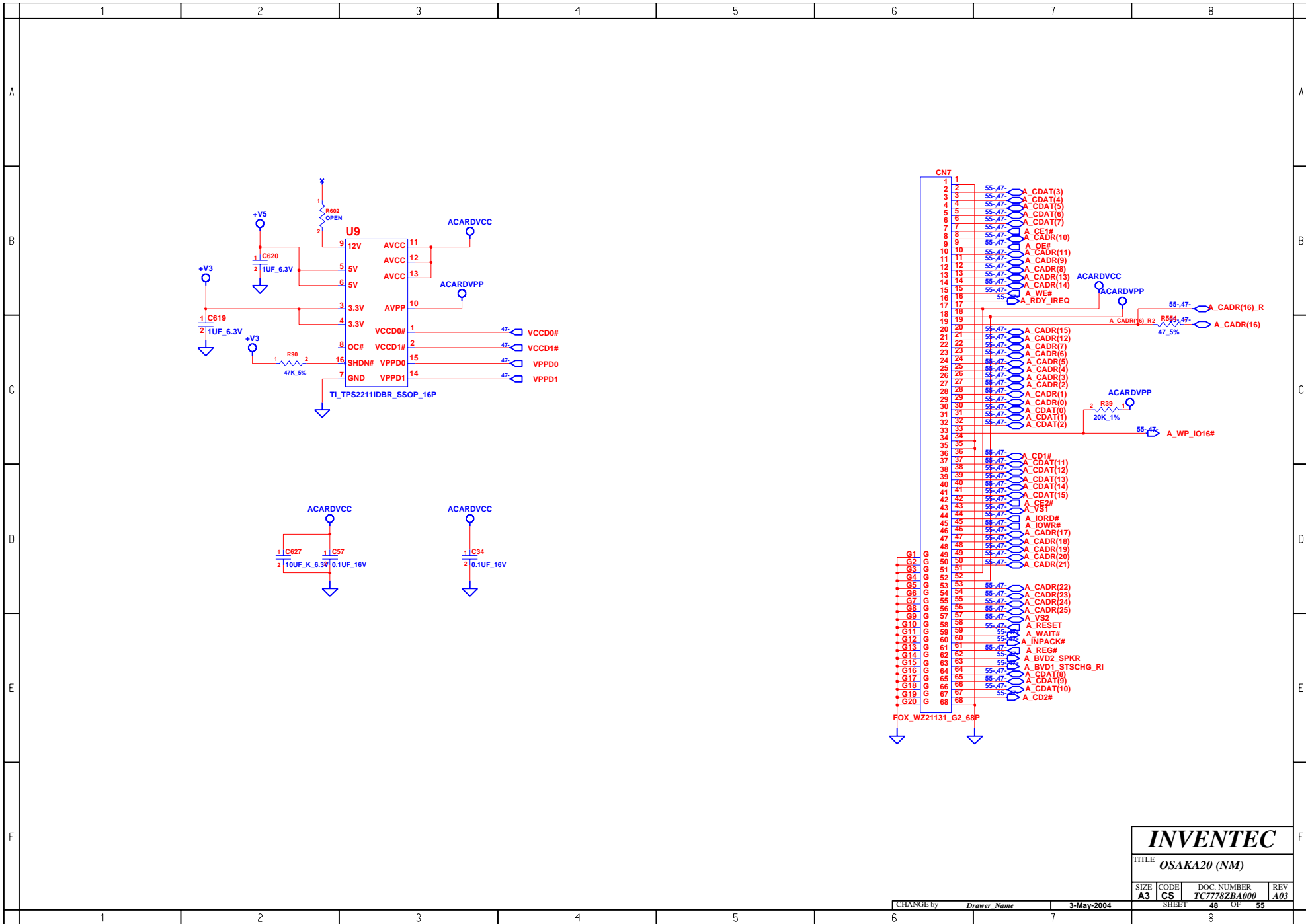
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