

B	07-09-04	TE248	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
A	28-05-03	----	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS

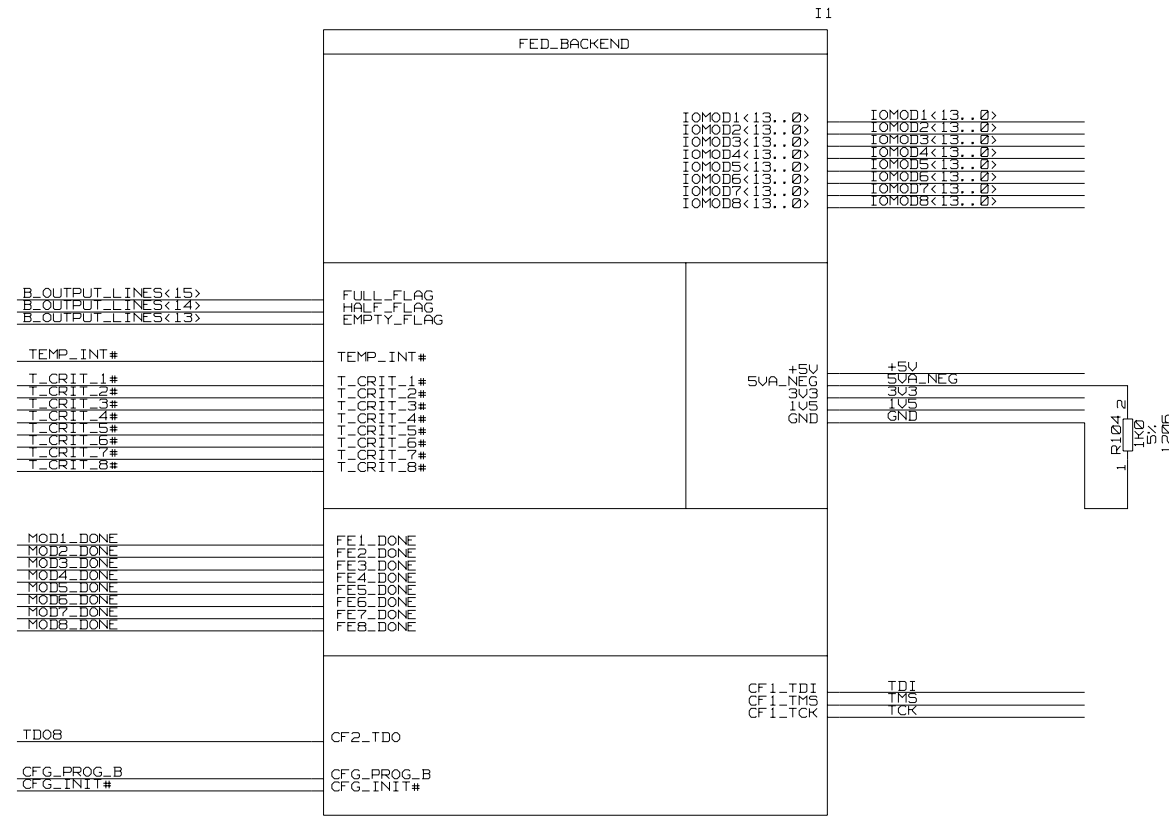
USED ON _____ © CCLRC 2003

CCLRC
COUNCIL FOR THE CENTRAL LABORATORY OF THE RESEARCH COUNCILS

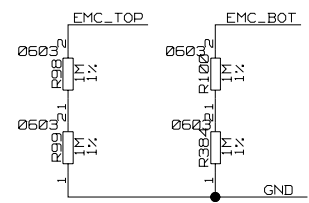
RUTHERFORD APPLETON LABORATORY, CHILTON, OXON OX11 0QX.

TITLE PC3252M CALICE TOP LEVEL CIRCUIT

A2-TE-0117-001-01-B

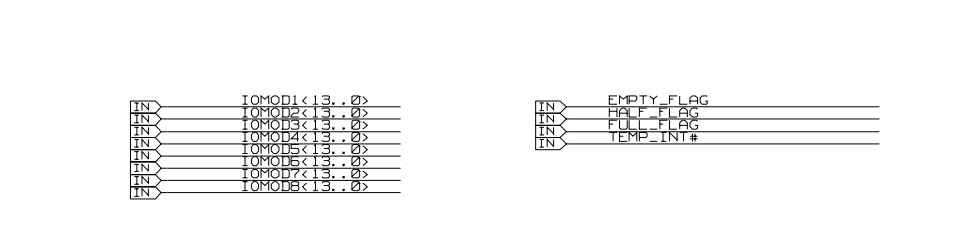
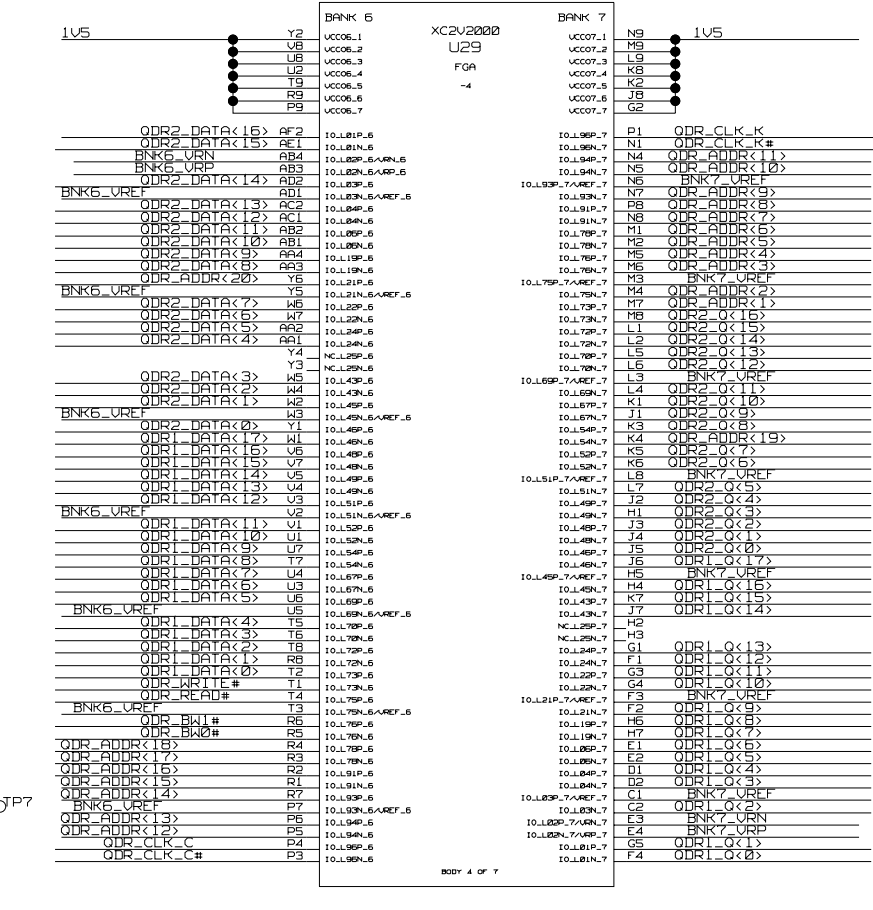
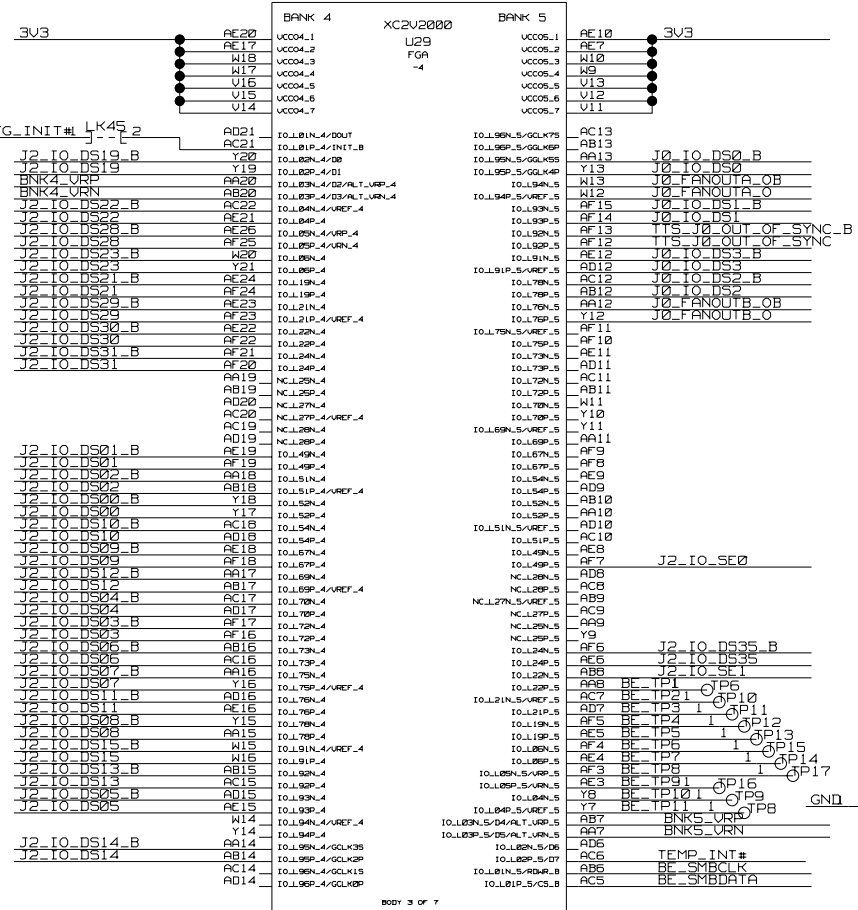
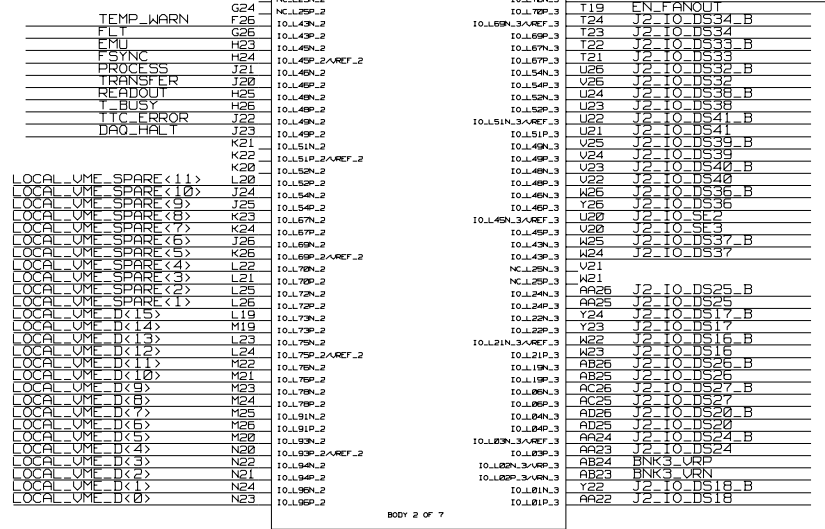
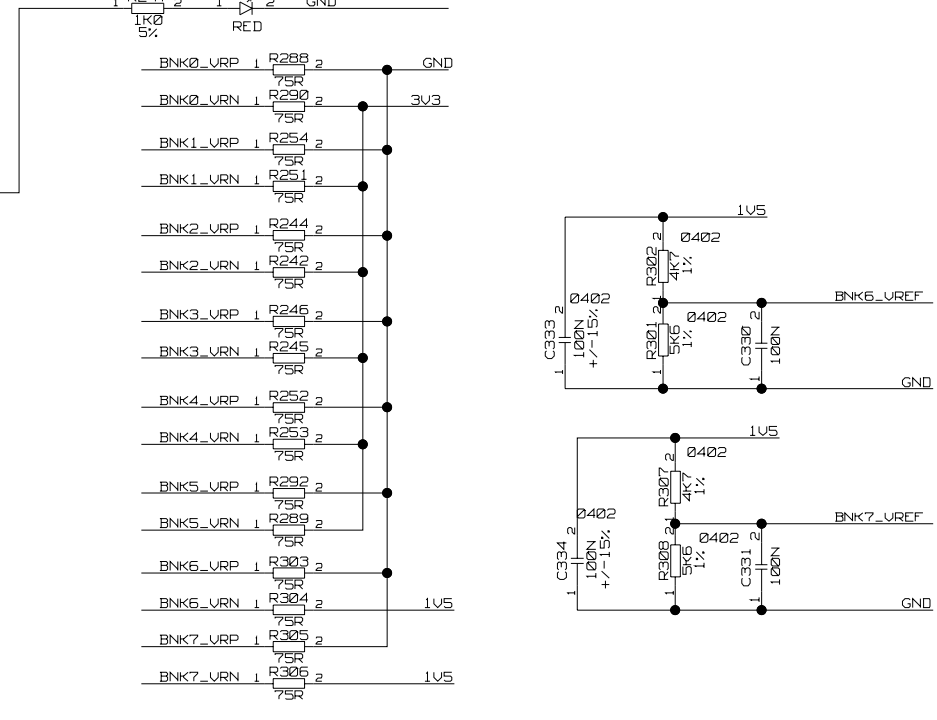
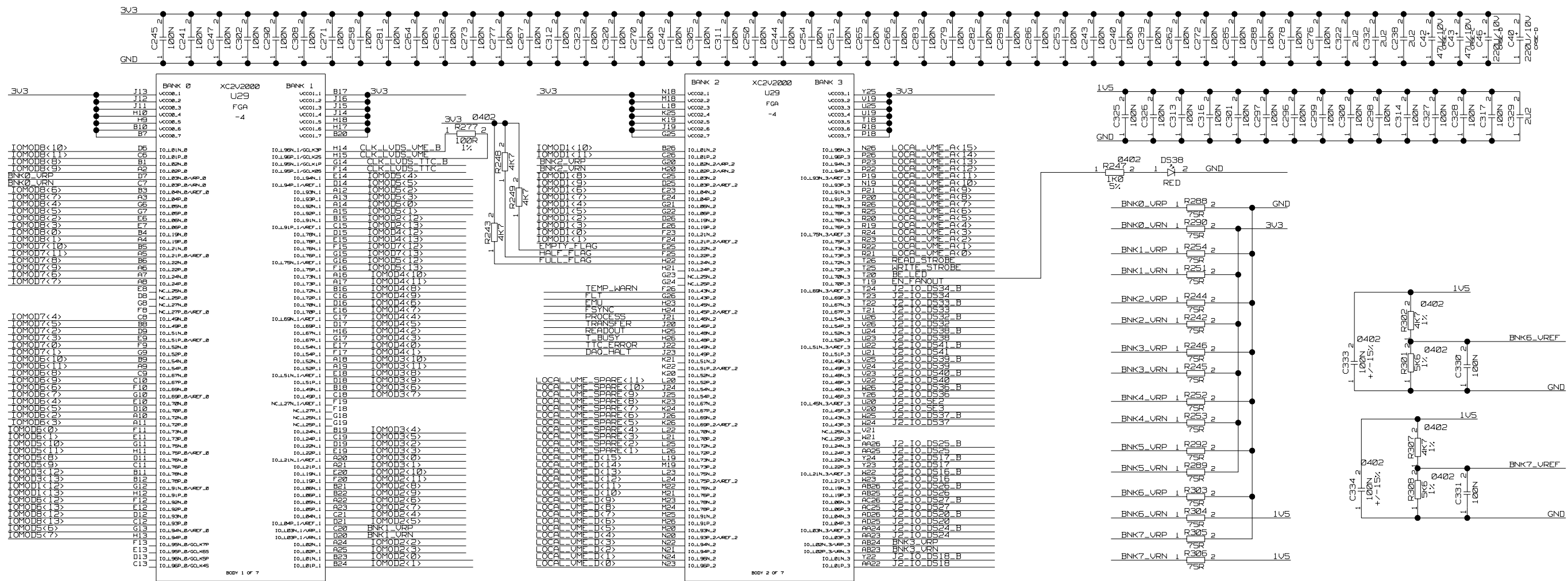


ESD DISCHARGE RESISTORS



B	07-09-04	TE24B	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
A	28-05-03	-----	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS

