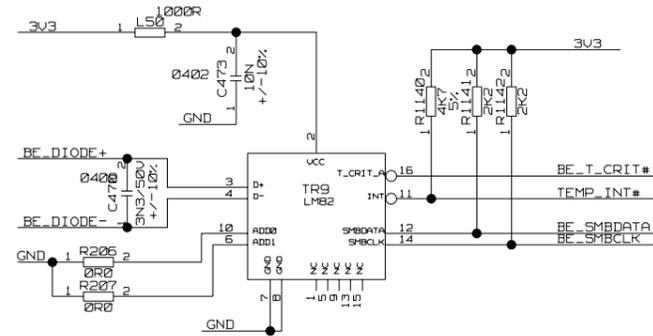
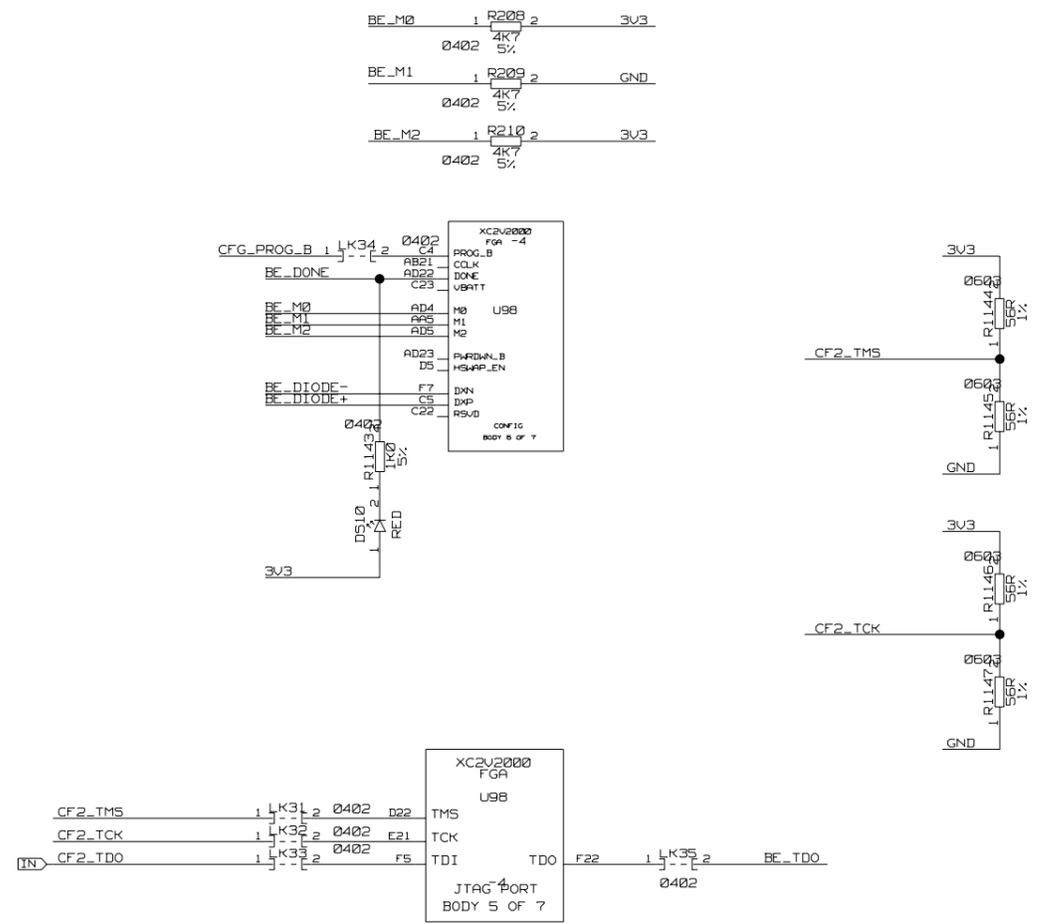
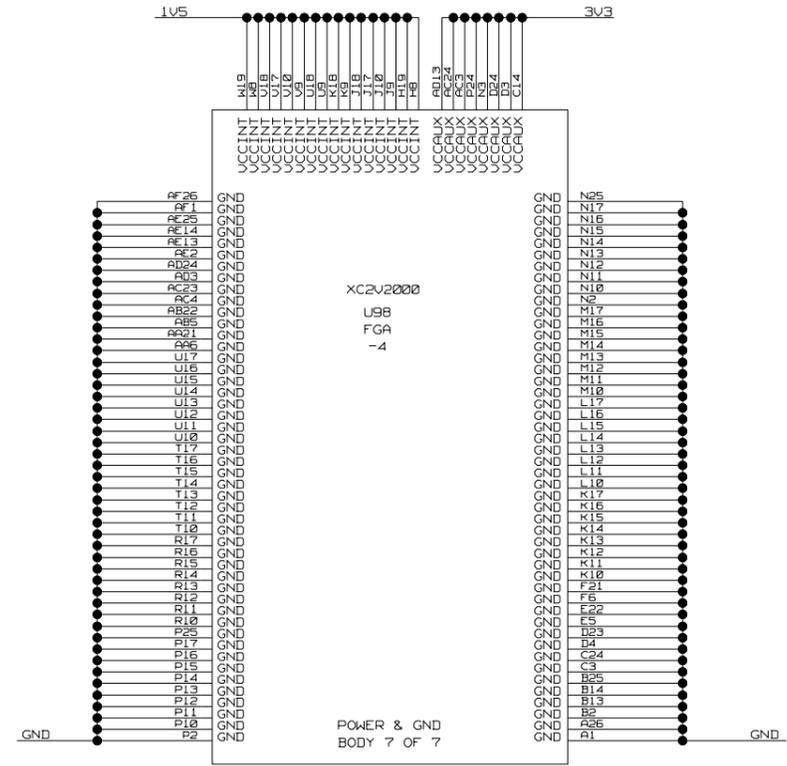
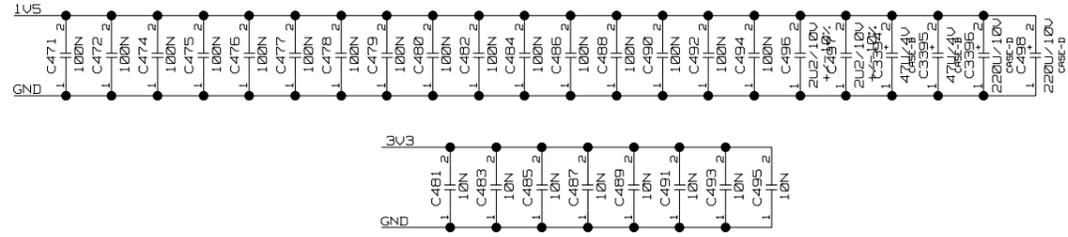