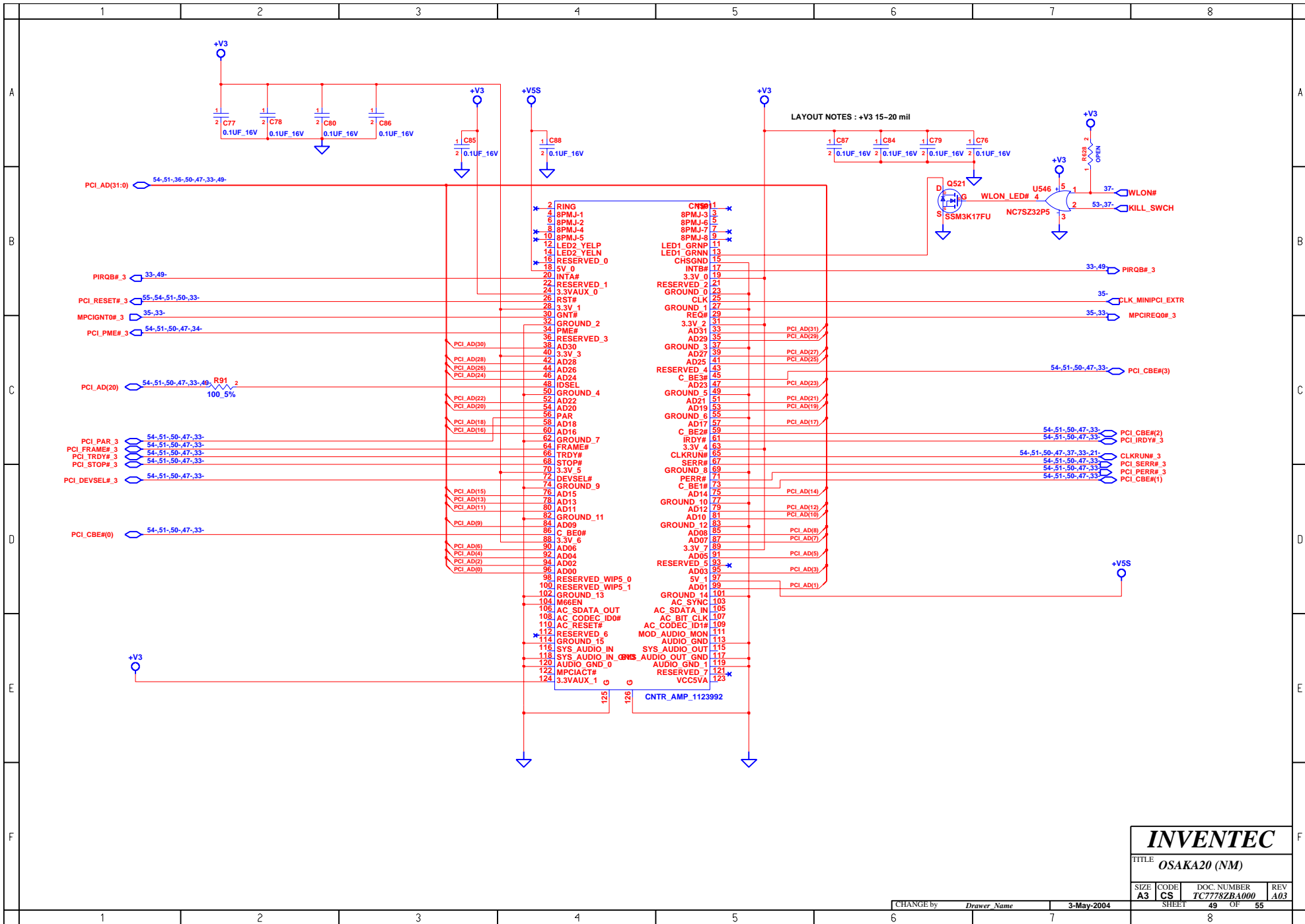
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