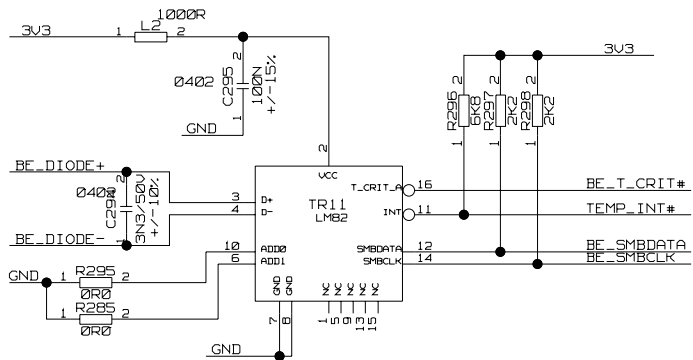
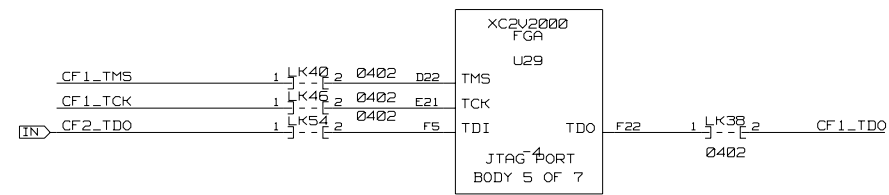
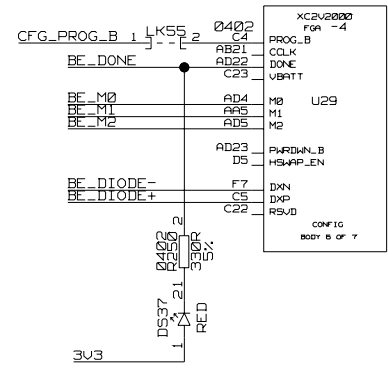
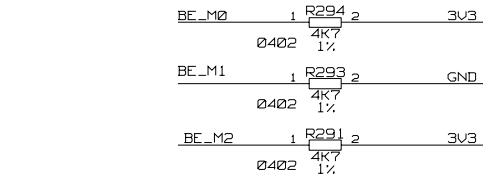
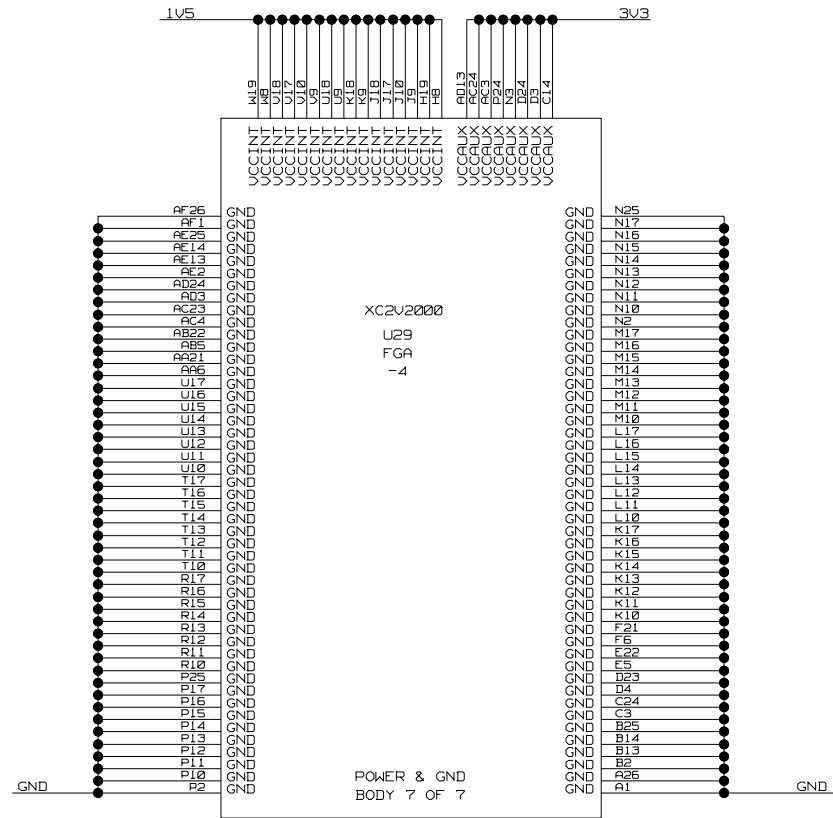
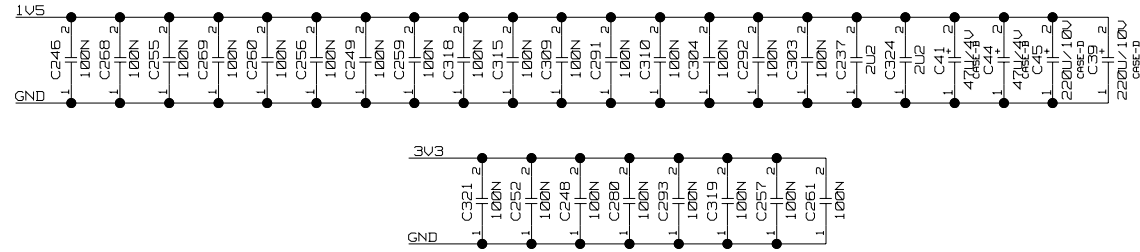
USED ON © CCLRC 2003
 CCLRC COUNCIL FOR THE CENTRAL LABORATORY RUTHERFORD APPLETON LABORATORY, CHILTON, OXON OX11 0QX.
 OF THE RESEARCH COUNCILS
 TITLE PC3252M CIRCUIT
 CALICE
 TOP LEVEL



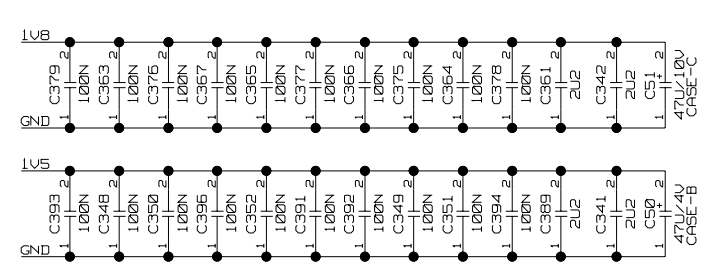
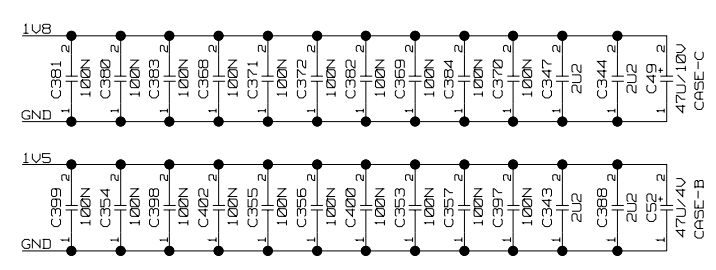
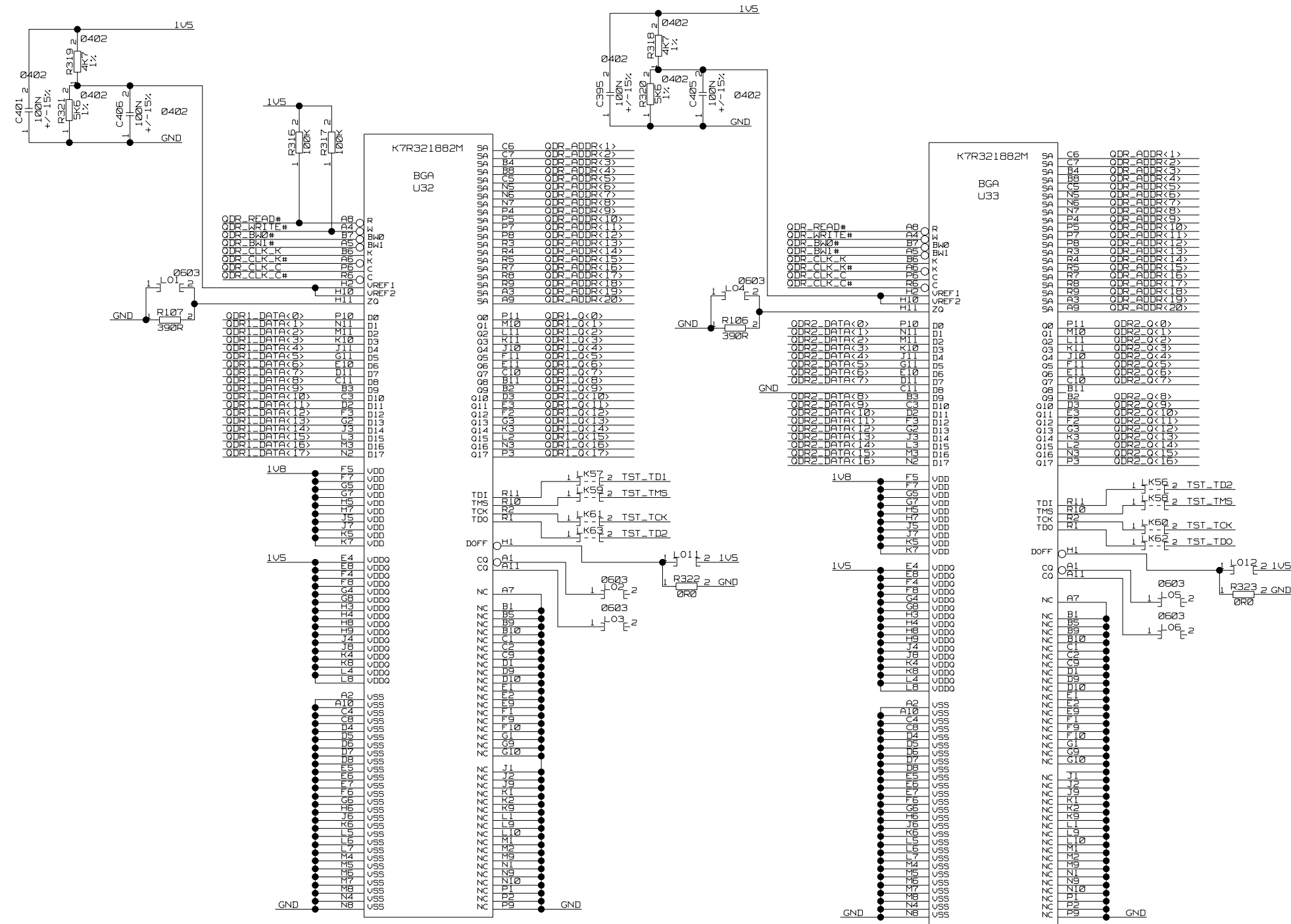
SOME PINS MAY BE LABELLED DIFFERENTLY IN THE UCF FILE

B	07-09-04	TE248	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
A	28-05-03	----	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS
USED ON						© CCLRC 2003
CCLRC COUNCIL FOR THE CENTRAL LABORATORY RUTHERFORD APPLETON LABORATORY, CHILTON, OXON OX11 0QX. OF THE RESEARCH COUNCILS						
TITLE			PC3252M	CIRCUIT		
			CALICE	BACK END FPGA		
A2-TE-0117-001-03-B						
						TOTAL NO. OF SHEETS B7 <24>

A 2-TE-0117-001-04-B THIS DRAWING CONFORMS TO B.S. 3939

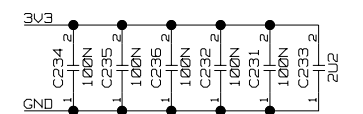
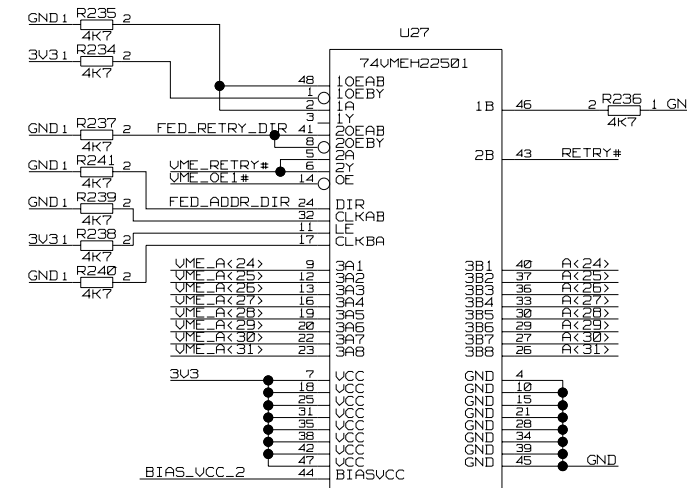
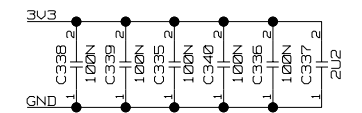
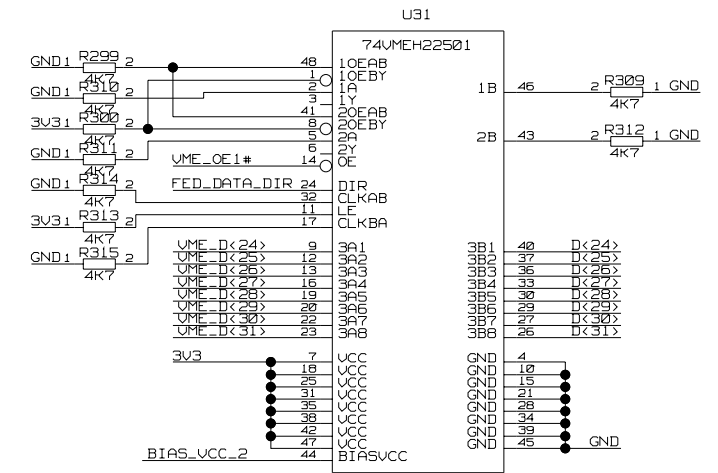
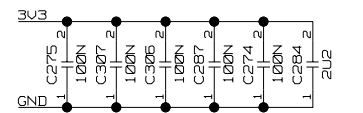
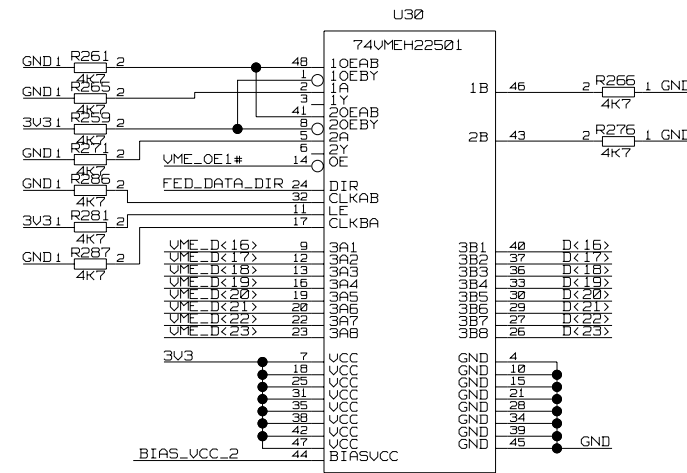
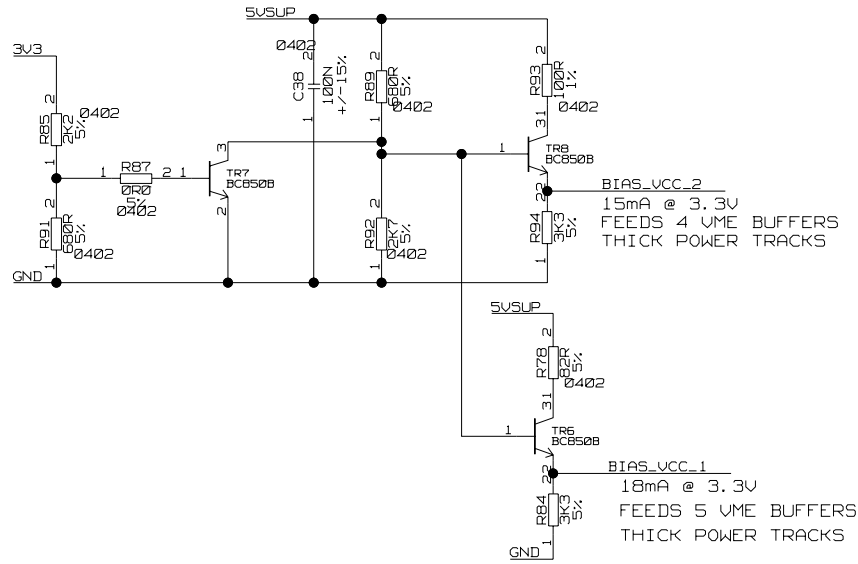


B	07-09-04	TE248	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
A	28-05-03	----	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS
USED ON					© CCLRC 2003	
CCLRC COUNCIL FOR THE CENTRAL LABORATORY OF THE RESEARCH COUNCILS RUTHERFORD APPLETON LABORATORY, CHILTON, OXON OX11 0QX.						
TITLE			PC3252M CIRCUIT			
CALICE BACK END FPGA						
A2-TE-0117-001-04-B						



B	07-09-04	TE24B	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
A	28-05-03	----	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS
USED ON					© CCLRC 2003	
CCLRC COUNCIL FOR THE CENTRAL LABORATORY RUTHERFORD APPLETON LABORATORY, CHILTON, OXON OX11 0QX. OF THE RESEARCH COUNCILS						
TITLE			PC3252M		CIRCUIT	
			CALICE		QDR MEMORY	
A2-TE-0117-001-05-B						
TOTAL NO. OF SHEETS B7 <24>						

A 2-TE-0117-001-05-B



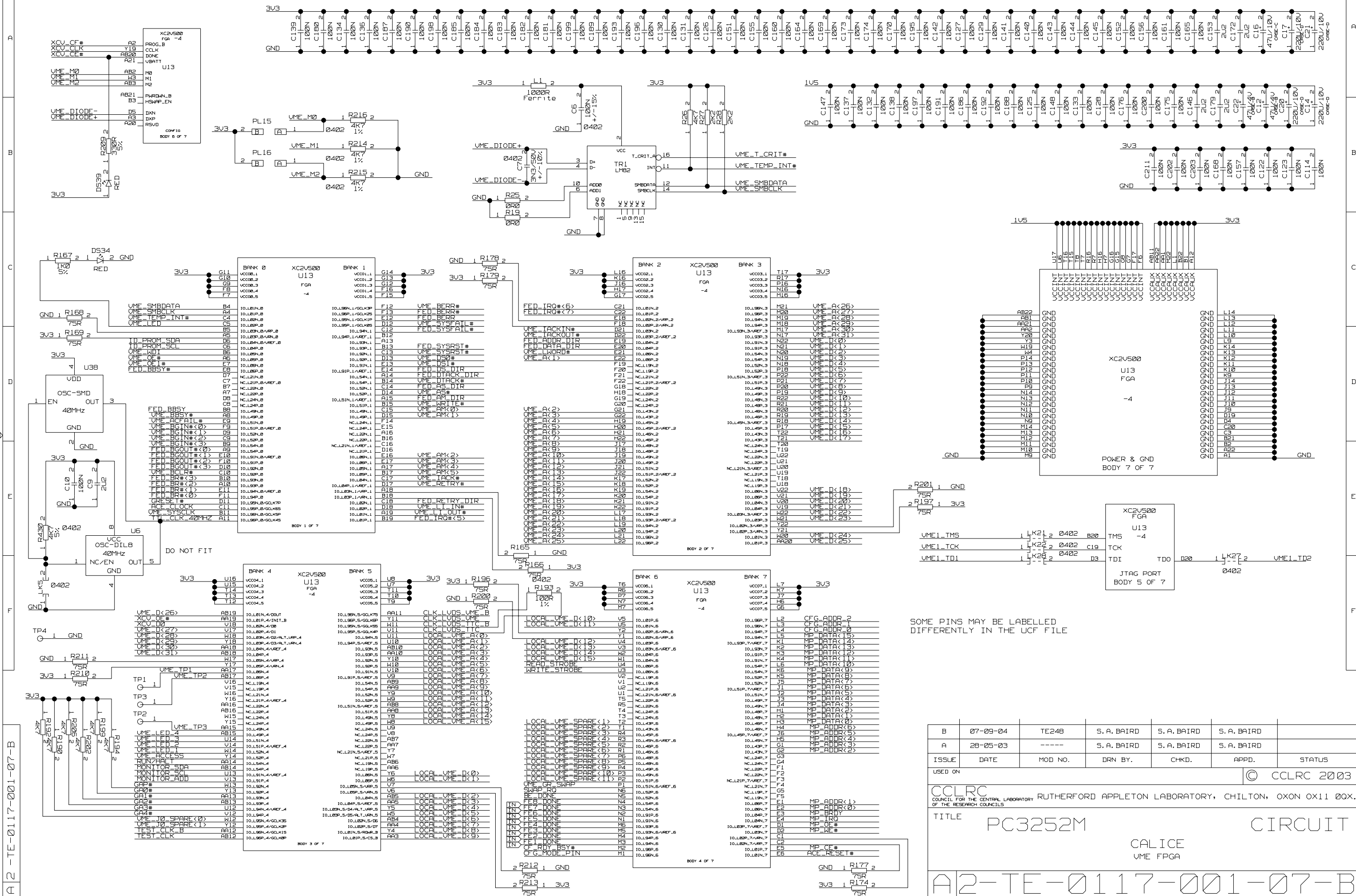
B	07-09-04	TE24B	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
A	28-05-03	----	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS