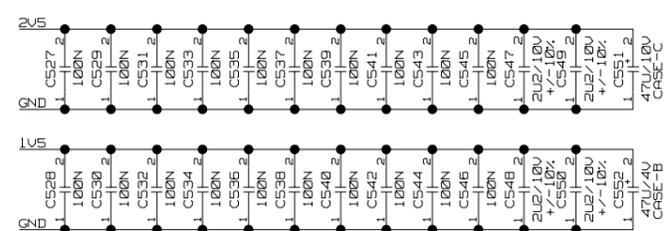
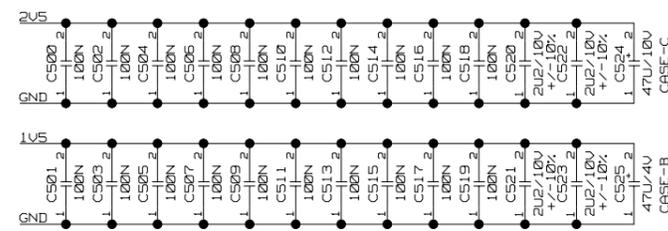
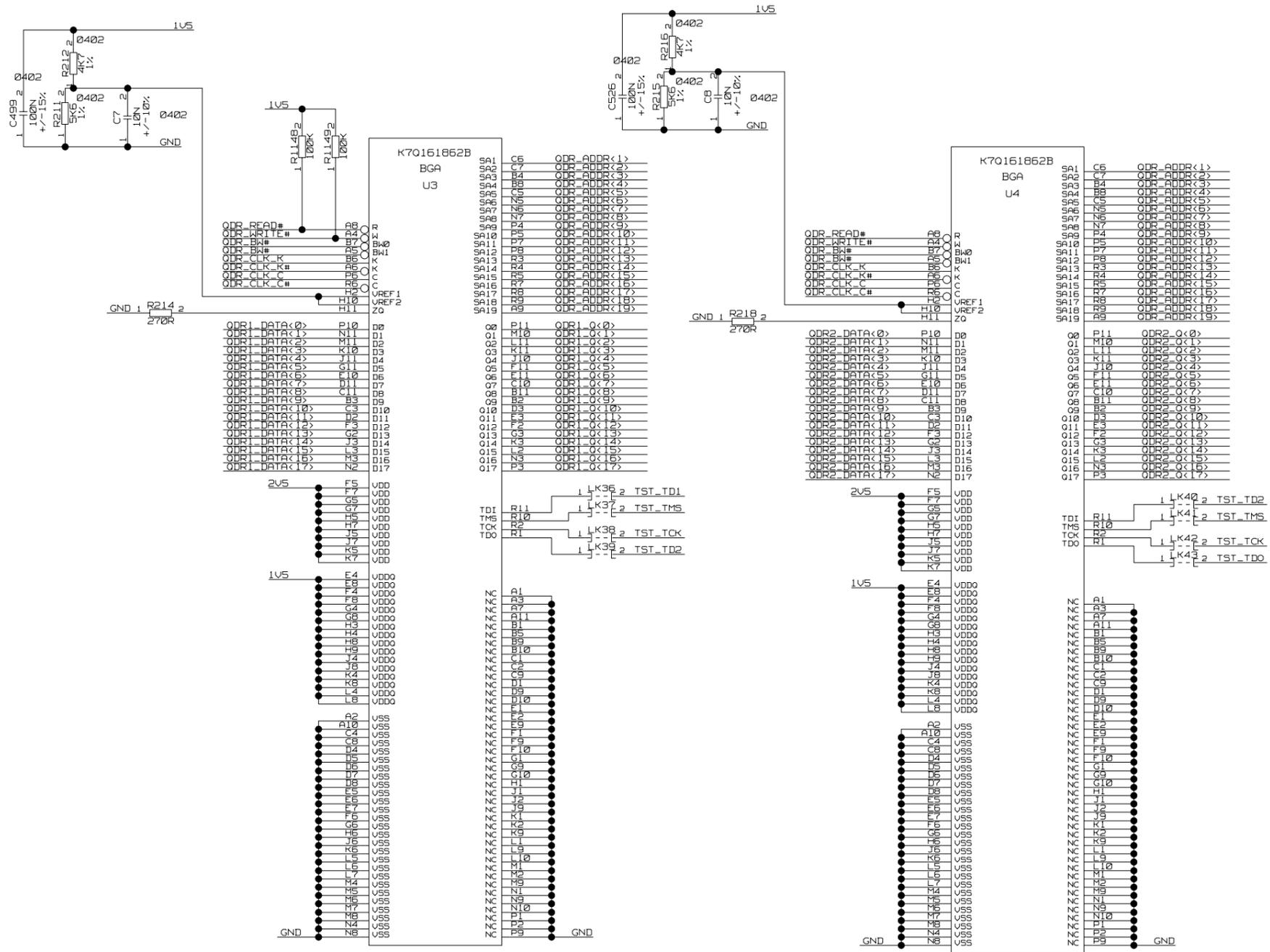
B	12-05-04	TE243	S. TAGHAVI	J. COUGHLAN	J. COUGHLAN	PROVISIONAL
A	13-11-02	----	S. TAGHAVIRAD	S. TAGHAVIRAD	S. TAGHAVIRAD	
ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS
USED ON				CMS		© CCLRC 2002
CCLRC COUNCIL FOR THE CENTRAL LABORATORY OF THE RESEARCH COUNCILS RUTHERFORD APPLETON LABORATORY, CHILTON, OXON OX11 0QX.						
TITLE			PC3205M		CIRCUIT	
CMS TRACKER FED TOP LEVEL						





B	12-05-04	TE243	S. TAGHAVI	J. COUGHLAN	J. COUGHLAN	PROVISIONAL
A	13-11-02	----	S. TAGHAVIRAD	S. TAGHAVIRAD	S. TAGHAVIRAD	
ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS
USED ON					CMS	© CCLRC 2002