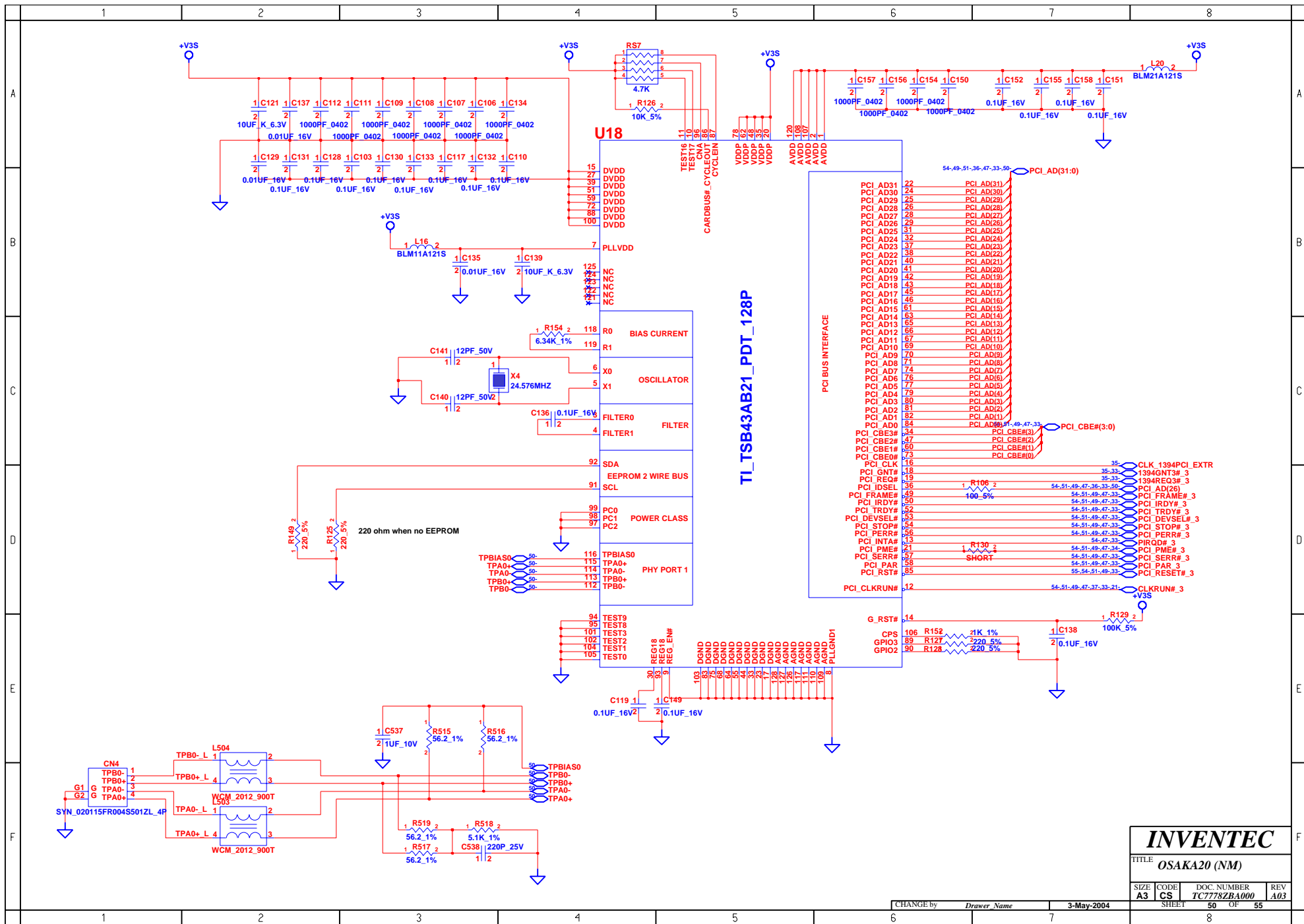
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TITLE OSAKA20 (NM)