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CCLRC
COUNCIL FOR THE CENTRAL LABORATORY RUTHERFORD APPLETON LABORATORY, CHILTON, OXON OX11 0QX.
OF THE RESEARCH COUNCILS

TITLE PC3252M CIRCUIT

CALICE
J2 UME INTERFACE AND PRECHARGE CIRCUIT



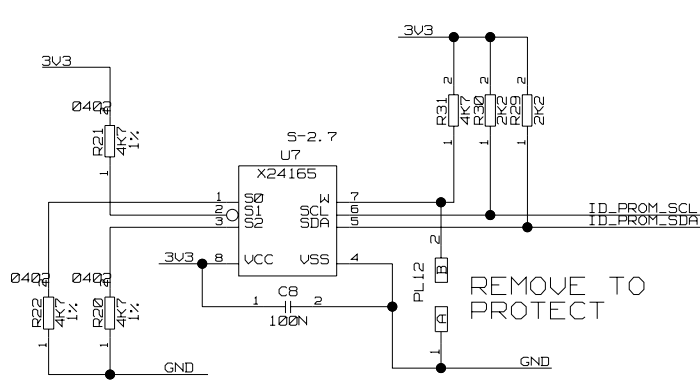
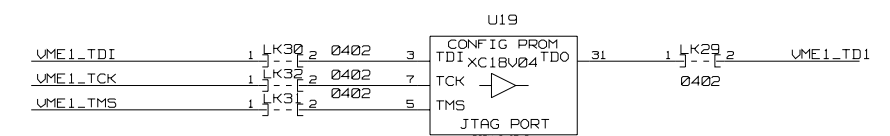
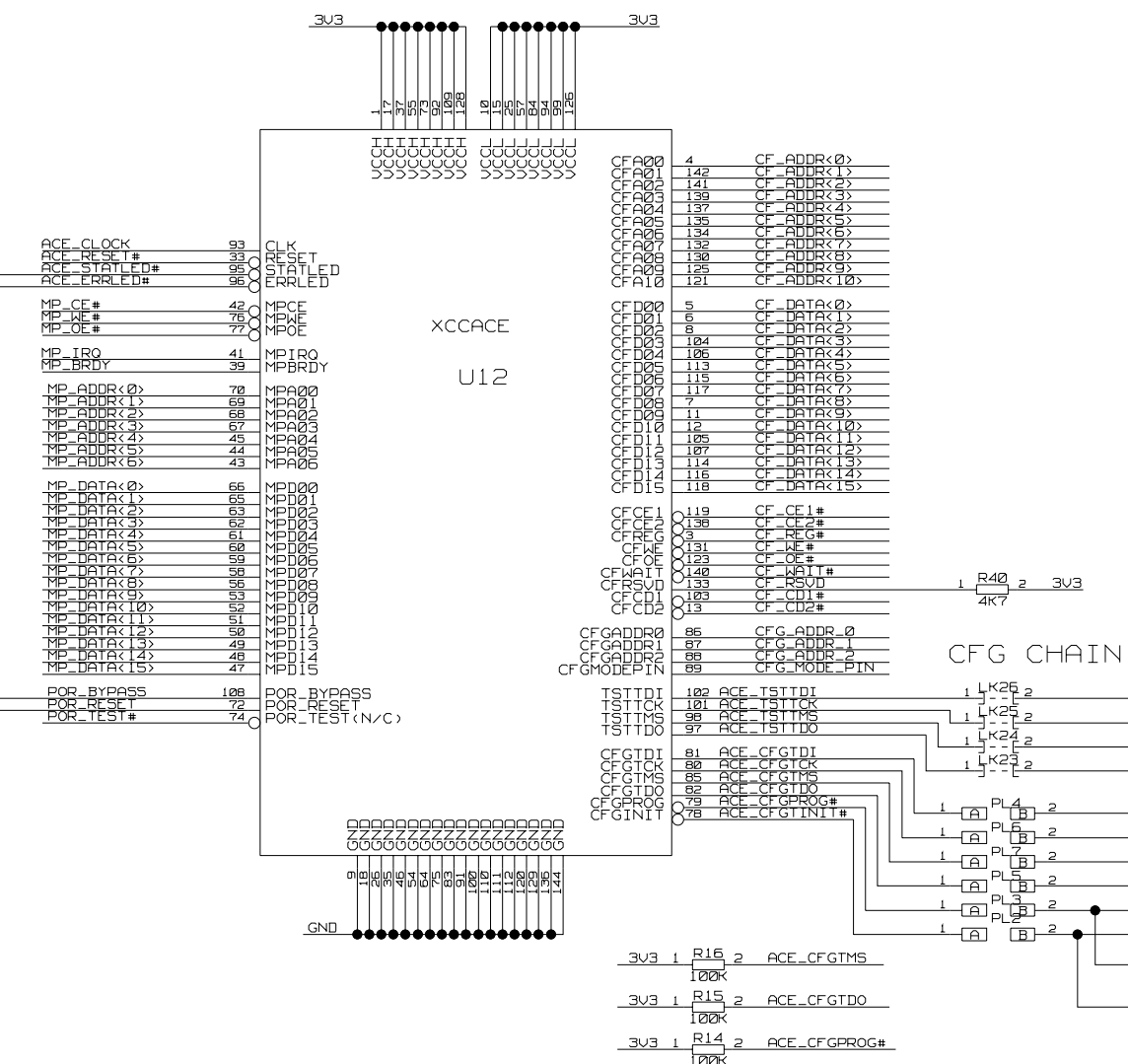
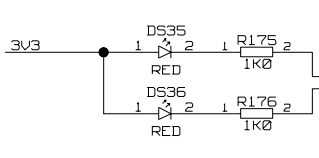
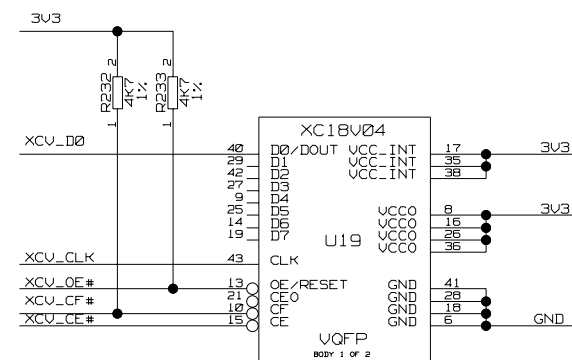
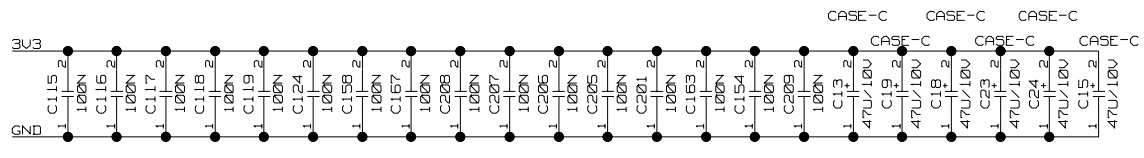
SOME PINS MAY BE LABELLED DIFFERENTLY IN THE UCF FILE

ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS
B	07-09-04	TE248	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
A	28-05-03	----	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	

USED ON © CCLRC 2003

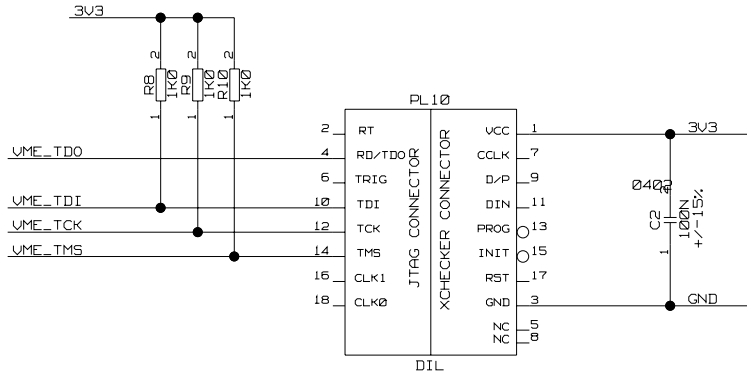
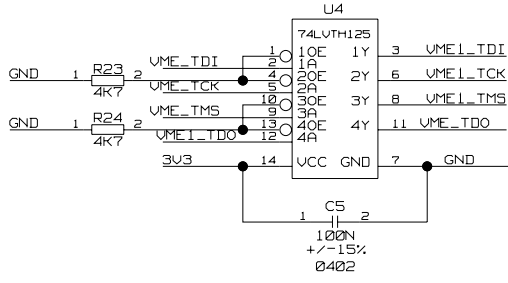
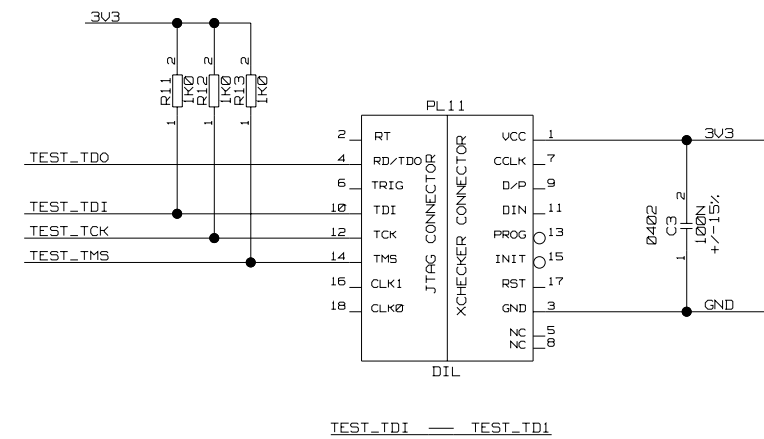
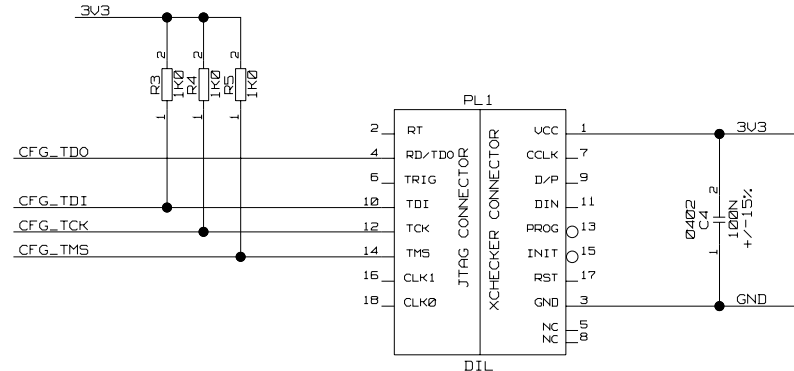
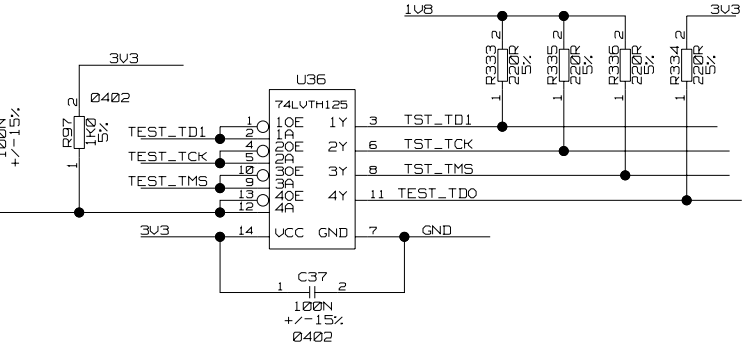
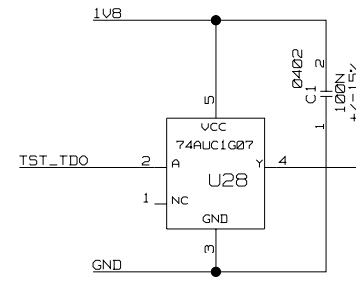
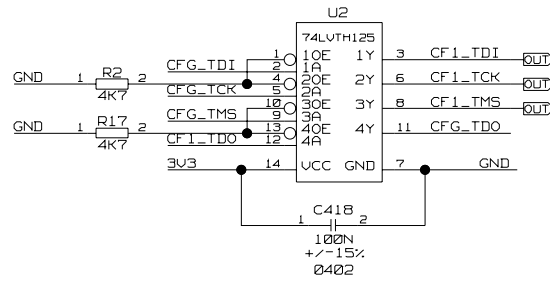
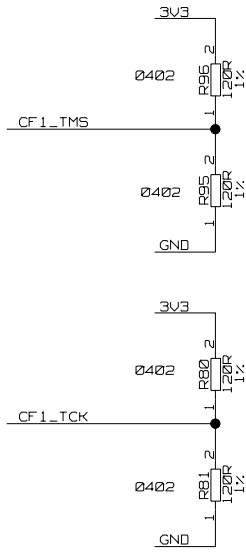
CCLRC COUNCIL FOR THE CENTRAL LABORATORY OF THE RESEARCH COUNCILS RUTHERFORD APPLETON LABORATORY, CHILTON, OXON OX11 0QX.

TITLE **PC3252M CIRCUIT**
 CALICE UME FPGA



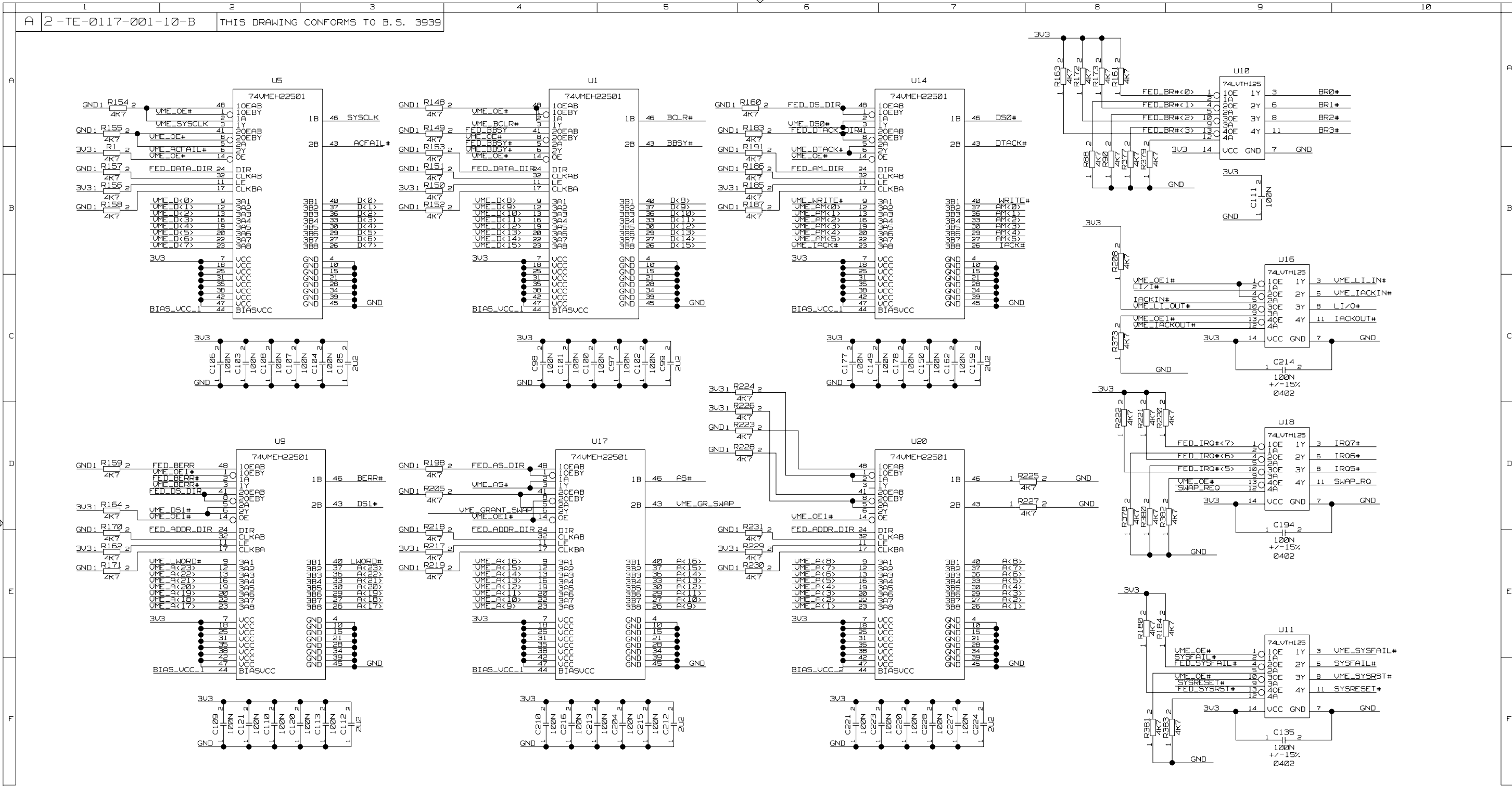
CFG CHAIN IS CONNECTED TO TST CHAIN.