CCLRC  
 COUNCIL FOR THE CENTRAL LABORATORY OF THE RESEARCH COUNCILS  
 RUTHERFORD APPLETON LABORATORY, CHILTON, OXON OX11 0QX.  
 TITLE PC3205M CIRCUIT  
 CMS TRACKER FED  
 BACK END FPGA

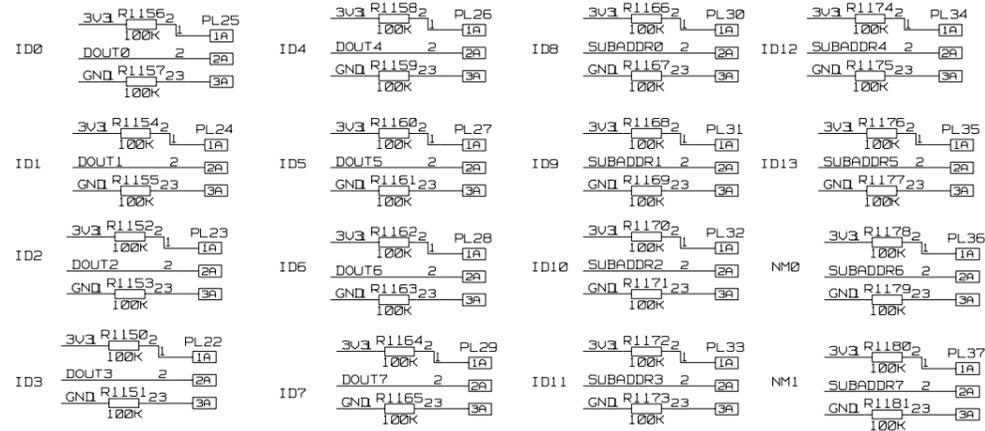


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A	13-11-02	----	S. TAGHAVIRAD	S. TAGHAVIRAD	S. TAGHAVIRAD	
ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS

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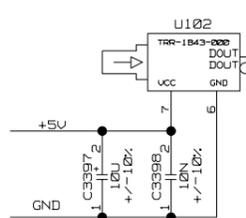
CCLRC COUNCIL FOR THE CENTRAL LABORATORY RUTHERFORD APPLETON LABORATORY, CHILTON, OXON OX11 0QX. OF THE RESEARCH COUNCILS

TITLE PC3205M CIRCUIT  
CMS TRACKER FED QDR MEMORY



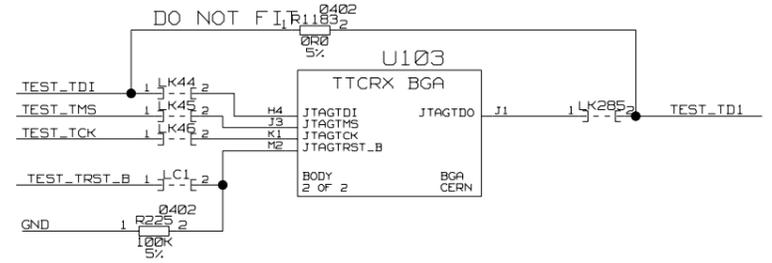
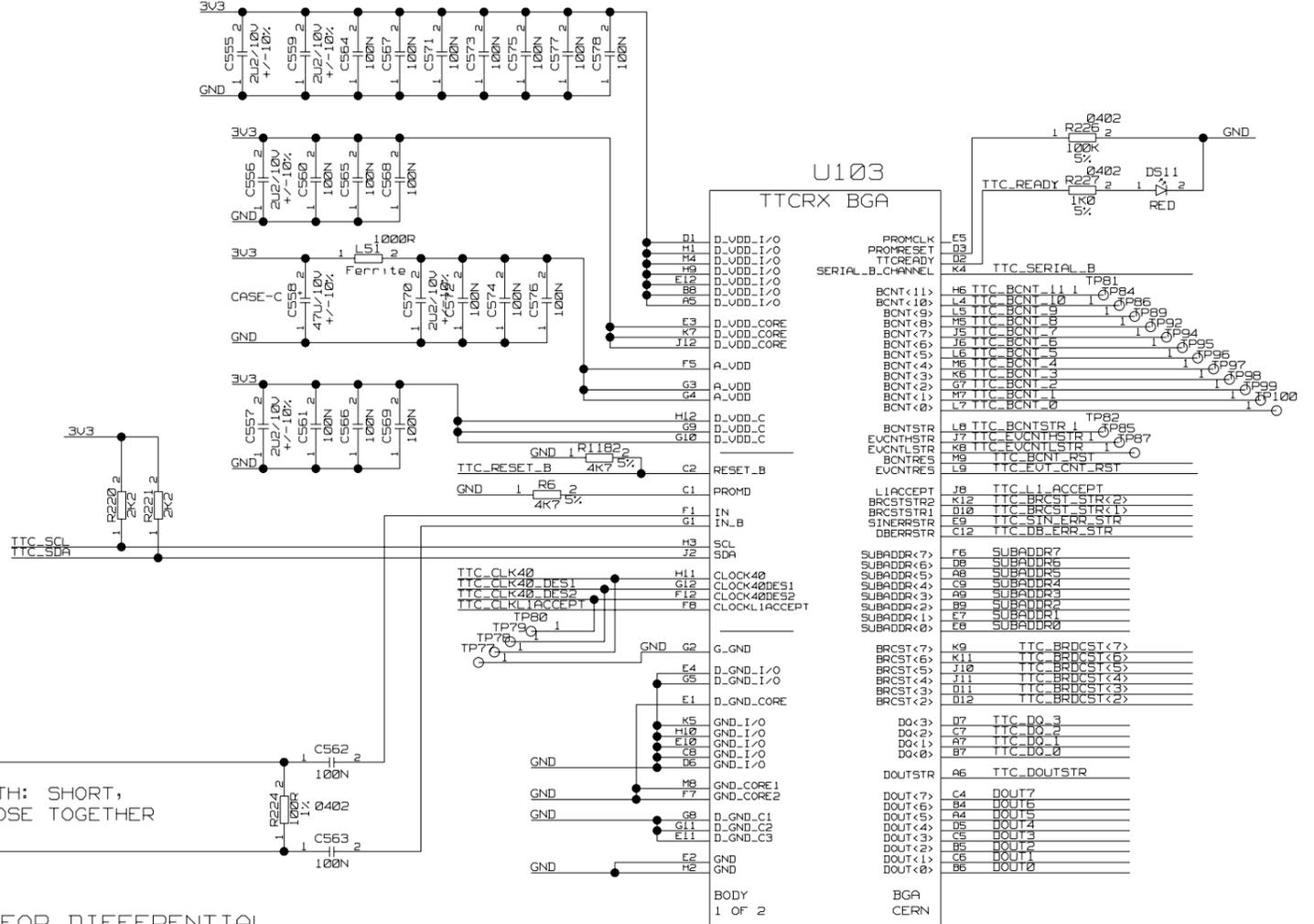
NM0 AND NM1 SHOULD BE SET TO GND FOR NORMAL OPERATION