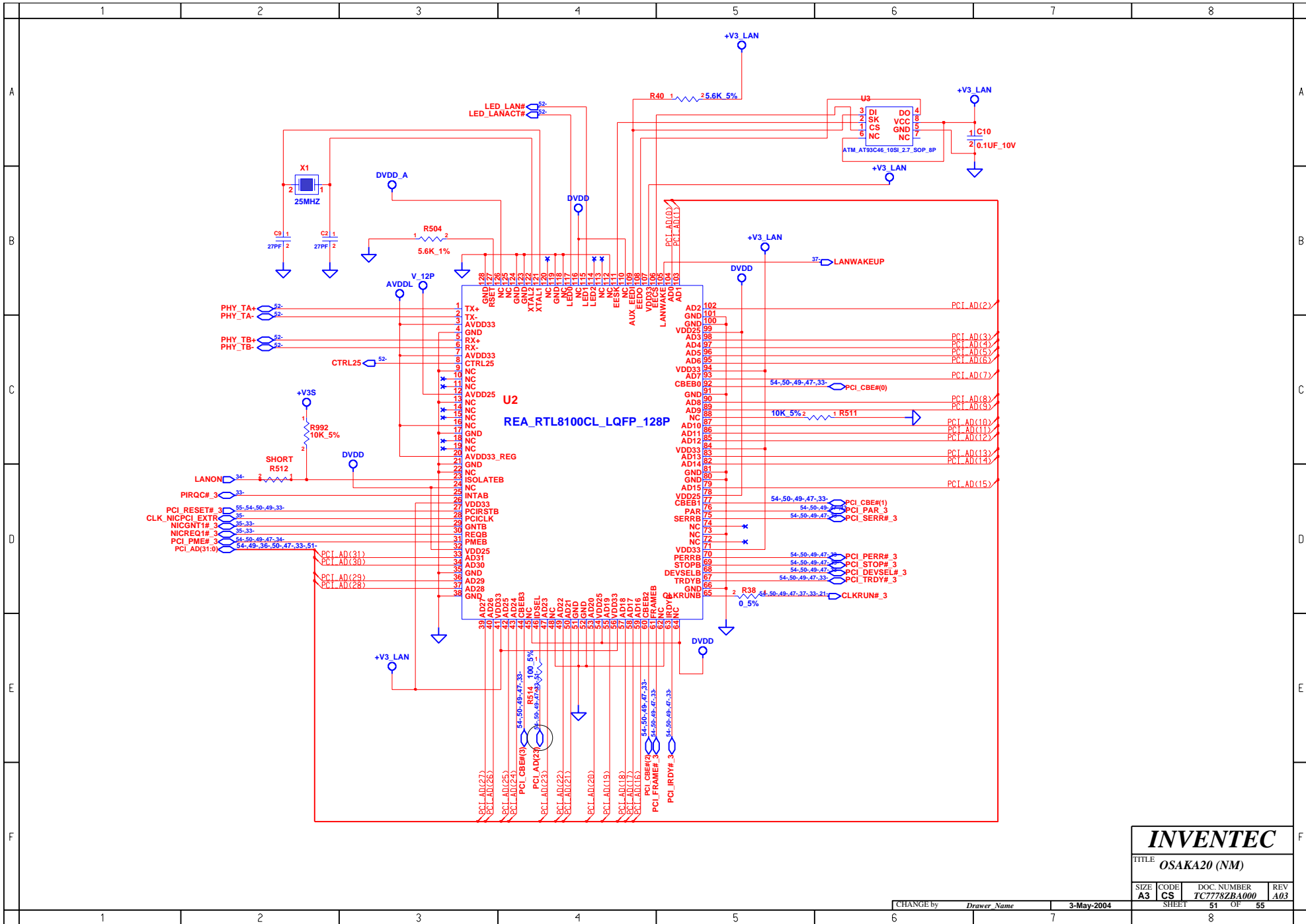
SIZE	CODE	DOC. NUMBER	REV
A3	CS	TC778ZBA000	A03