B	07-09-04	TE248	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
A	28-05-03	----	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS
USED ON			© CCLRC 2003			
CCLRC COUNCIL FOR THE CENTRAL LABORATORY OF THE RESEARCH COUNCILS						
RUTHERFORD APPLETON LABORATORY, CHILTON, OXON OX11 0QX.						
TITLE			PC3252M		CIRCUIT	
			CALICE		SYSTEM ACE AND CONFIGURATION DEVICE	
A2-TE-0117-001-08-B						
TOTAL NO. OF SHEETS B7 <24>						



B	07-09-04	TE24B	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
A	28-05-03	----	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS

USED ON _____ © CCLRC 2003
 CCLRC COUNCIL FOR THE CENTRAL LABORATORY OF THE RESEARCH COUNCILS RUTHERFORD APPLETON LABORATORY, CHILTON, OXON OX11 0QX.
 TITLE PC3252M CALICE CIRCUIT
 JTAG CONNECTORS AND BUFFERS



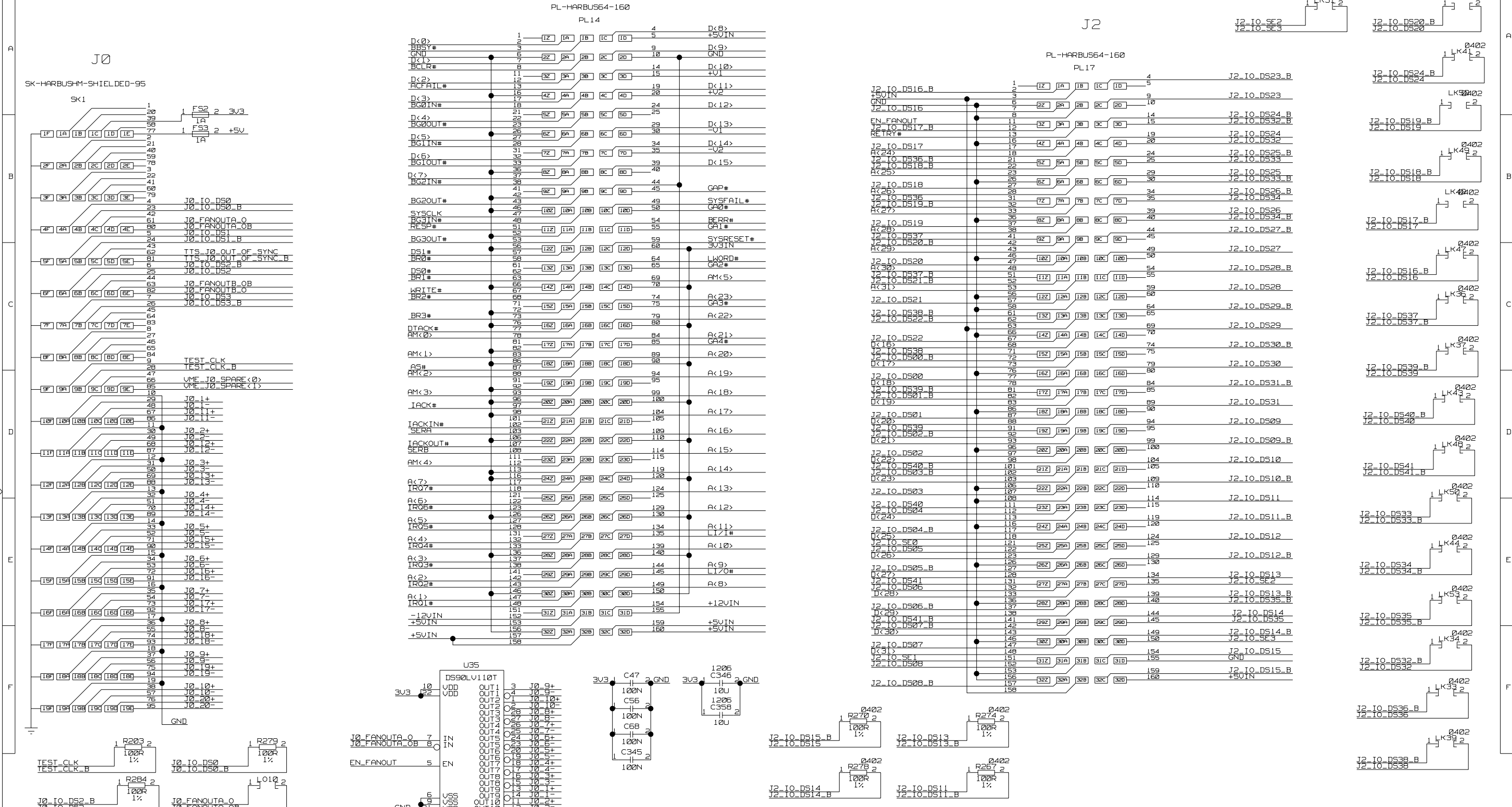
A 2-TE-0117-001-10-B

B	07-09-04	TE24B	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
A	28-05-03	----	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS

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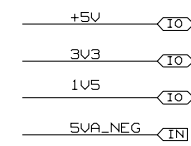
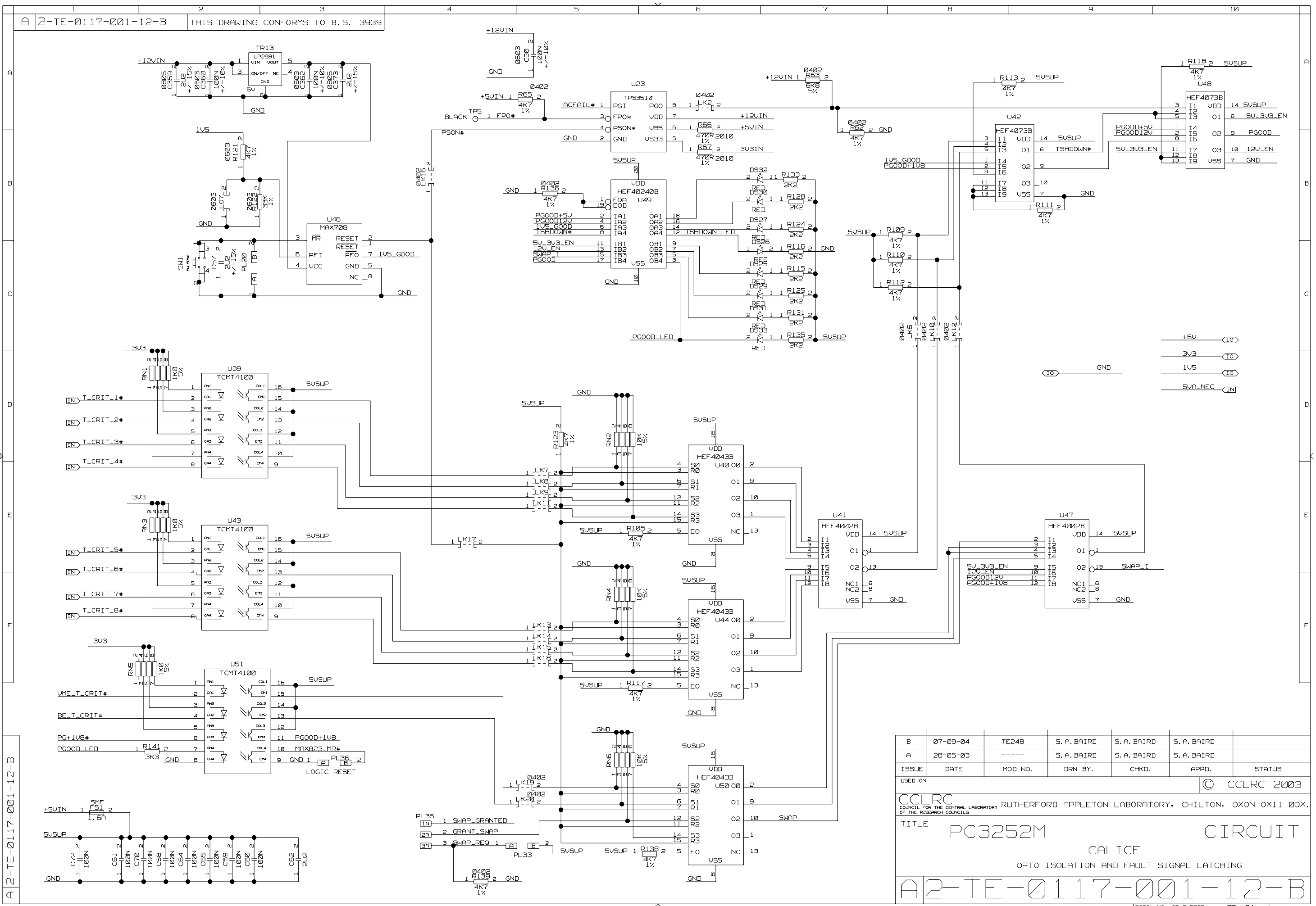
CCLRC COUNCIL FOR THE CENTRAL LABORATORY RUTHERFORD APPLETON LABORATORY, CHILTON, OXON OX11 0QX.
OF THE RESEARCH COUNCILS

TITLE **PC3252M** **CIRCUIT**
CALICE
J1 UME INTERFACE

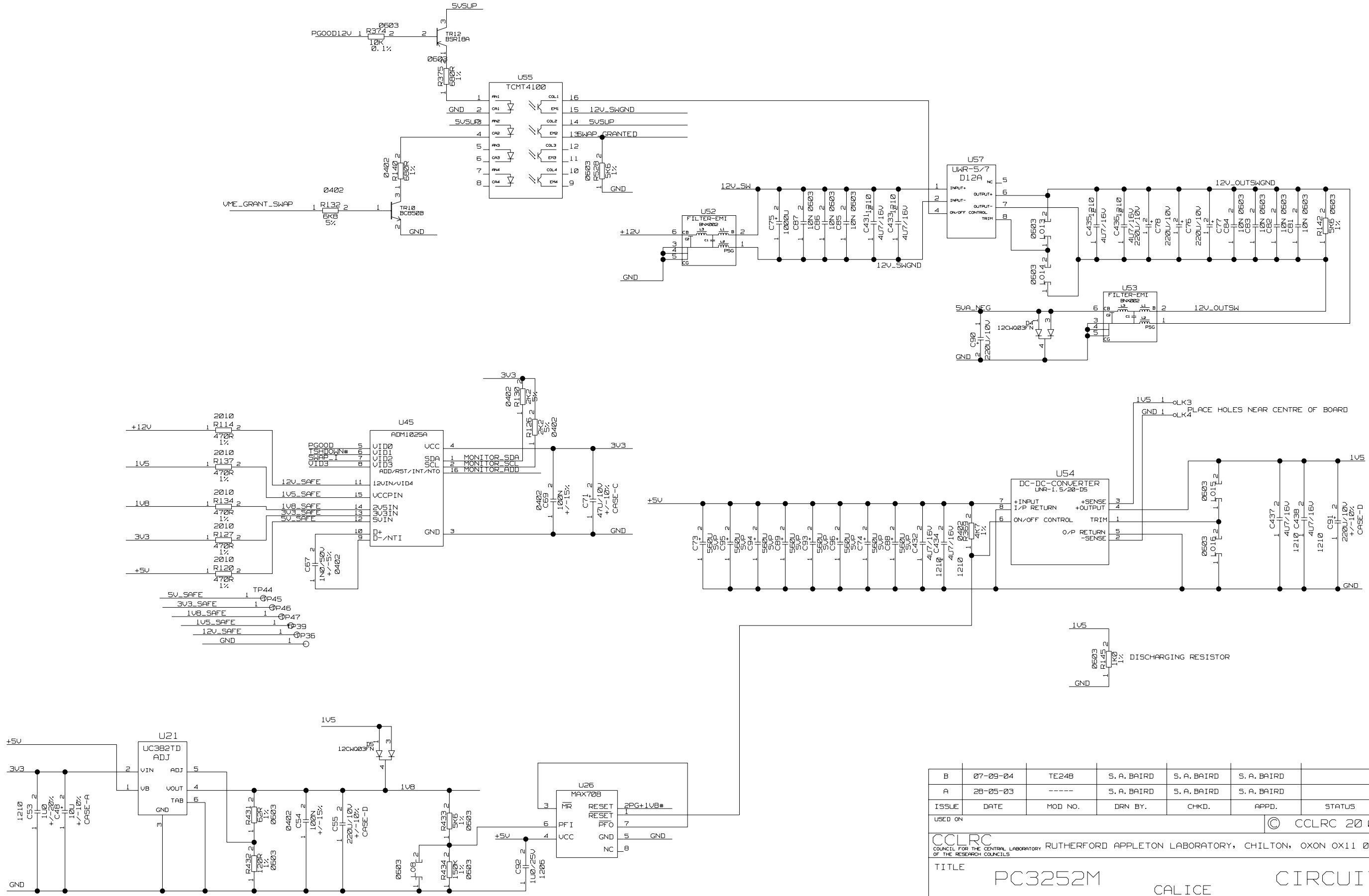


ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS
B	07-09-04	TE248	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
A	28-05-03	----	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	

USED ON	© CCLRC 20 03
CCLRC COUNCIL FOR THE CENTRAL LABORATORY OF THE RESEARCH COUNCILS	RUTHERFORD APPLETON LABORATORY, CHILTON, OXON OX11 0QX.
TITLE	PC3252M CIRCUIT
CALICE CONNECTORS	



B	07-09-04	TE248	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
A	28-05-03	----	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS
USED ON						© CCLRC 2003
CCLRC COUNCIL FOR THE CENTRAL LABORATORY OF THE RESEARCH COUNCILS						
RUTHERFORD APPLETON LABORATORY, CHILTON, OXON OX11 0QX.						
TITLE			PC3252M			
			CIRCUIT			
			CALICE			
			OPTO ISOLATION AND FAULT SIGNAL LATCHING			
A2-TE-0117-001-12-B						
TOTAL NO. OF SHEETS						B7 (24)



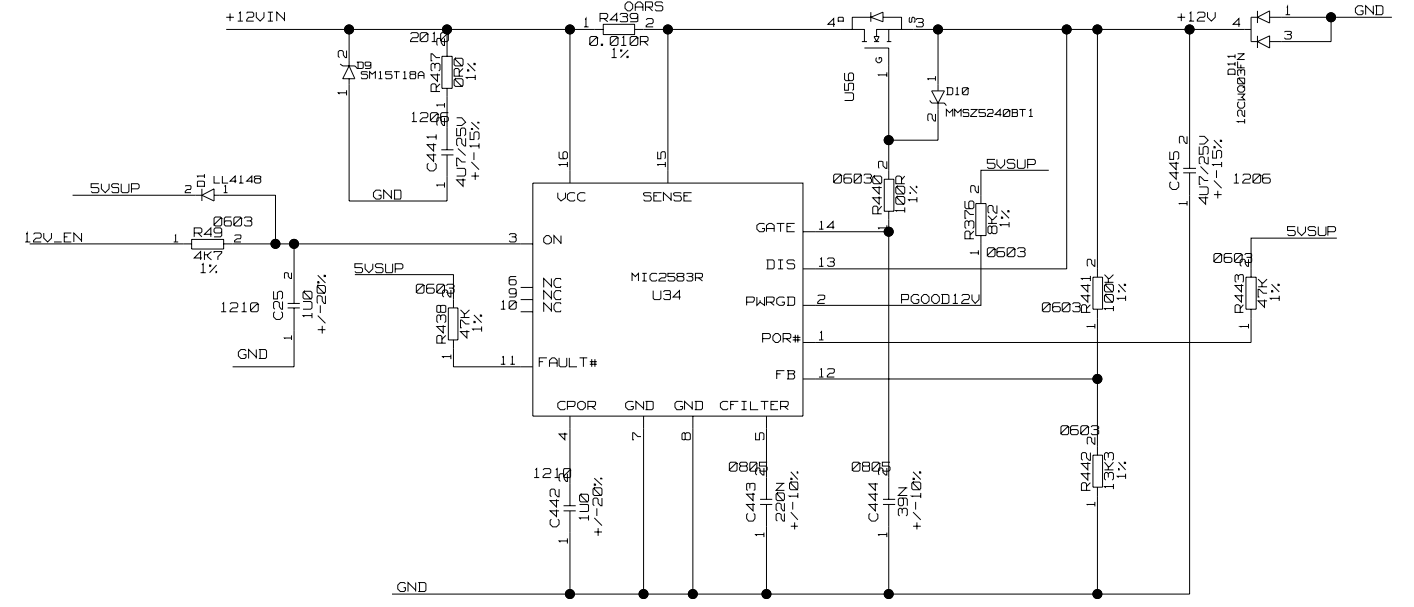
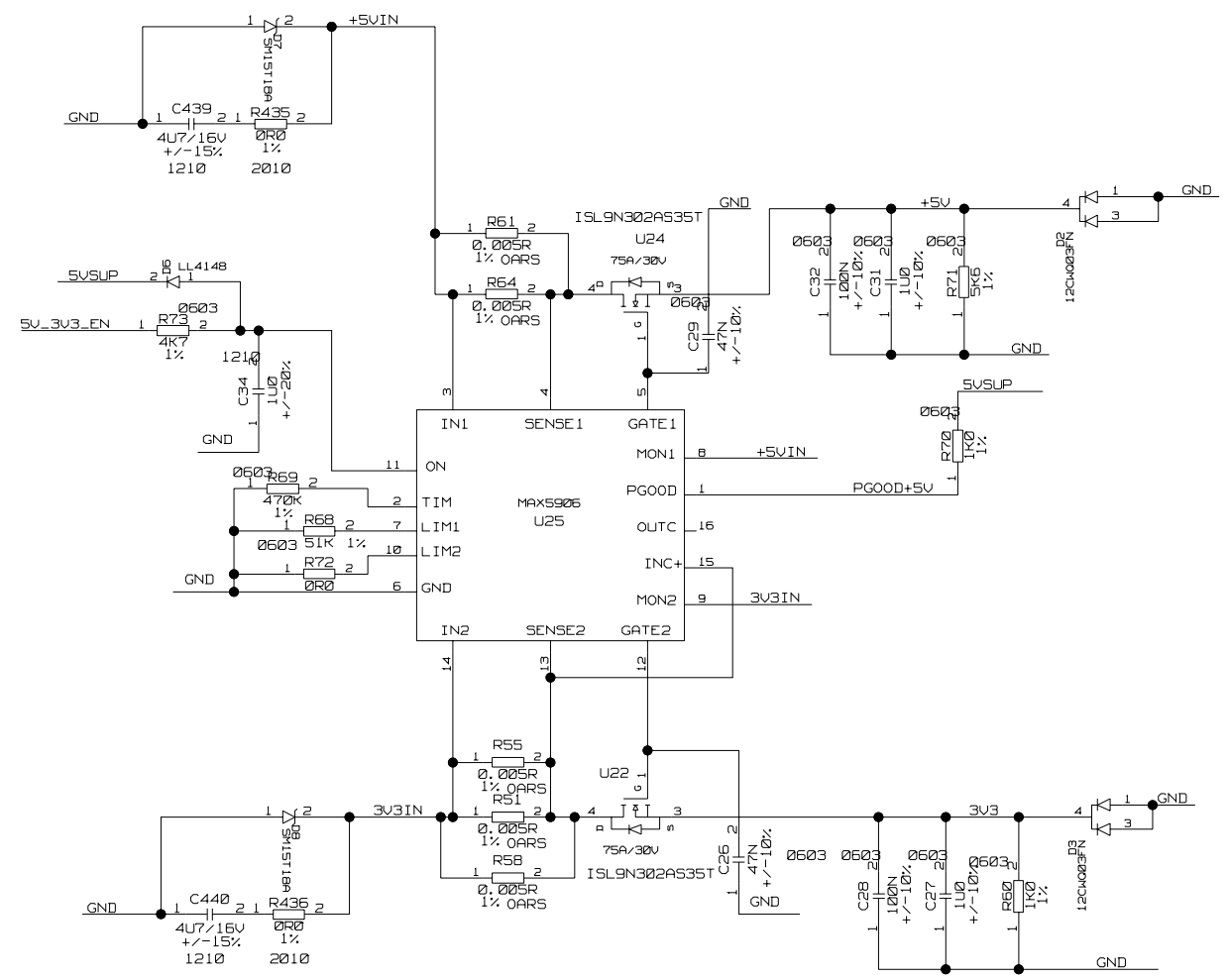
CONSULT DATA SHEET BEFORE CHANGING CAPACITORS