CONNECT NC PINS TO GND



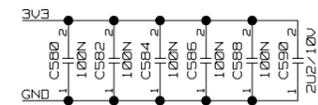
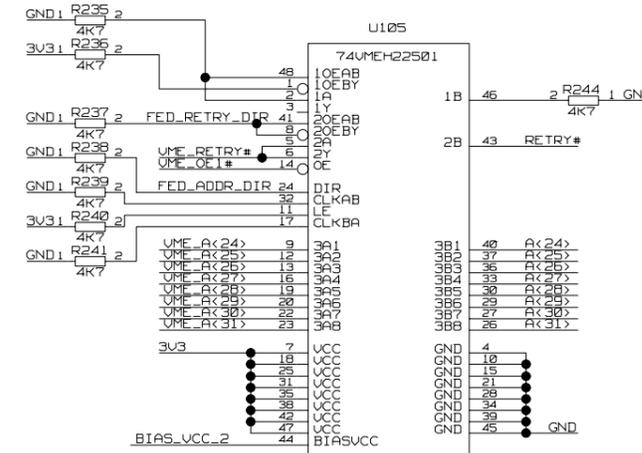
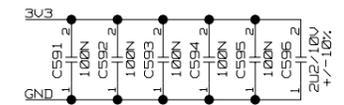
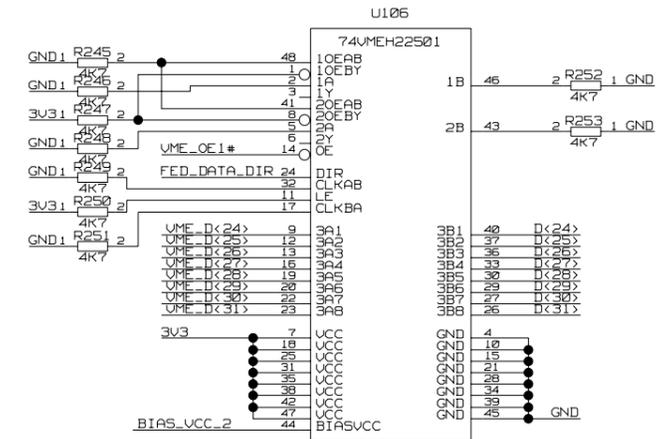
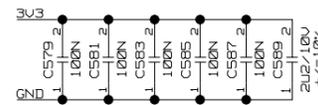
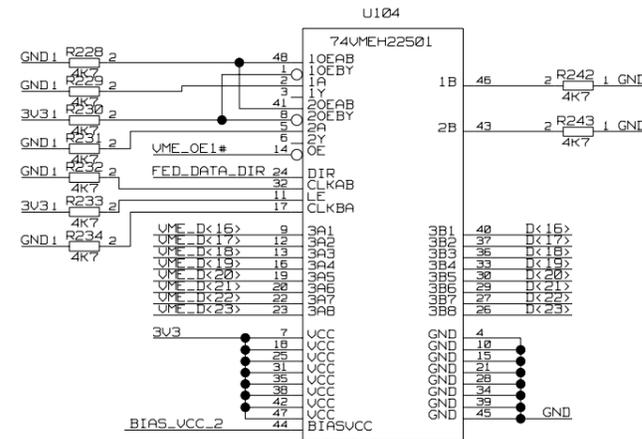
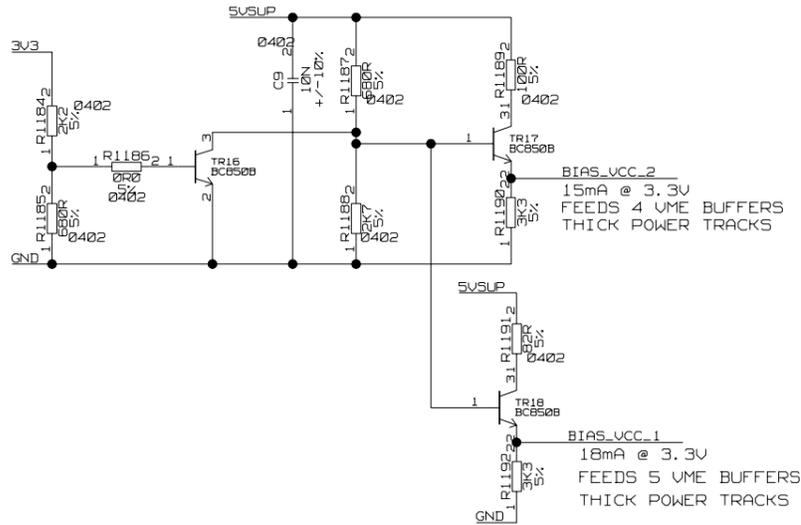
DIRECT SIGNAL PATH: SHORT, SYMMETRICAL & CLOSE TOGETHER

OPTIMALLY PLACE FOR DIFFERENTIAL



B	12-05-04	TE243	S. TAGHAVI	J. COUGHLAN	J. COUGHLAN	PROVISIONAL
A	13-11-02	----	S. TAGHAVIRAD	S. TAGHAVIRAD	S. TAGHAVIRAD	
ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS

USED ON CMS © CCLRC 20 02  
 CCLRC COUNCIL FOR THE CENTRAL LABORATORY RUTHERFORD APPLETON LABORATORY, CHILTON, OXON OX11 0QX.  
 TITLE PC3205M CIRCUIT  
 CMS TRACKER FED  
 TTC RECEIVER AND PIN DIODE CONNECTOR