INVENTEC			
TITLE OSAKA20 (NM)			
SIZE A3	CODE CS	DOC. NUMBER TC7782BA000	REV A03
CHANGE by Drawer Name		3-May-2004	SHEET 49 OF 55



INVENTEC			
TITLE OSAKA20 (NM)			
SIZE A3	CODE CS	DOC. NUMBER TC77782BA000	REV A03



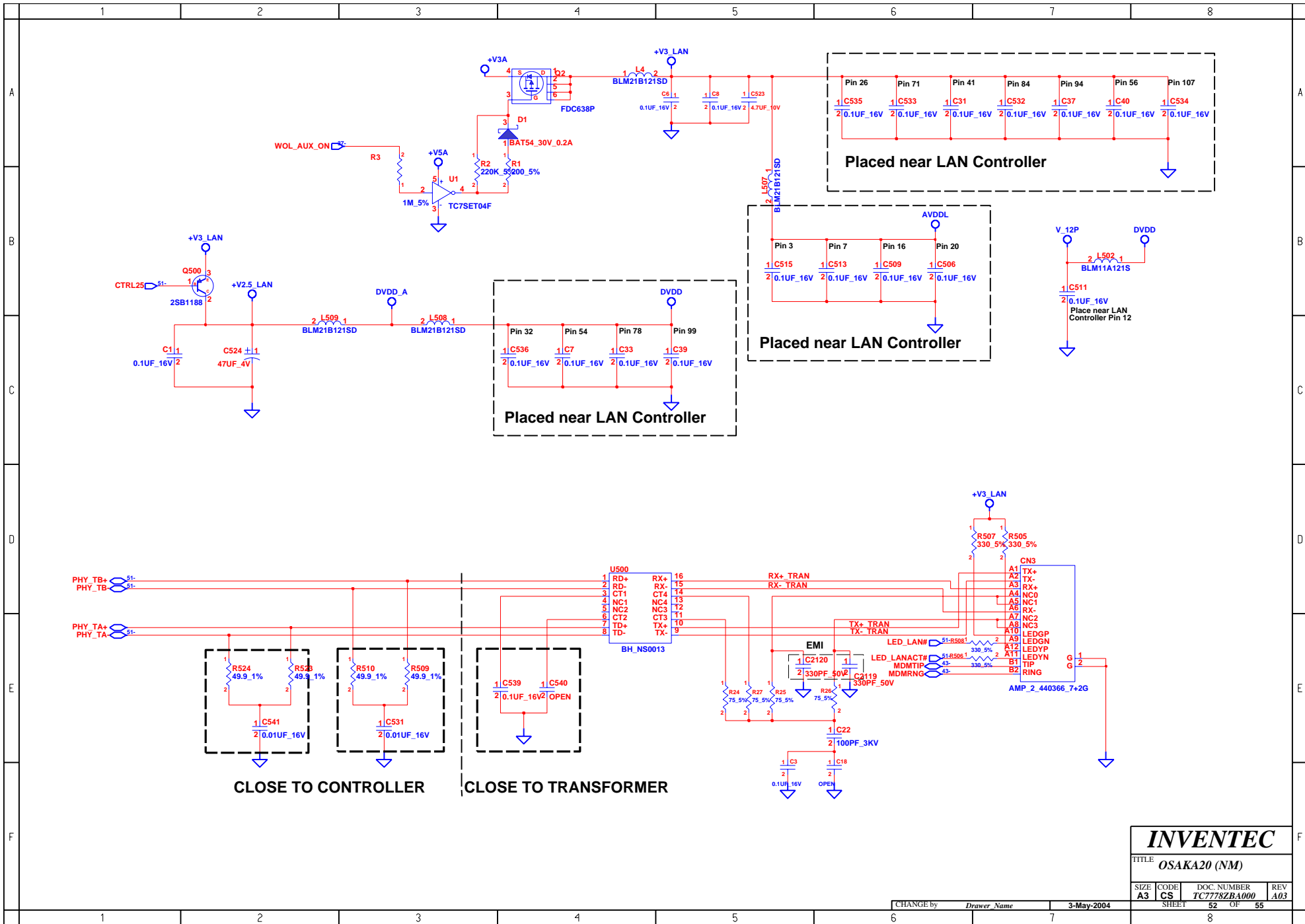
INVENTEC

TITLE OSAKA20 (NM)

SIZE	CODE	DOC. NUMBER	REV
A3	CS	TC7782BA000	A03

CHANGE by *Drawer Name* 3-May-2004

SHEET 51 OF 55



INVENTEC

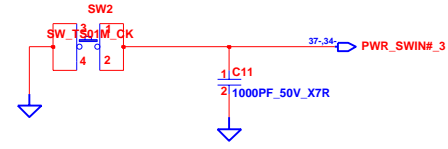
TITLE OSAKA20 (NM)