B	07-09-04	TE24B	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
A	28-05-03	----	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS

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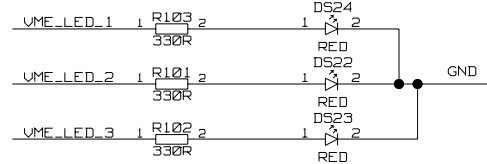
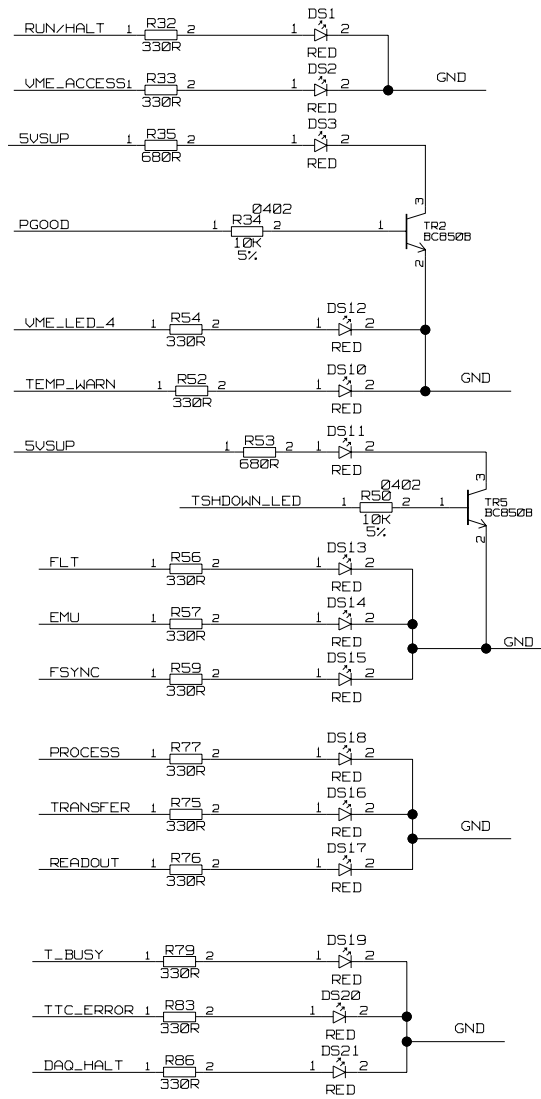
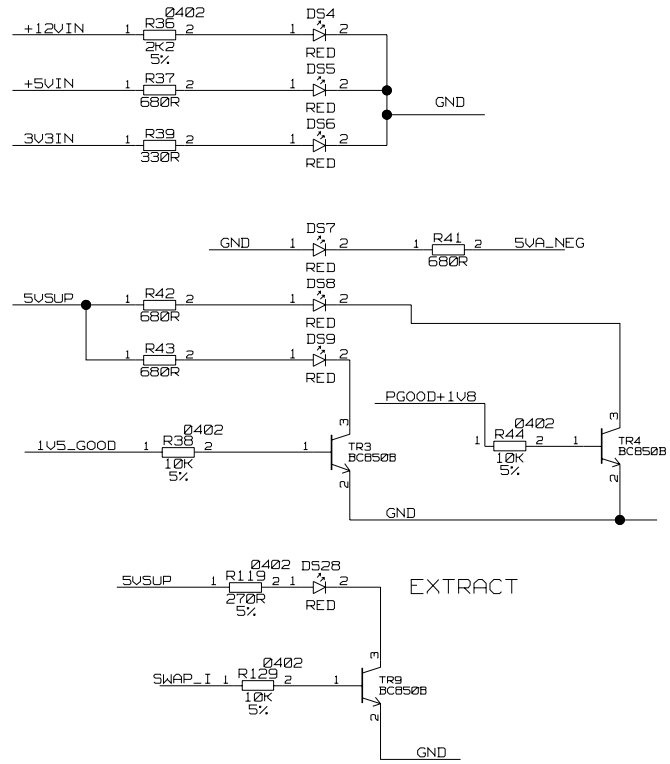
CCLRC COUNCIL FOR THE CENTRAL LABORATORY RUTHERFORD APPLETON LABORATORY, CHILTON, OXON OX11 0QX. OF THE RESEARCH COUNCILS

TITLE PC3252M CALICE CIRCUIT
DC-DC CONVERTERS AND MONITORING



B	07-09-04	TE248	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
A	28-05-03	----	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS

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 CCLRC COUNCIL FOR THE CENTRAL LABORATORY RUTHERFORD APPLETON LABORATORY, CHILTON, OXON OX11 0QX.
 OF THE RESEARCH COUNCILS
 TITLE PC3252M CIRCUIT
 CALICE
 ELECTRONIC POWER SUPPLY PROTECTION

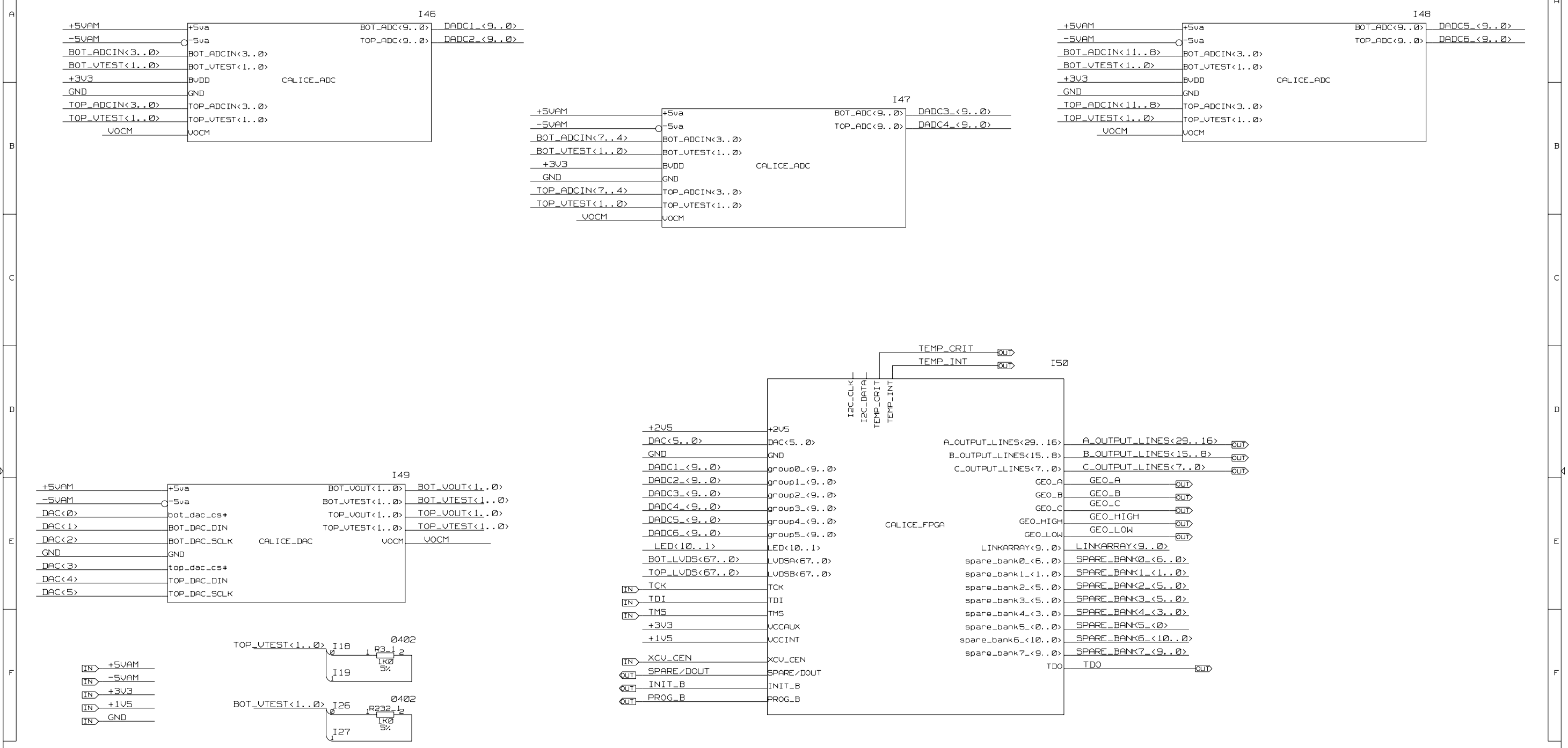


B	07-09-04	TE248	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
A	28-05-03	----	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS

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CCLRC COUNCIL FOR THE CENTRAL LABORATORY OF THE RESEARCH COUNCILS RUTHERFORD APPLETON LABORATORY, CHILTON, OXON OX11 0QX.

TITLE PC3252M CIRCUIT
CALICE
FRONT PANEL DISPLAY



B	07-09-04	TE248	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
A	26-08-03	-----	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS

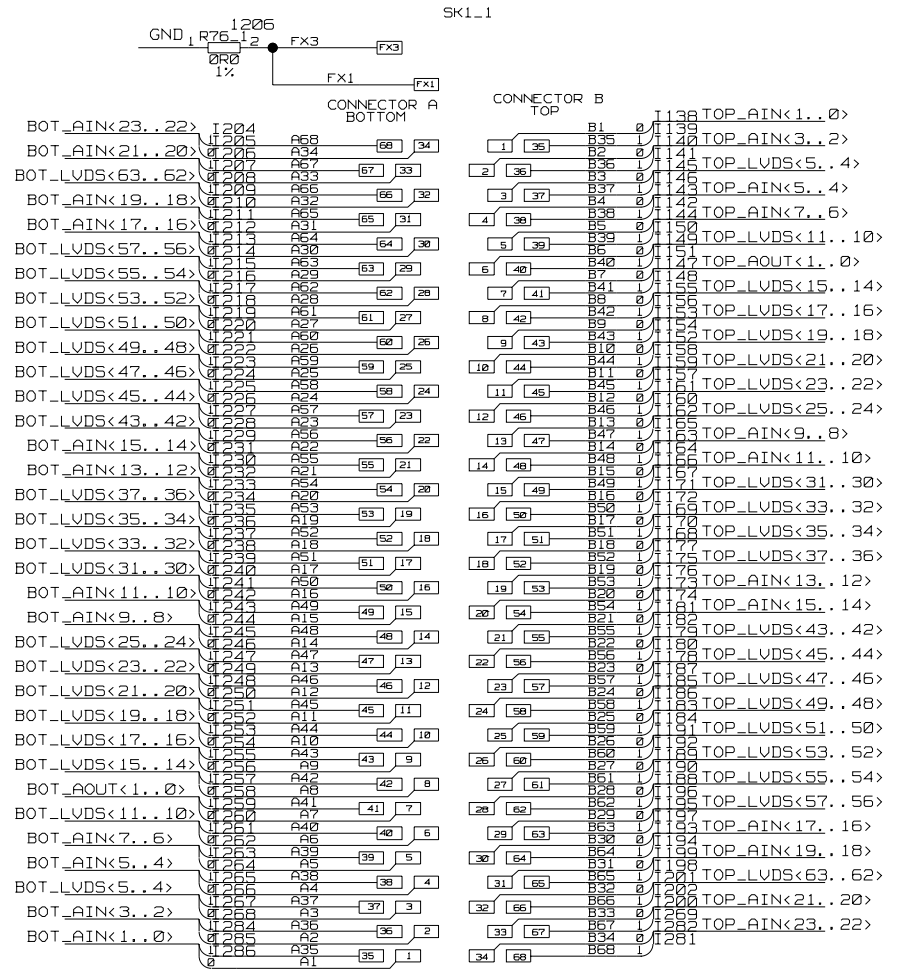
USED ON _____ © CCLRC 2003

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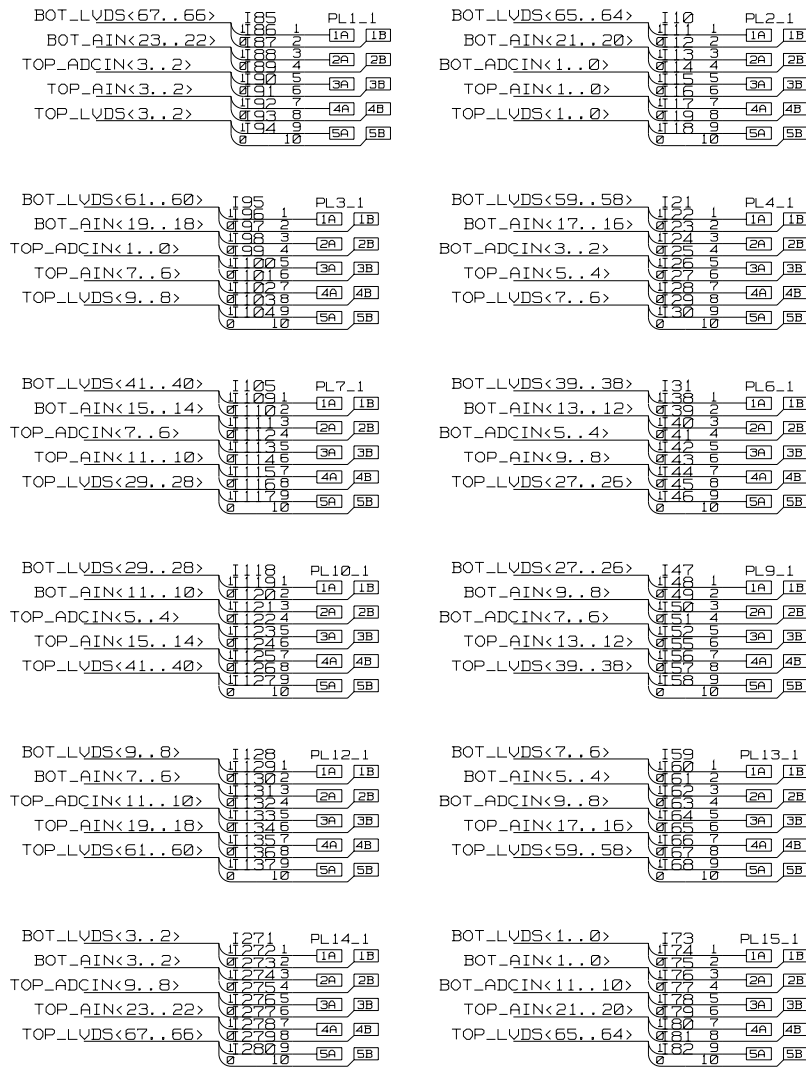
RUTHERFORD APPLETON LABORATORY, CHILTON, OXON OX11 0QX.