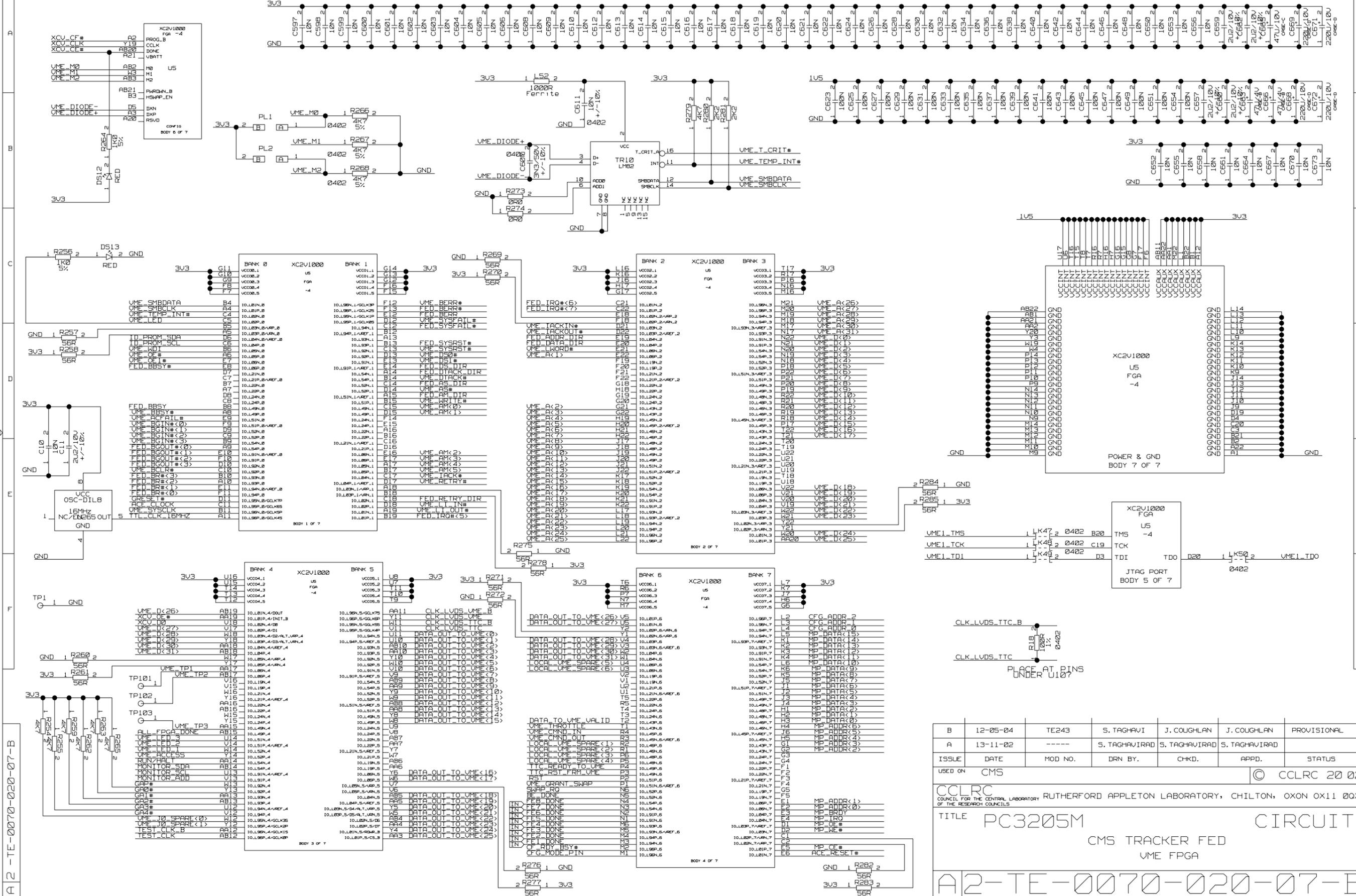


B	12-05-04	TE243	S. TAGHAVI	J. COUGHLAN	J. COUGHLAN	PROVISIONAL
A	13-11-02	----	S. TAGHAVIRAD	S. TAGHAVIRAD	S. TAGHAVIRAD	
ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS

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TITLE PC3205M CIRCUIT  
CMS TRACKER FED  
J2 VME INTERFACE AND PRECHARGE CIRCUIT