SIZE	CODE	DOC. NUMBER	REV
A3	CS	TC778ZBA000	A03

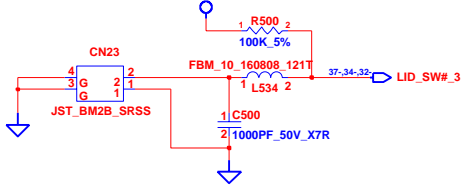
CHANGE by Drawer Name 3-May-2004

SHEET 52 OF 55

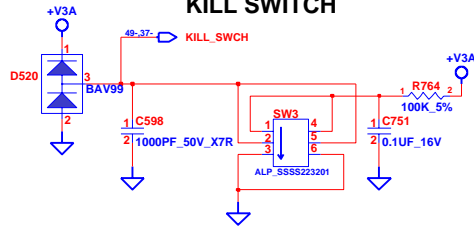
POWER SWITCH



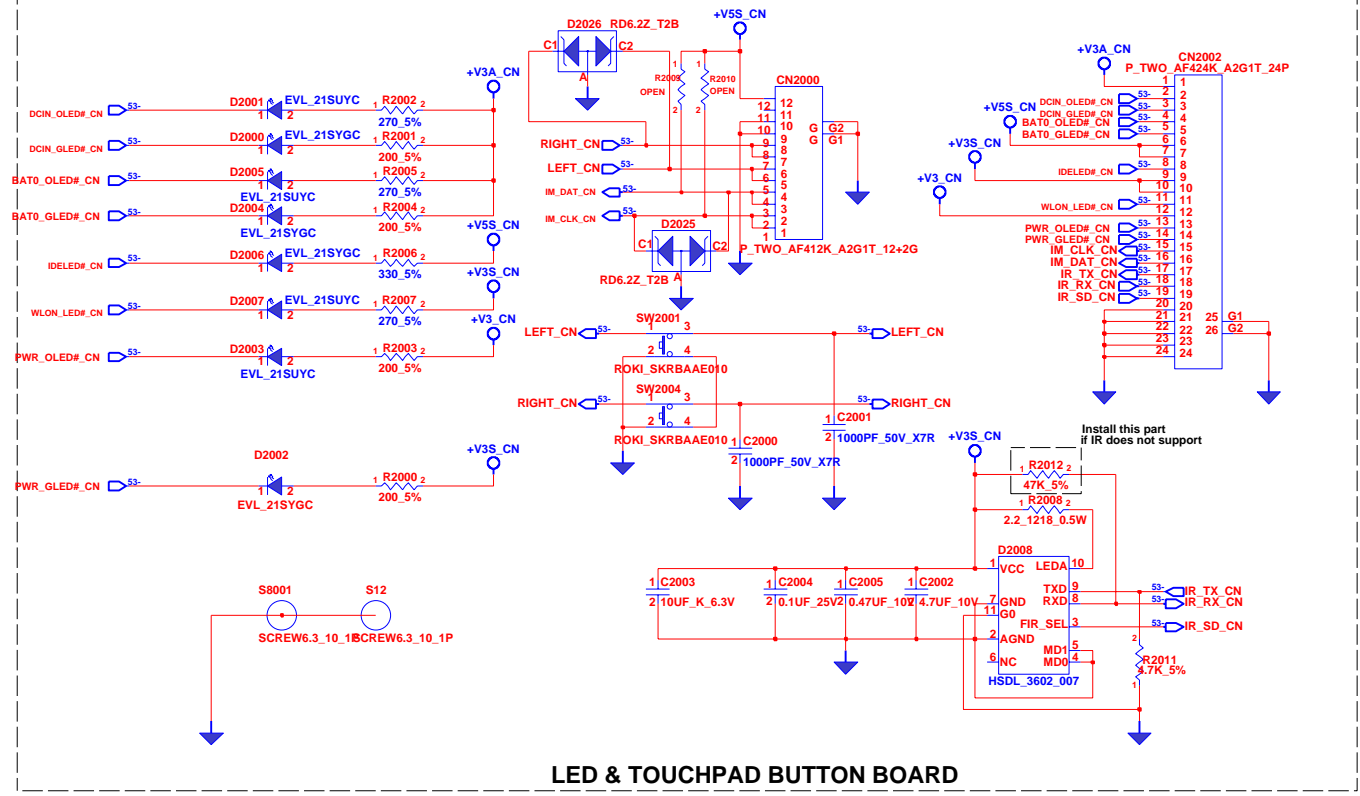
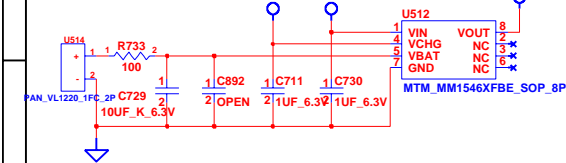
LID SWITCH



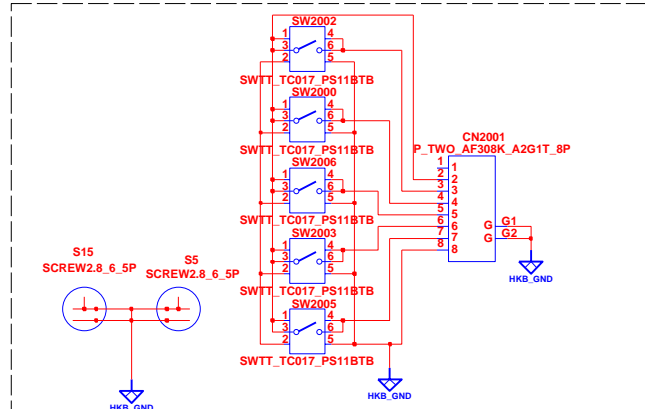
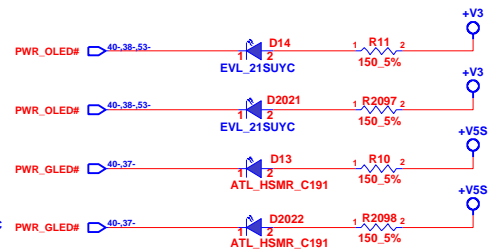
KILL SWITCH