TITLE **PC3252M** **CIRCUIT**
CALICE
 FRONT END CHANNEL - TOP LEVEL

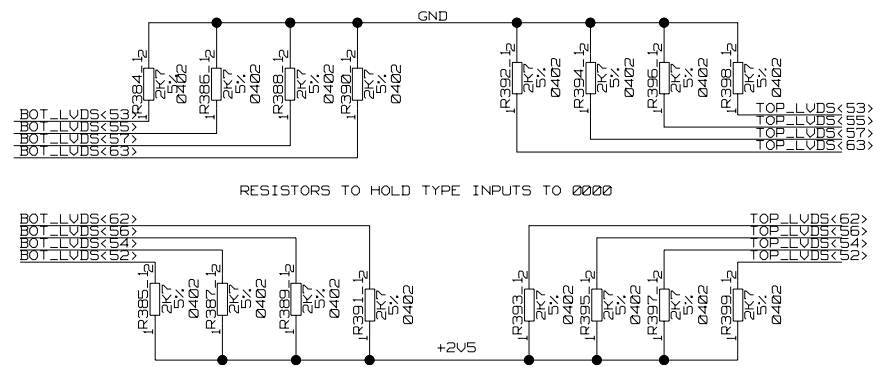
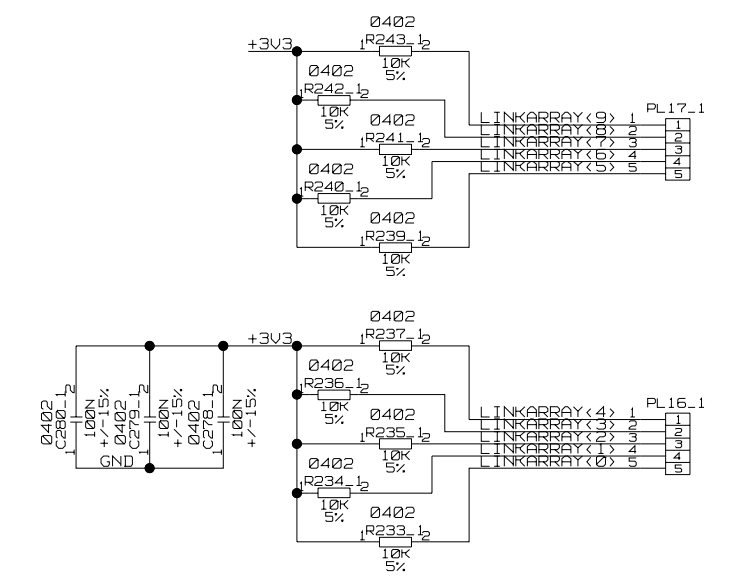
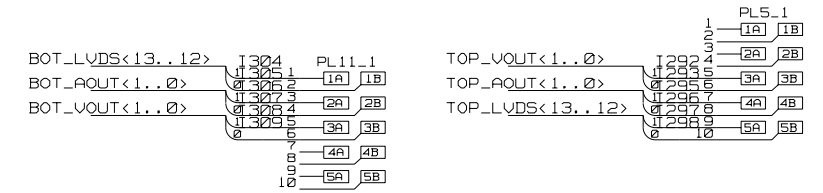
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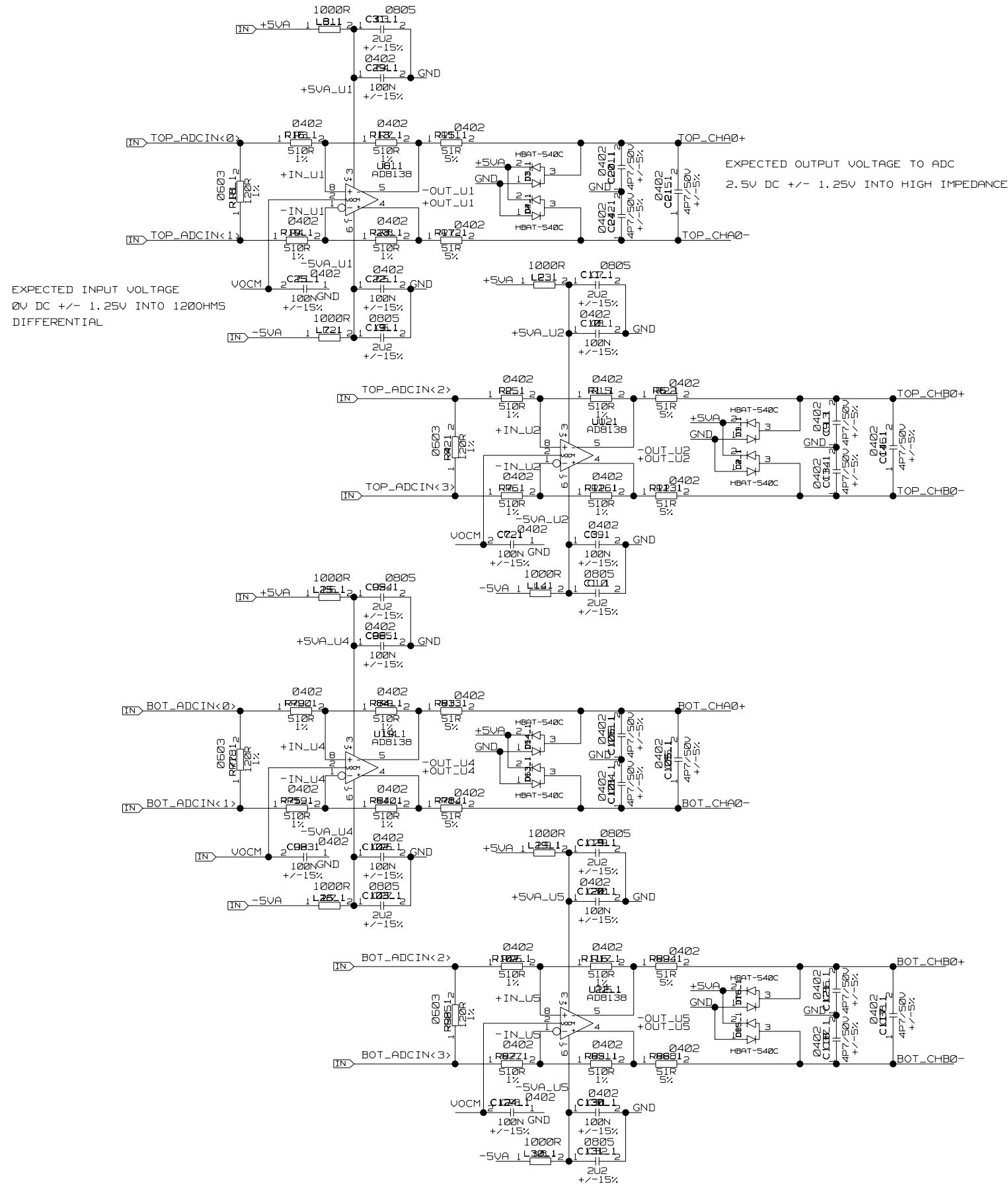
ANALOGUE INPUT SIGNALS



ANALOGUE OUTPUT SIGNALS

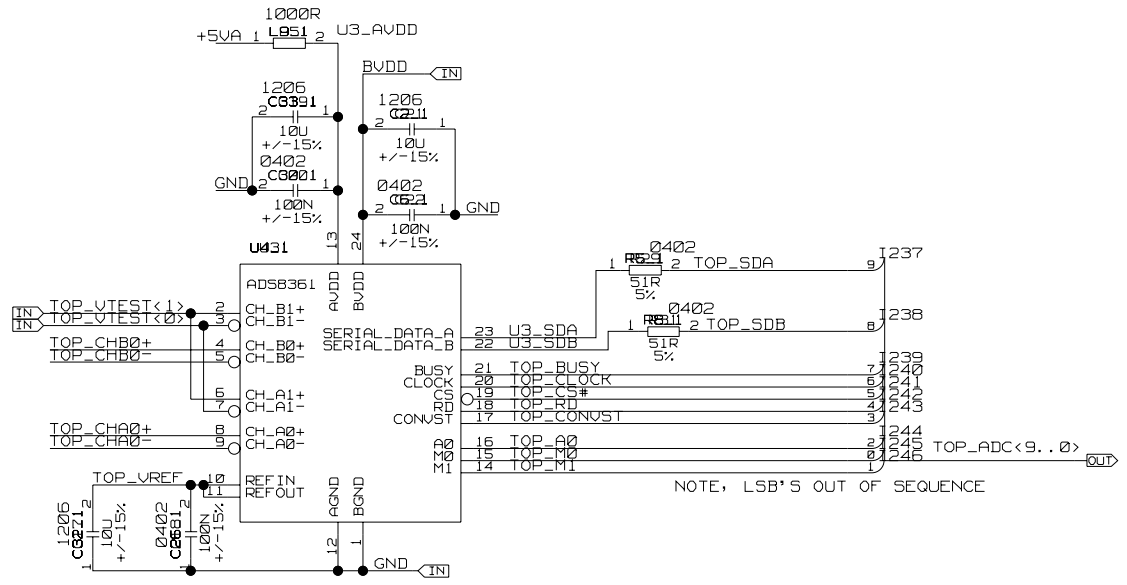


B	07-09-04	TE248	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
A	26-08-03	-----	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS
USED ON						© CCLRC 2003
CCLRC COUNCIL FOR THE CENTRAL LABORATORY RUTHERFORD APPLETON LABORATORY, CHILTON, OXON OX11 0QX. OF THE RESEARCH COUNCILS						
TITLE			PC3252M		CIRCUIT	
			CALICE			
			SCSI CONNECTOR AND SELECTION JUMPERS			
A2-TE-0117-001<17>B						

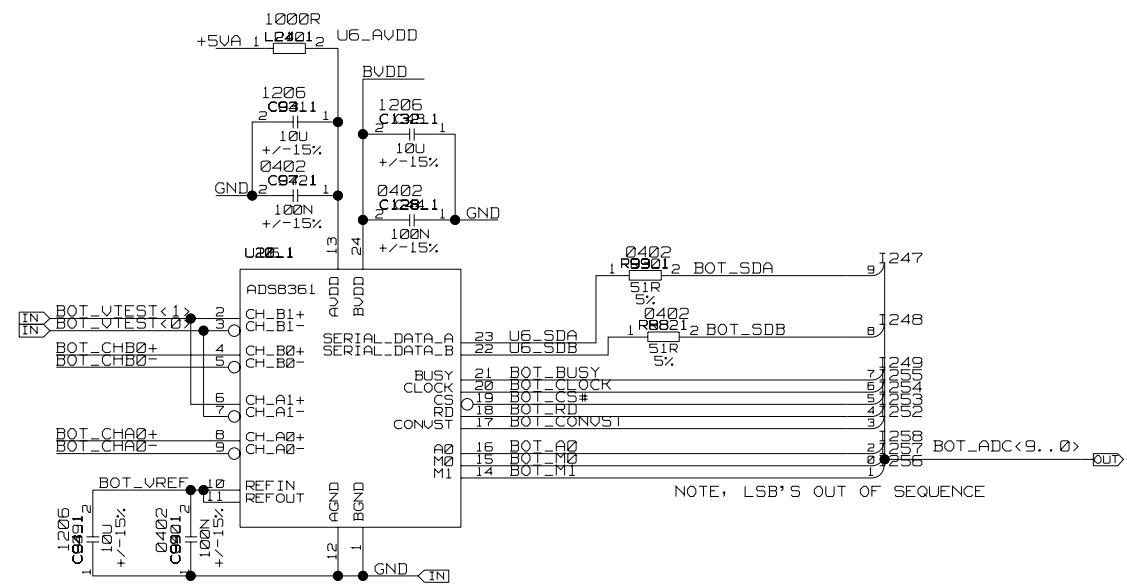


EXPECTED INPUT VOLTAGE
0V DC +/- 1.25V INTO 120OHMS
DIFFERENTIAL

EXPECTED OUTPUT VOLTAGE TO ADC
2.5V DC +/- 1.25V INTO HIGH IMPEDANCE



NOTE, LSB'S OUT OF SEQUENCE

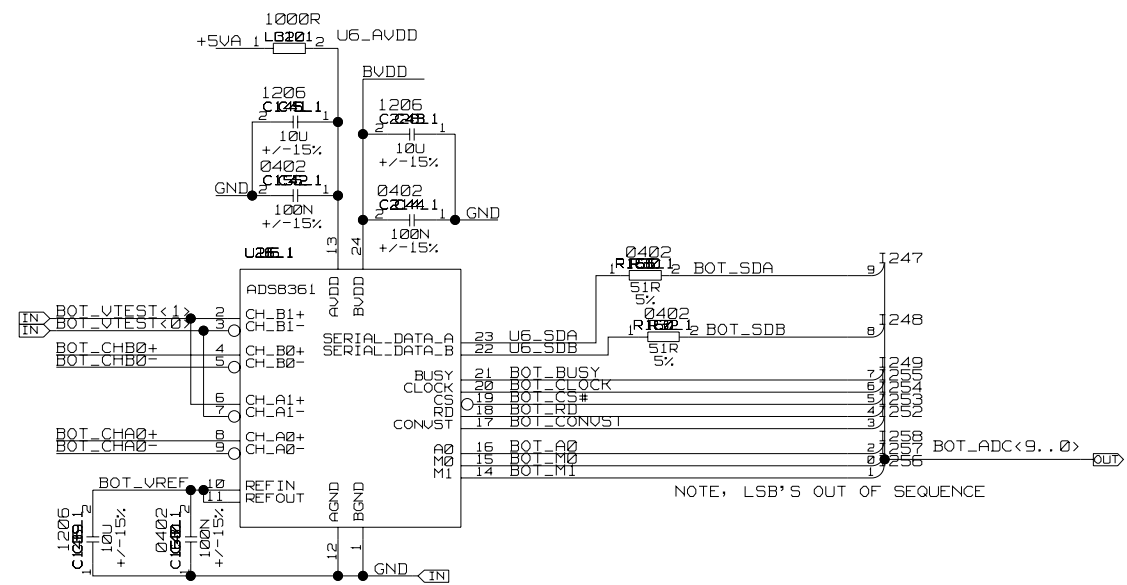
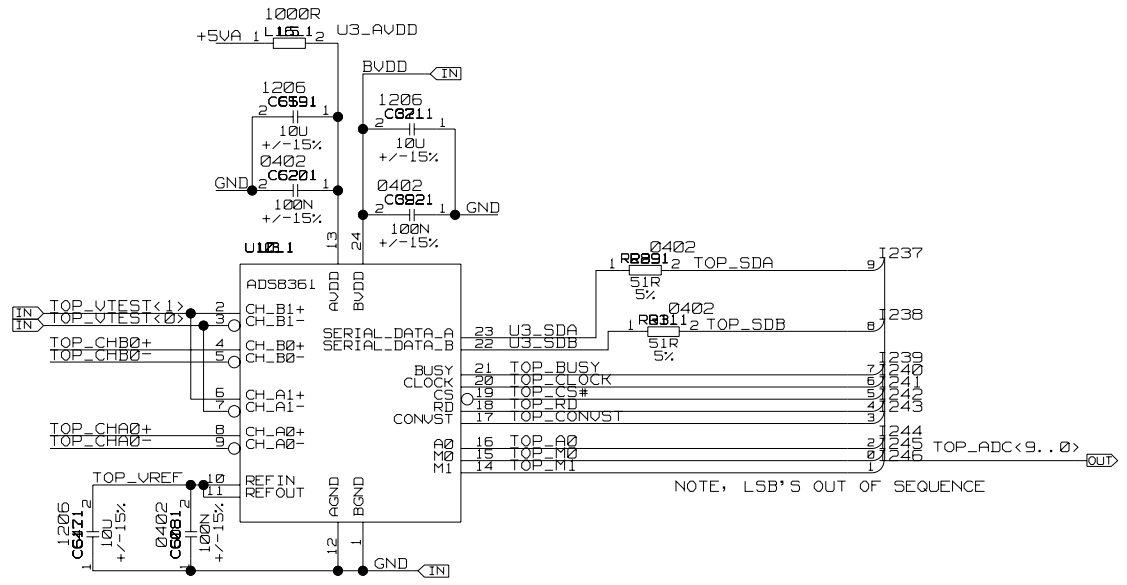
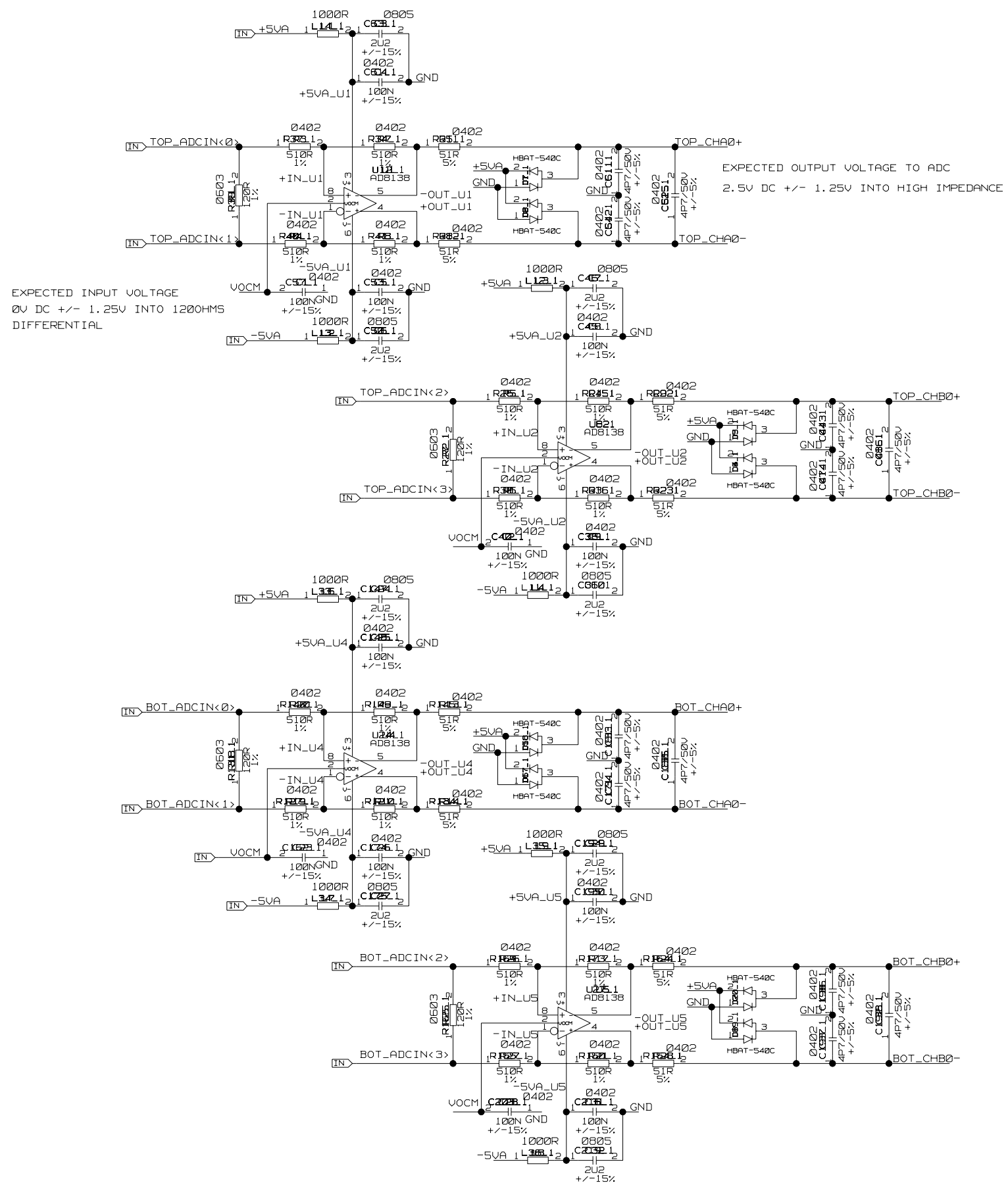