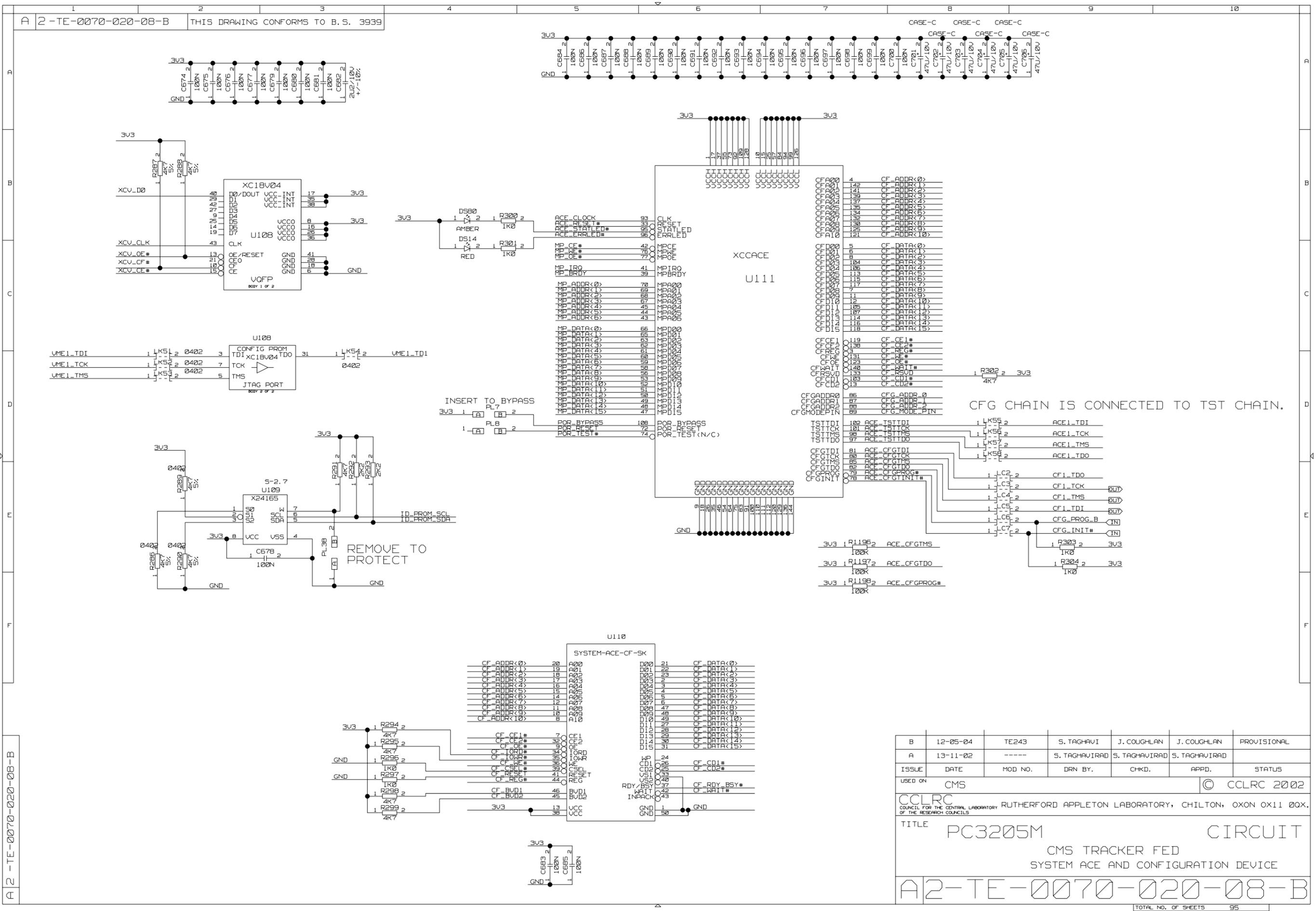


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A	13-11-02	----	S. TAGHAVIRAD	S. TAGHAVIRAD	S. TAGHAVIRAD	
ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS
USED ON						CMS
CCLRC						© CCLRC 20 02

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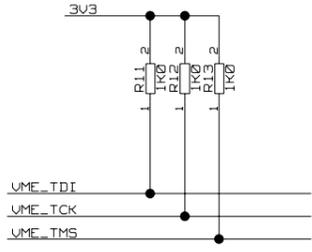
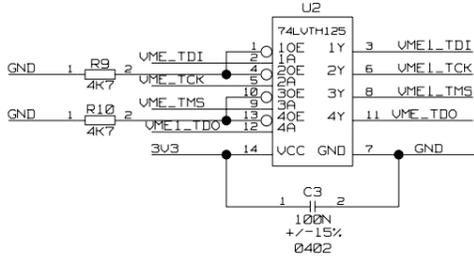
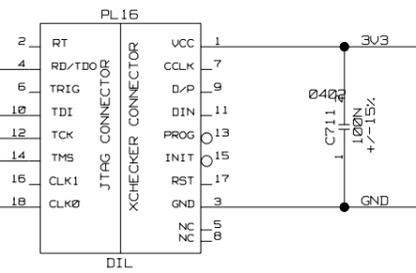
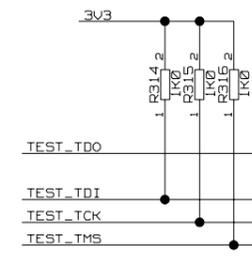
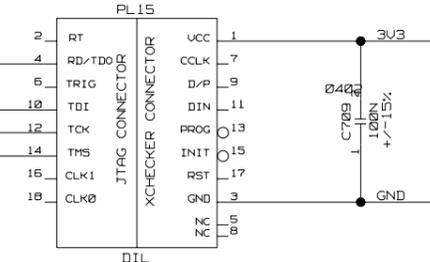
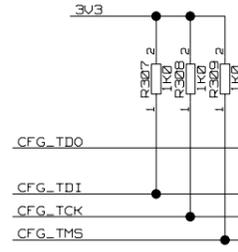
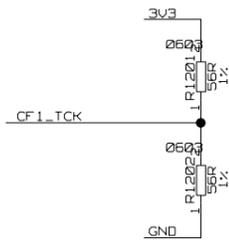
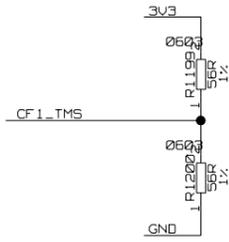
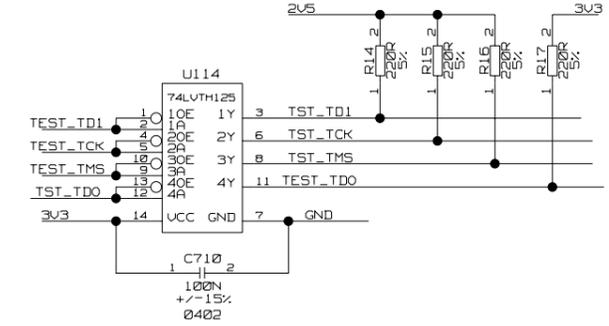
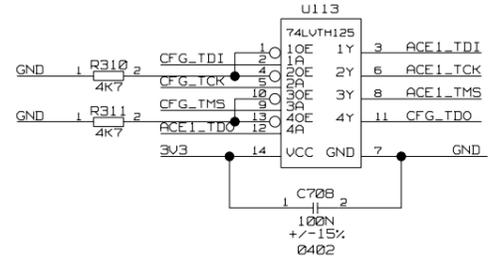
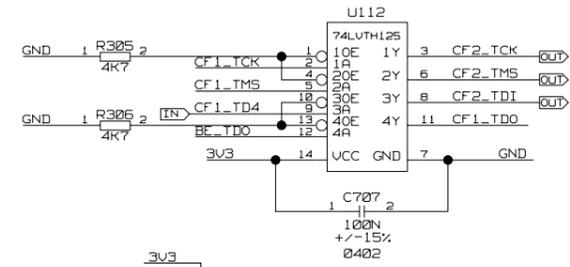
TITLE **PC3205M** **CIRCUIT**