RTC BATTERY

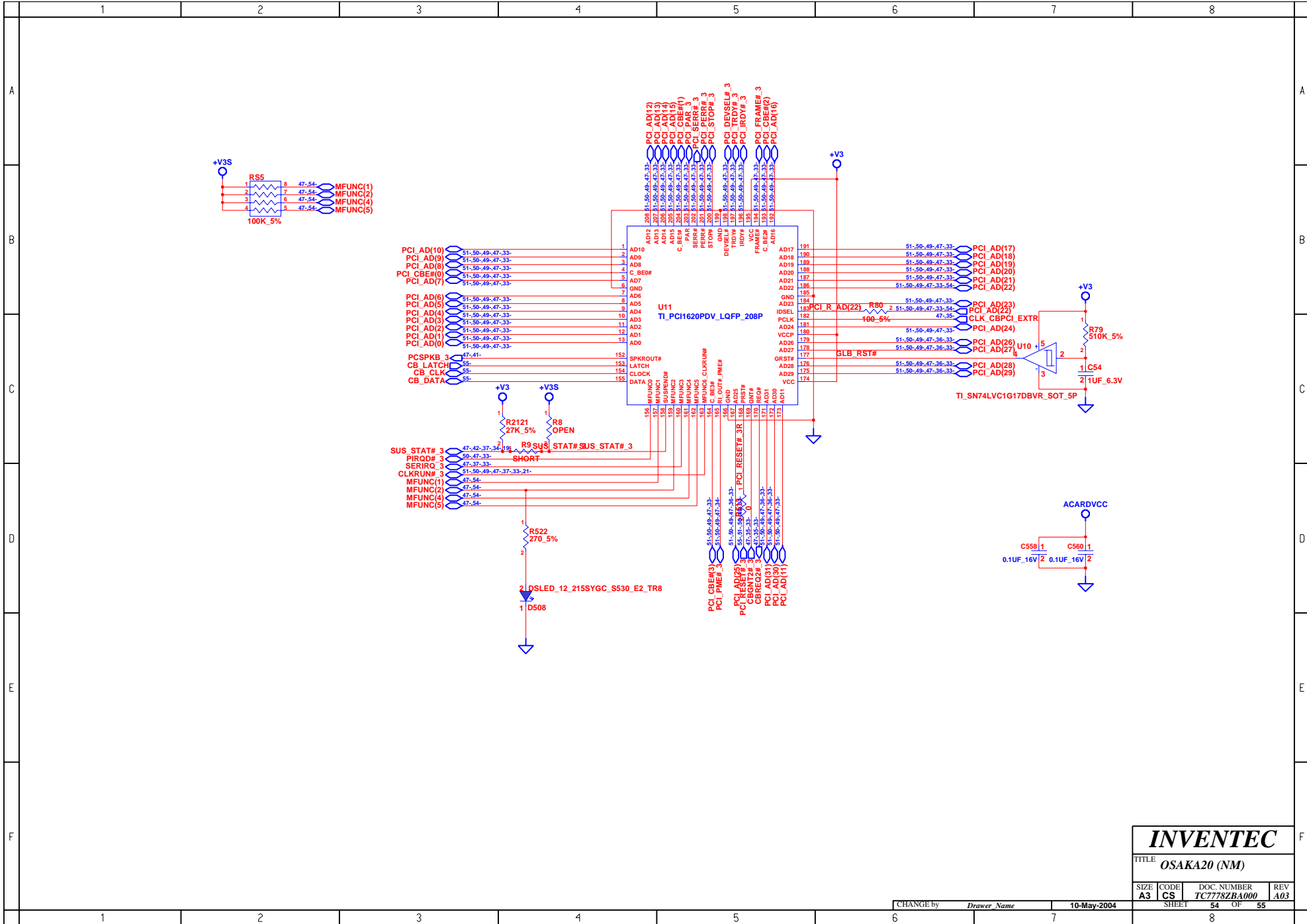


LED & TOUCHPAD BUTTON BOARD

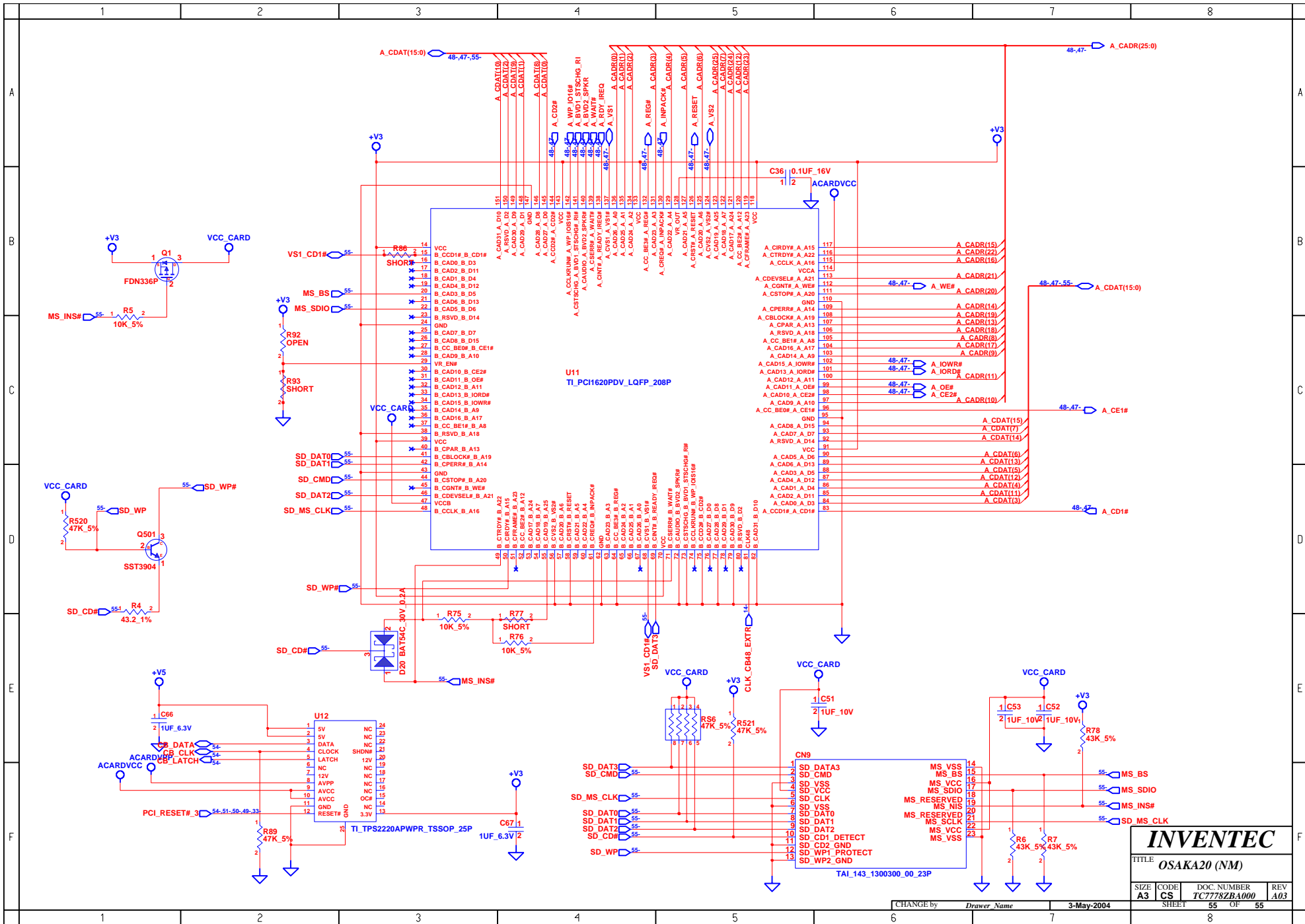


HOTKEY BOARD

INVENTEC			
TITLE OSAKA20 (NM)			
SIZE A3	CODE CS	DOC. NUMBER TC7778ZBA000	REV A03
CHANGE by Drawer Name		3-May-2004	
SHEET		53 OF 55	



INVENTEC			
TITLE OSAKA20 (NM)			
SIZE A3	CODE CS	DOC. NUMBER TC7778ZBA000	REV A03
CHANGE by Drawer Name		10-May-2004	SHEET 54 OF 55



INVENTEC			
TITLE OSAKA20 (NM)			
SIZE A3	CODE CS	DOC. NUMBER TC7778ZBA000	REV A03
CHANGE by <i>Drawer Name</i>		3-May-2004	
SHEET 55		OF 55	