NOTE, LSB'S OUT OF SEQUENCE

B	07-09-04	TE248	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
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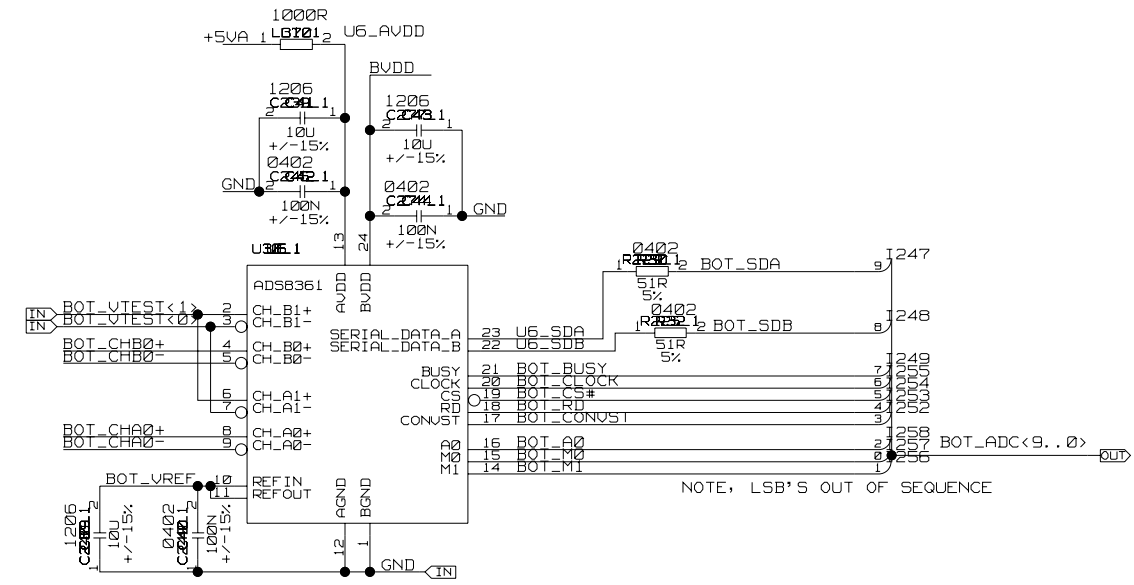
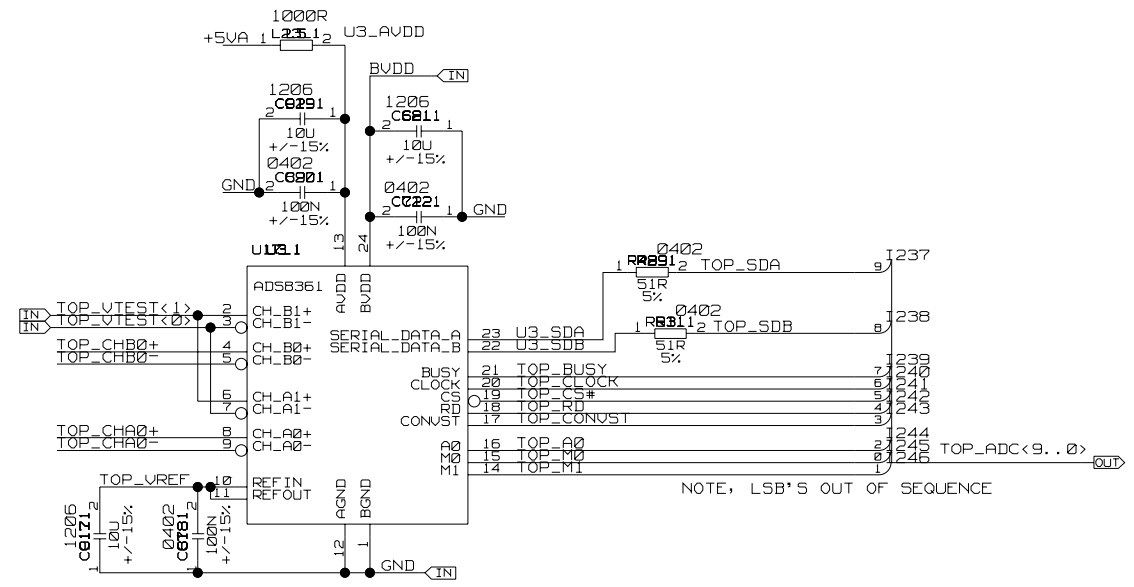
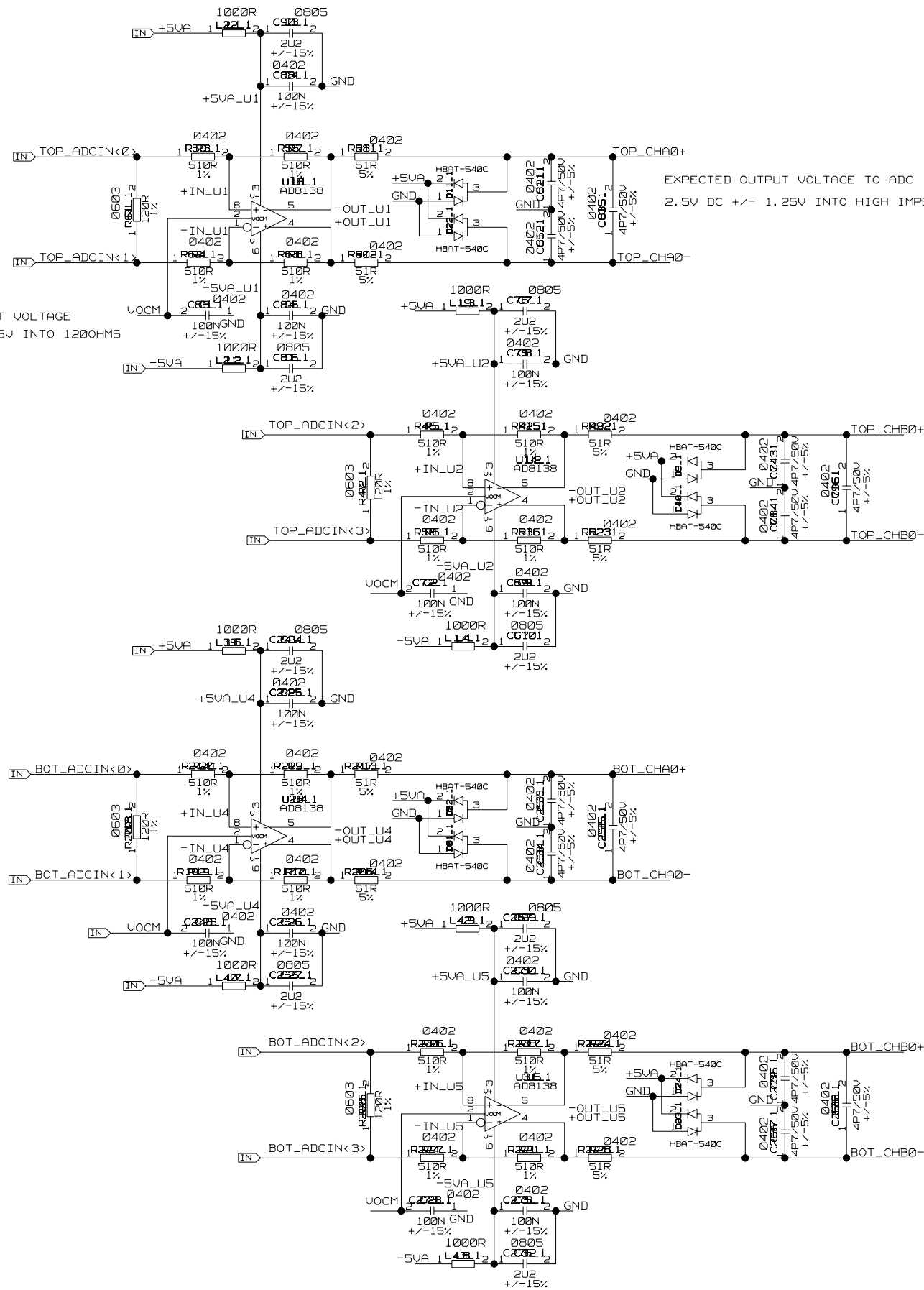
TITLE PC3252M CALICE CIRCUIT
CALICE ADC DESIGN



B	07-09-04	TE248	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
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TITLE PC3252M CALICE CALICE ADC DESIGN CIRCUIT						
A2-TE-0117-001<18>B						

EXPECTED INPUT VOLTAGE
0V DC +/- 1.25V INTO 120OHMS
DIFFERENTIAL

EXPECTED OUTPUT VOLTAGE TO ADC
2.5V DC +/- 1.25V INTO HIGH IMPEDANCE



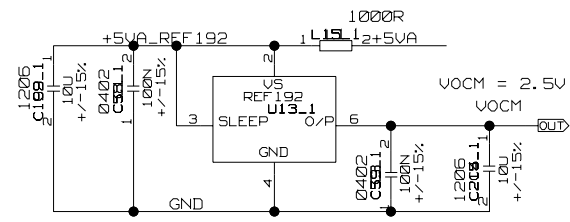
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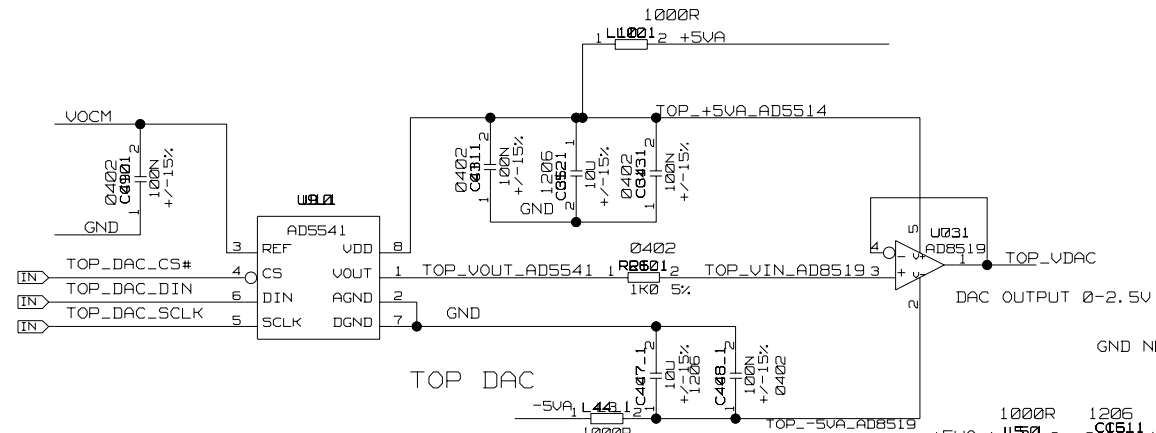
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TITLE PC3252M CALICE CIRCUIT
CALICE ADC DESIGN