CMS TRACKER FED UME FPGA



A 2-TE-0070-020-08-B

B	12-05-04	TE243	S. TAGHAVI	J. COUGHLAN	J. COUGHLAN	PROVISIONAL
A	13-11-02	----	S. TAGHAVIRAD	S. TAGHAVIRAD	S. TAGHAVIRAD	
ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS
USED ON			CMS		© CCLRC 2002	
CCLRC COUNCIL FOR THE CENTRAL LABORATORY RUTHERFORD APPLETON LABORATORY, CHILTON, OXON OX11 0QX. OF THE RESEARCH COUNCILS						
TITLE			PC3205M		CIRCUIT	
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A2-TE-0070-020-08-B						
TOTAL NO. OF SHEETS 95						

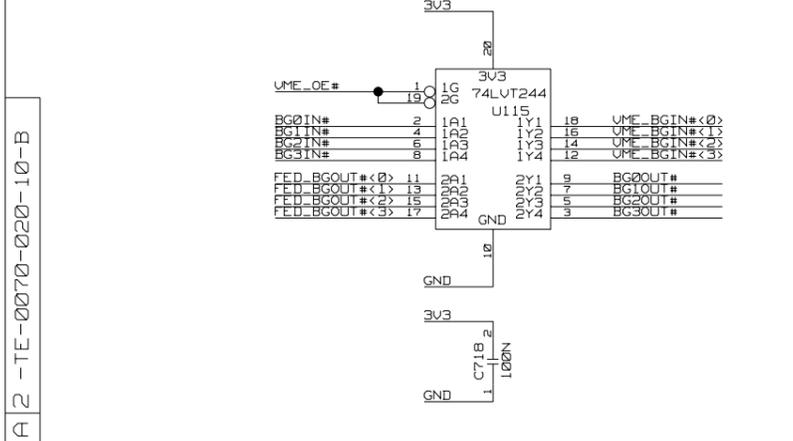
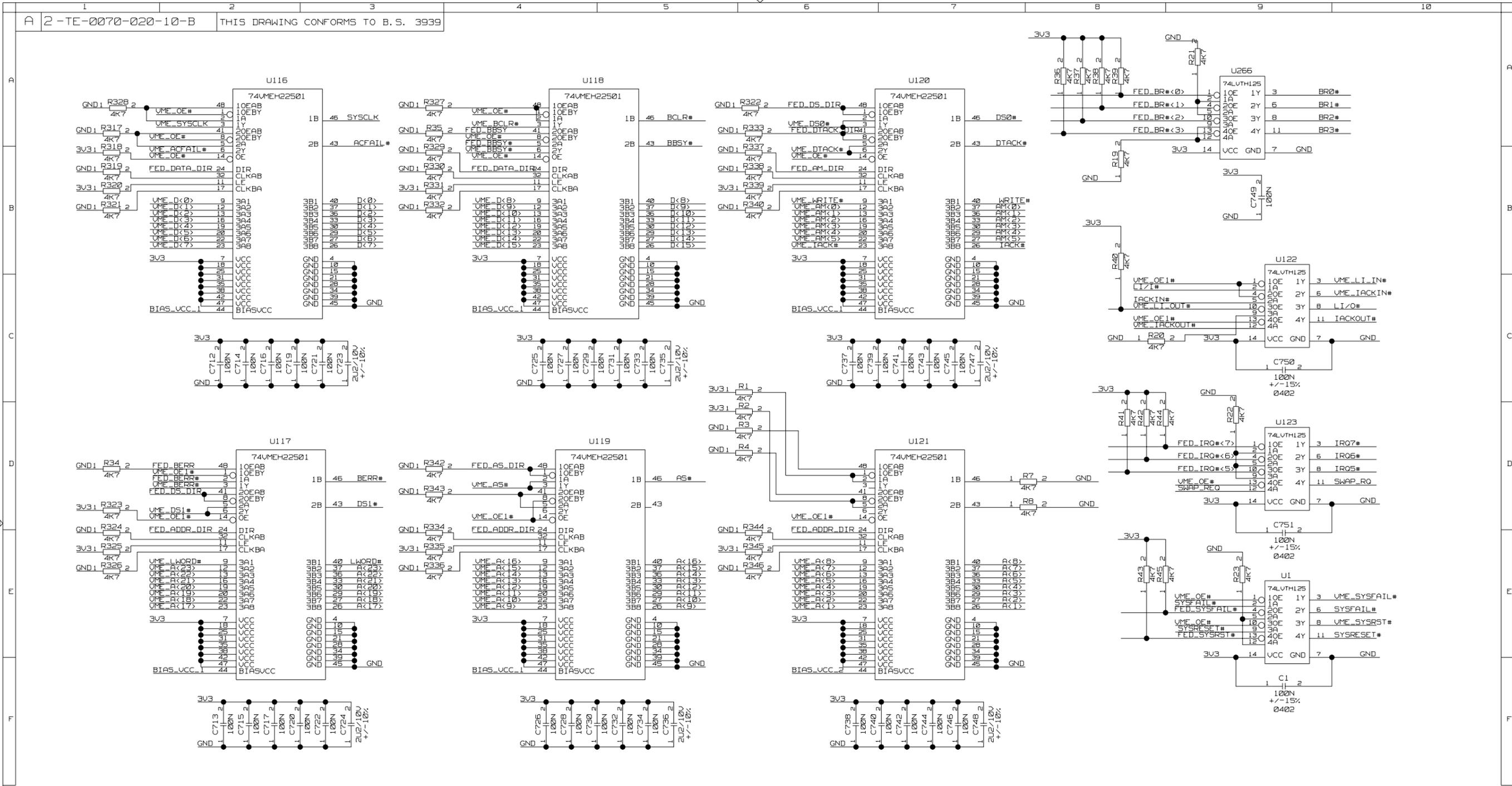


B	12-05-04	TE243	S. TAGHAVI	J. COUGHLAN	J. COUGHLAN	PROVISIONAL
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ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS