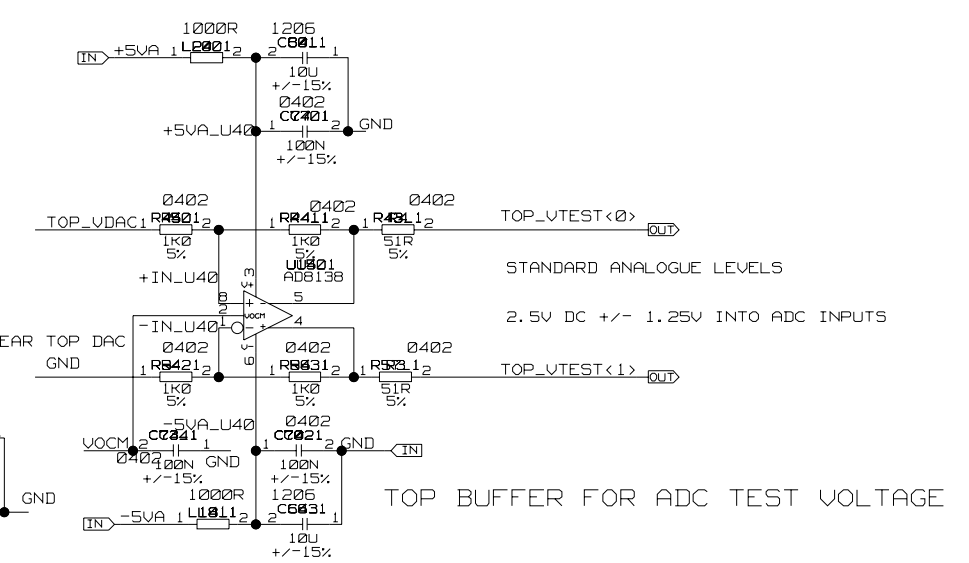
VOLTAGE REFERENCE



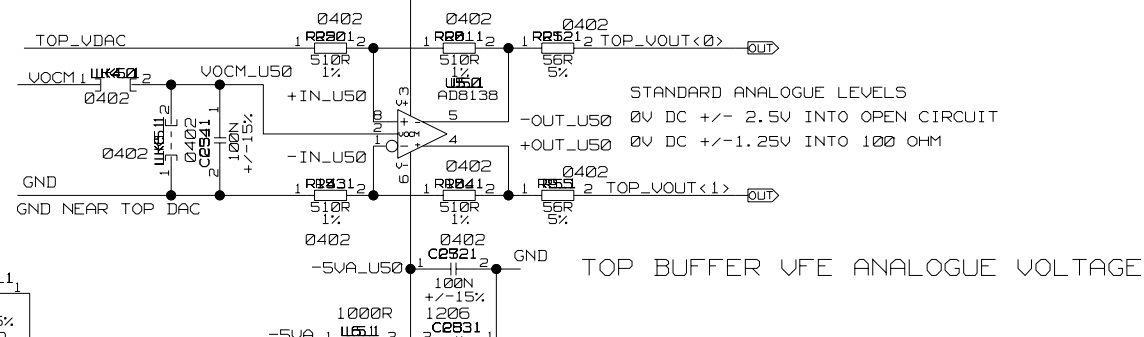
TOP DAC



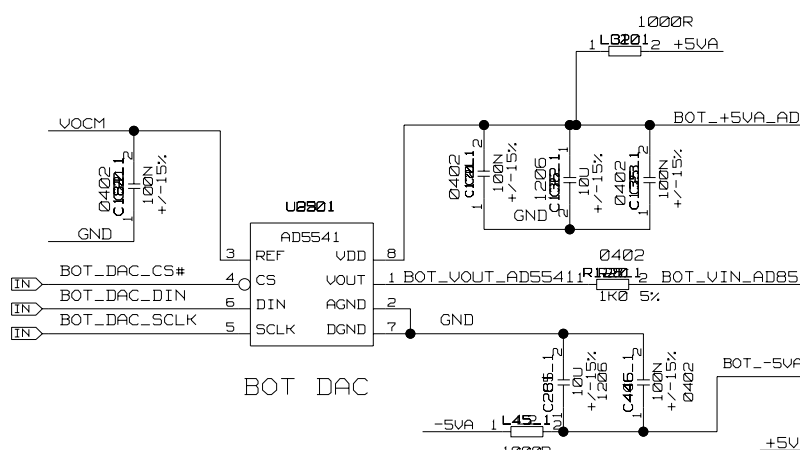
TOP BUFFER FOR ADC TEST VOLTAGE



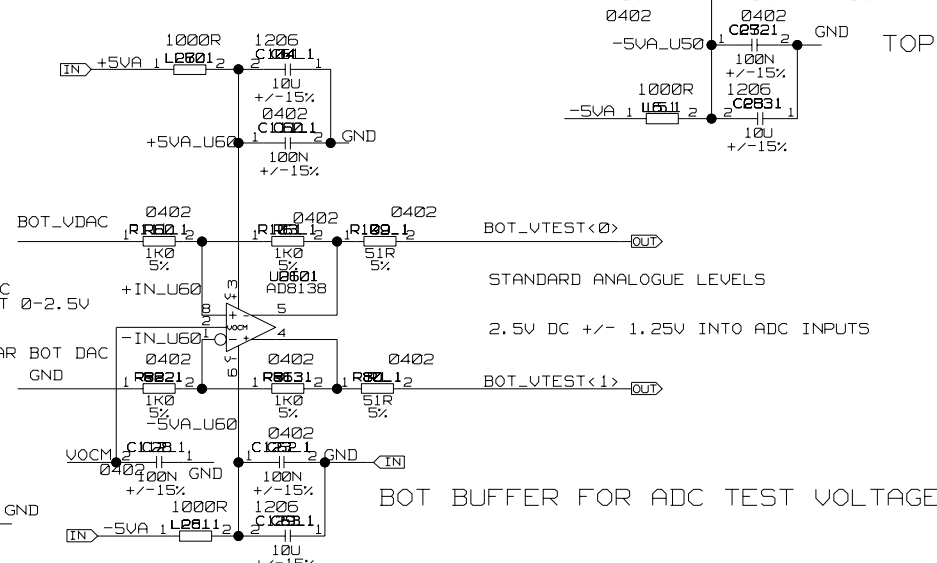
TOP BUFFER VFE ANALOGUE VOLTAGE



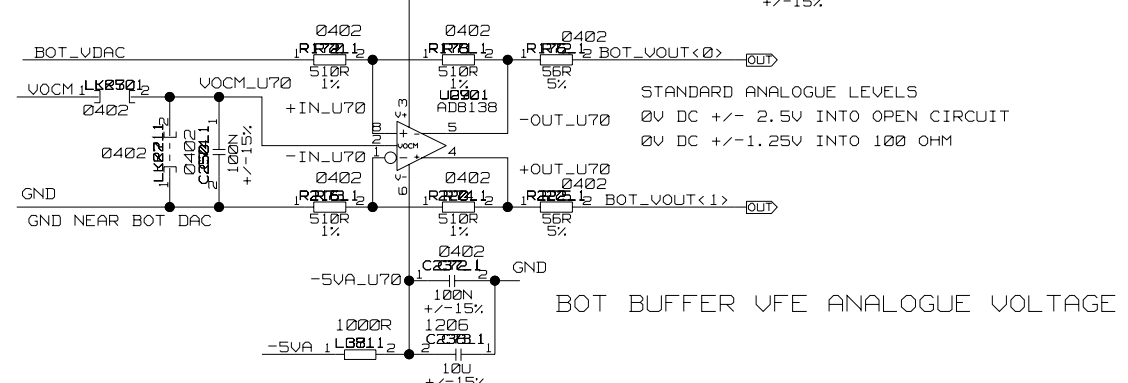
BOT DAC



BOT BUFFER FOR ADC TEST VOLTAGE



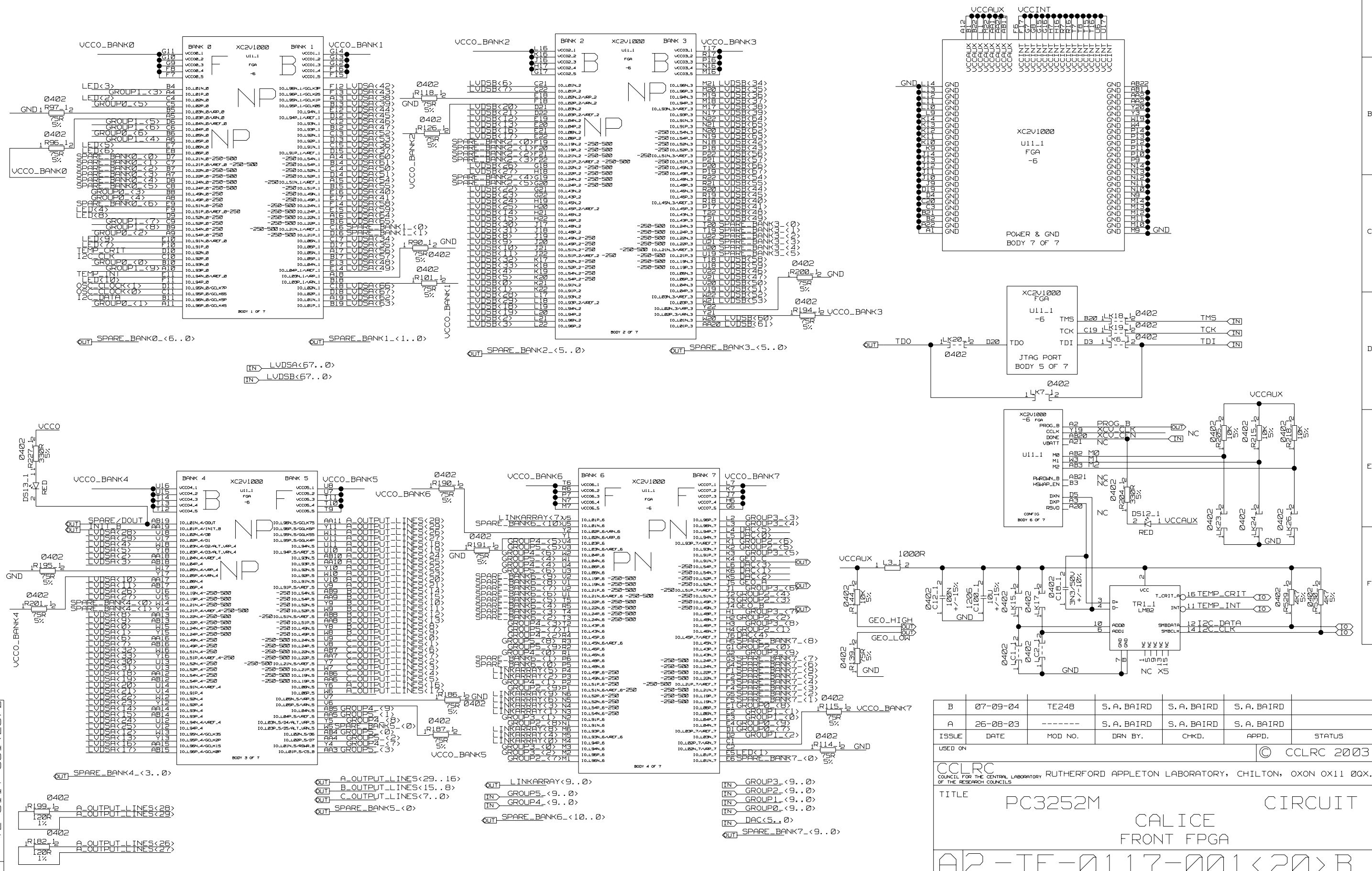
BOT BUFFER VFE ANALOGUE VOLTAGE



ALL RESISTORS SHOULD BE CHANGED TO 1% TOLERANCE

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 OF THE RESEARCH COUNCILS
 TITLE PC3252M CALICE CIRCUIT
 CALICE DAC DESIGN



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A	26-08-03	-----	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	

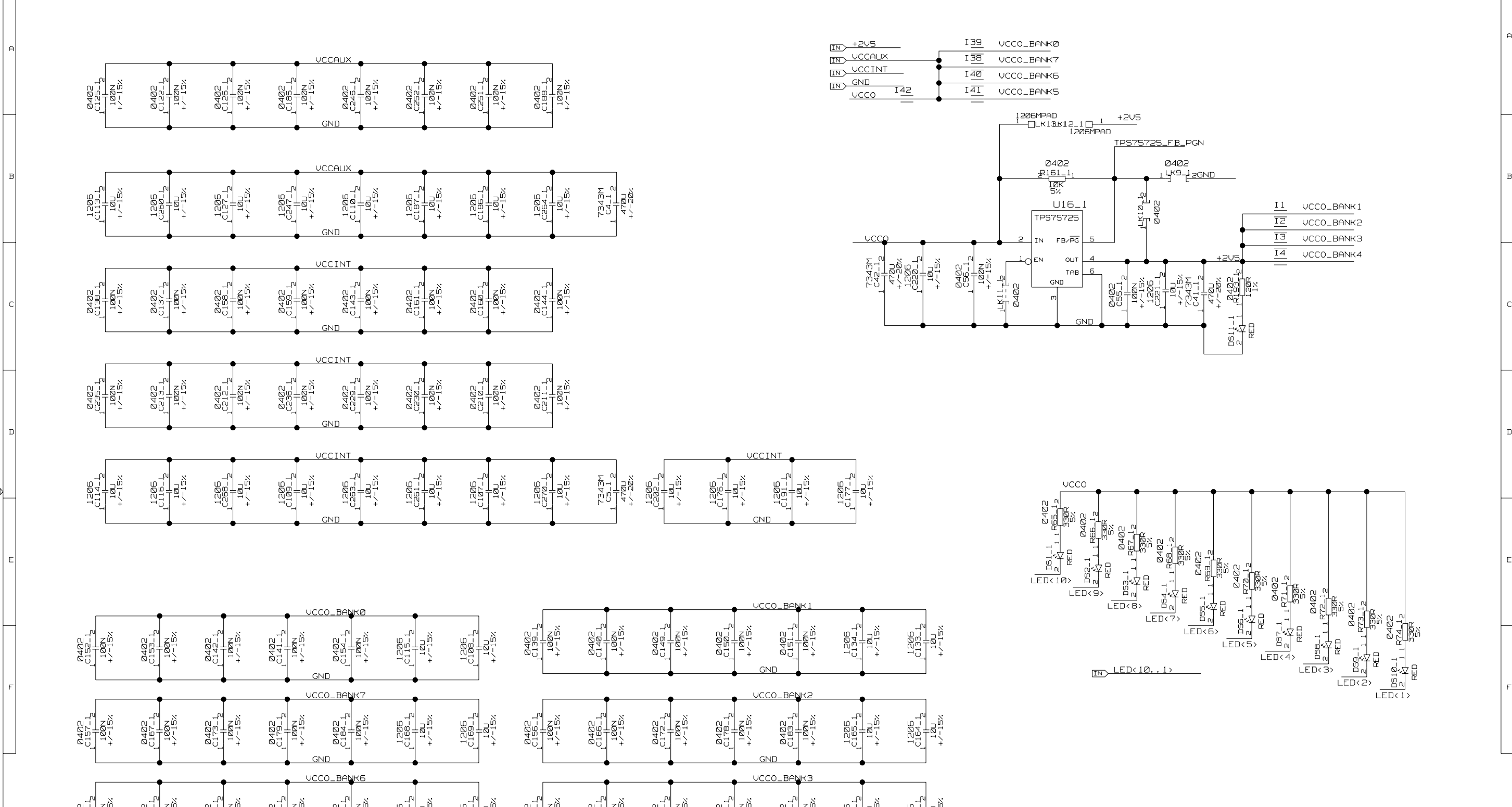
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OF THE RESEARCH COUNCILS

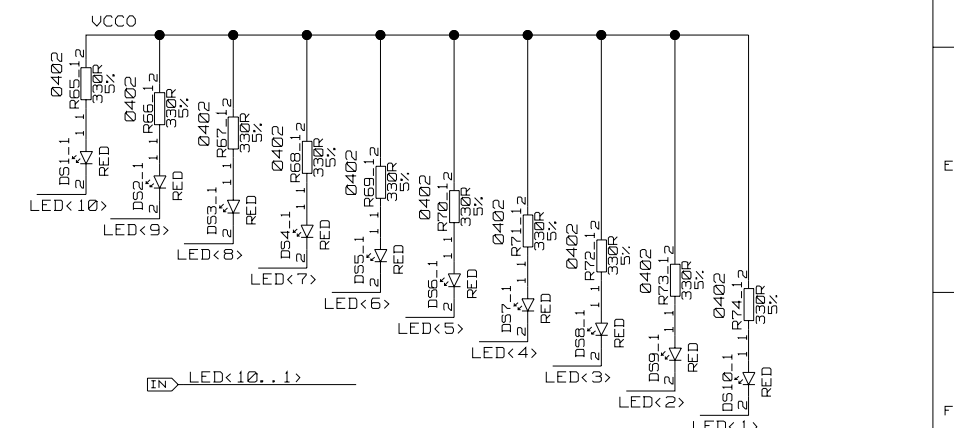
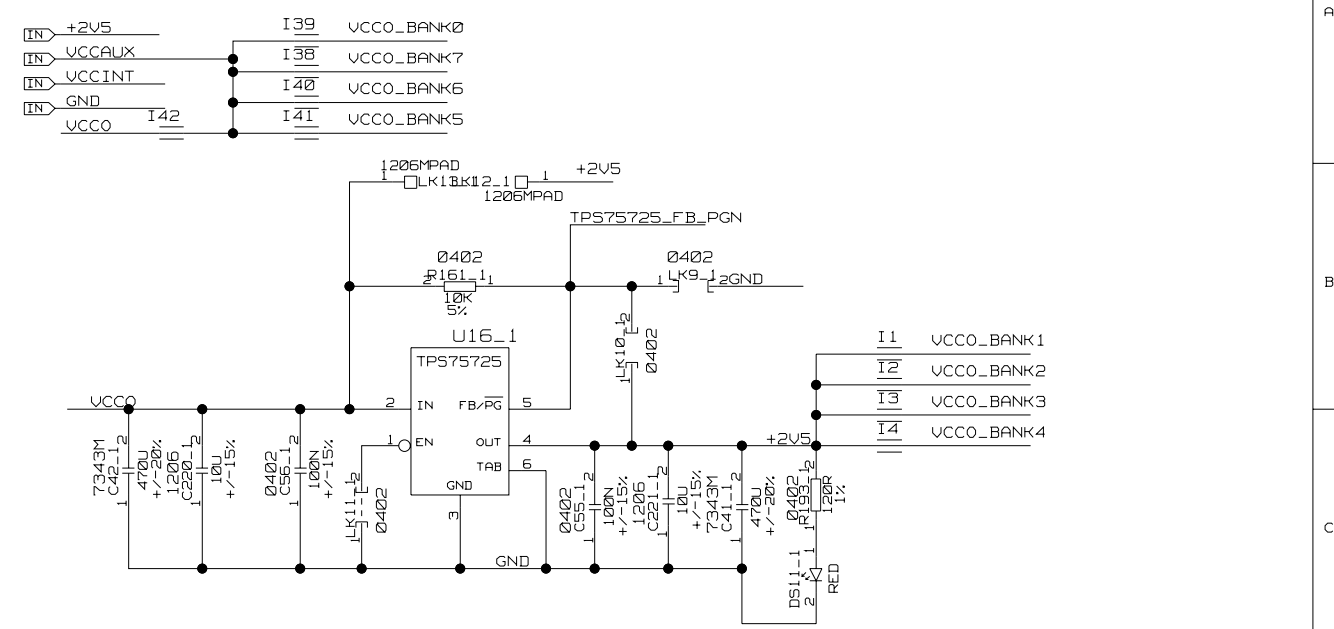
TITLE PC3252M CALICE FRONT FPGA CIRCUIT

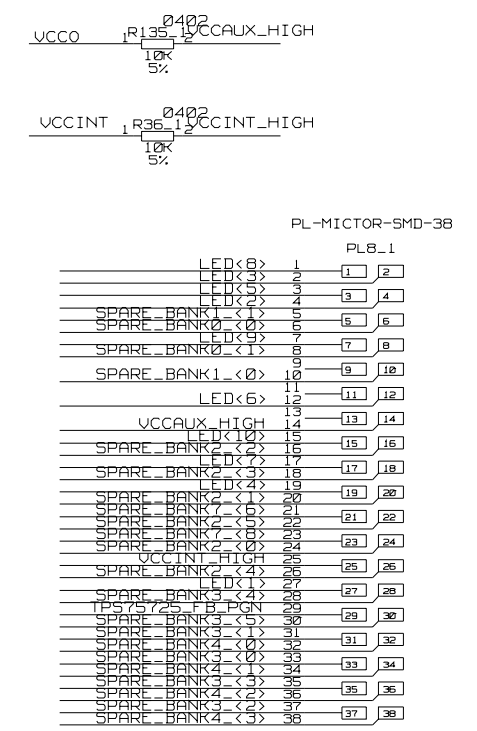
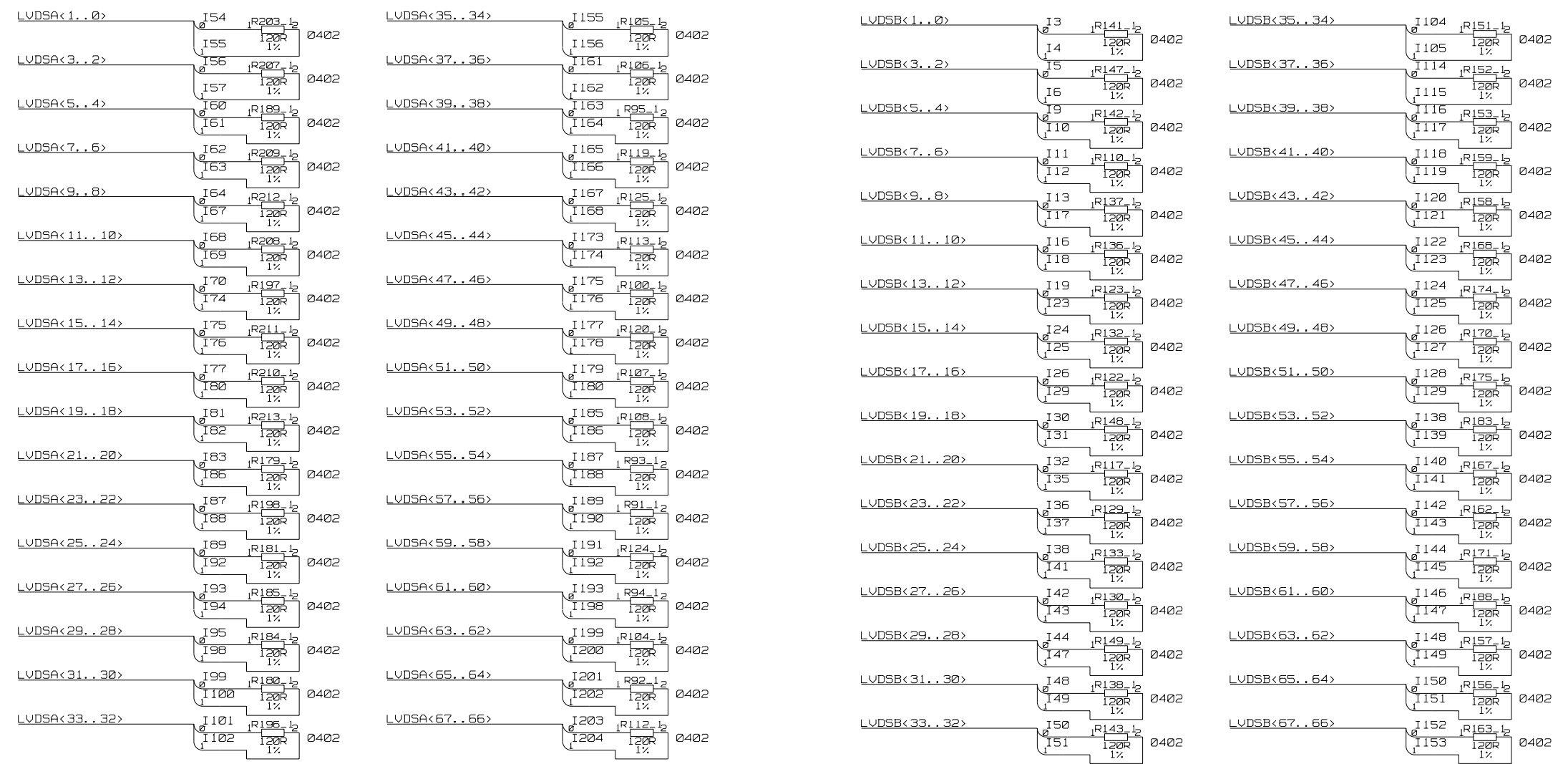
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TOTAL NO. OF SHEETS 87 <24>

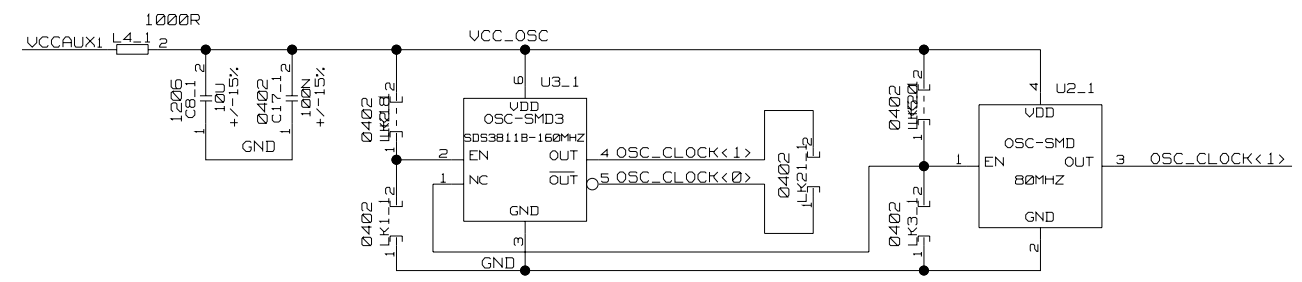


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	ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS
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TITLE				PC3252M			
				CALICE			
				FPGA DECOUPLING AND 2V5 LVDS VCCIO PSU			
A2-TE-0117-001<21>B							
							TOTAL NO. OF SHEETS 87<24>





DO NOT FIT



DO NOT FIT

DO NOT FIT

B	07-09-04	TE248	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
A	26-08-03	-----	S. A. BAIRD	S. A. BAIRD	S. A. BAIRD	
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TITLE			PC3252M CALICE LVDS TERMINATIONS			
A2-TE-0117-001<22>B						
TOTAL NO. OF SHEETS 87 <24>						