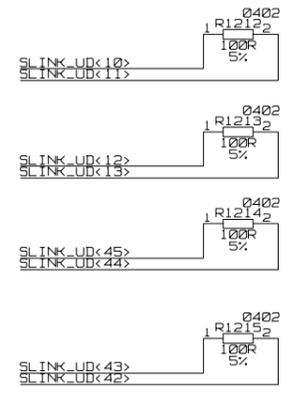
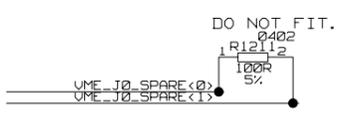
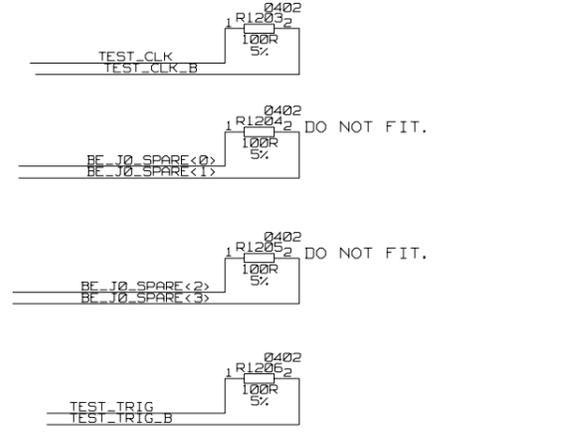
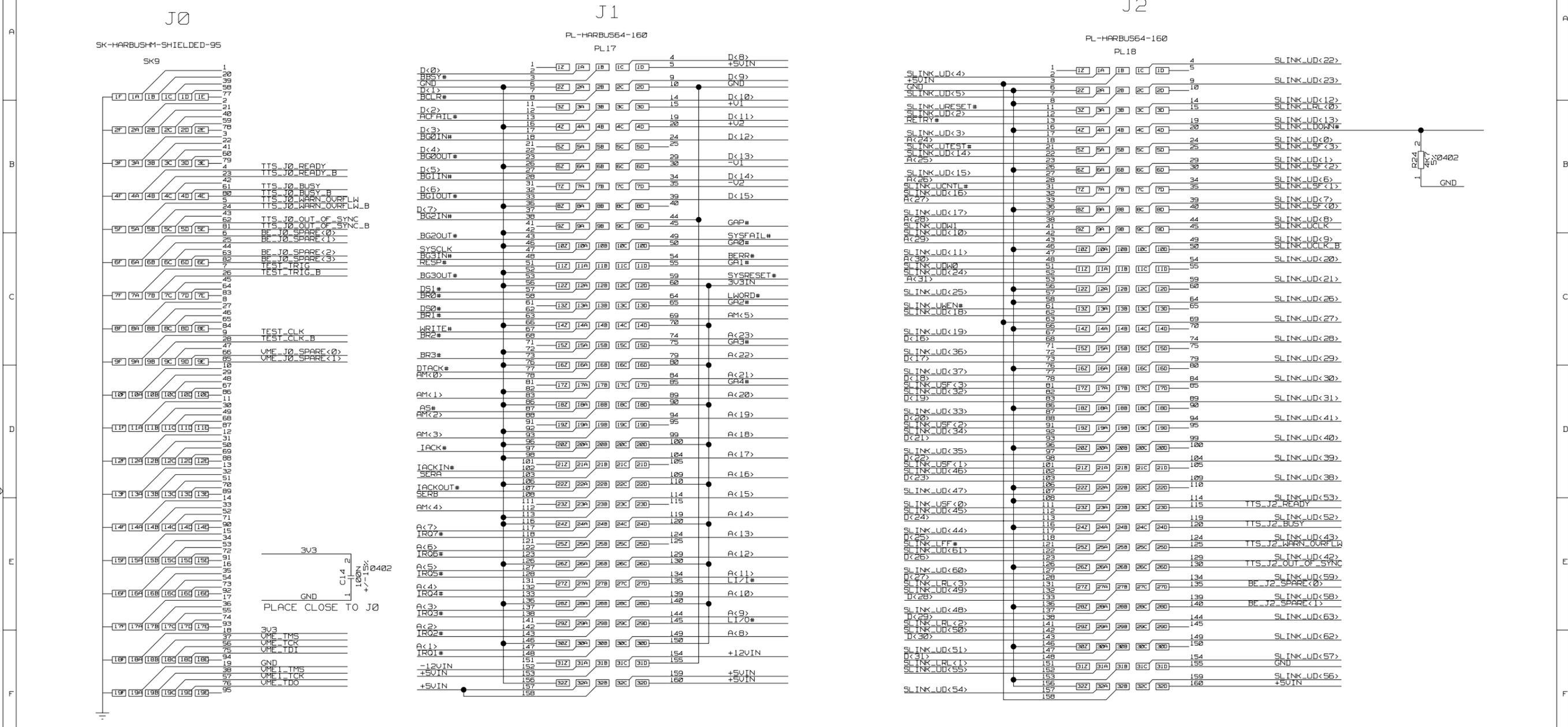
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TITLE PC3205M CIRCUIT  
 CMS TRACKER FED  
 JTAG CONNECTORS AND BUFFERS



B	12-05-04	TE243	S. TAGHAVI	J. COUGHLAN	J. COUGHLAN	PROVISIONAL
A	13-11-02	----	S. TAGHAVIRAD	S. TAGHAVIRAD	S. TAGHAVIRAD	
ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS
USED ON			CMS			© CCLRC 2002
CCLRC COUNCIL FOR THE CENTRAL LABORATORY RUTHERFORD APPLETON LABORATORY, CHILTON, OXON OX11 0QX. OF THE RESEARCH COUNCILS						
TITLE			PC3205M CIRCUIT			
CMS TRACKER FED J1 UME INTERFACE						
A2-TE-0070-020-10-B						
TOTAL NO. OF SHEETS 95						



THESE RESISTORS ARE DO NOT FIT.

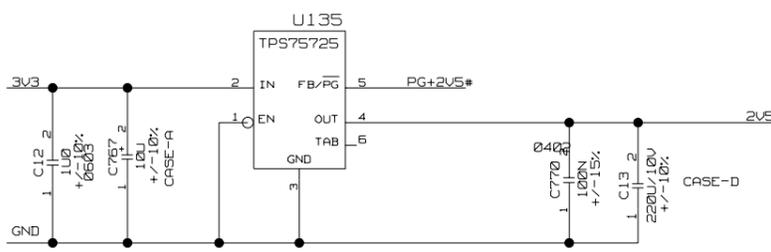
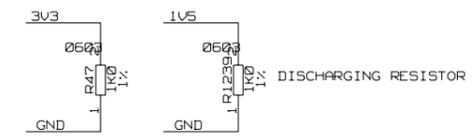
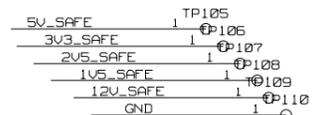
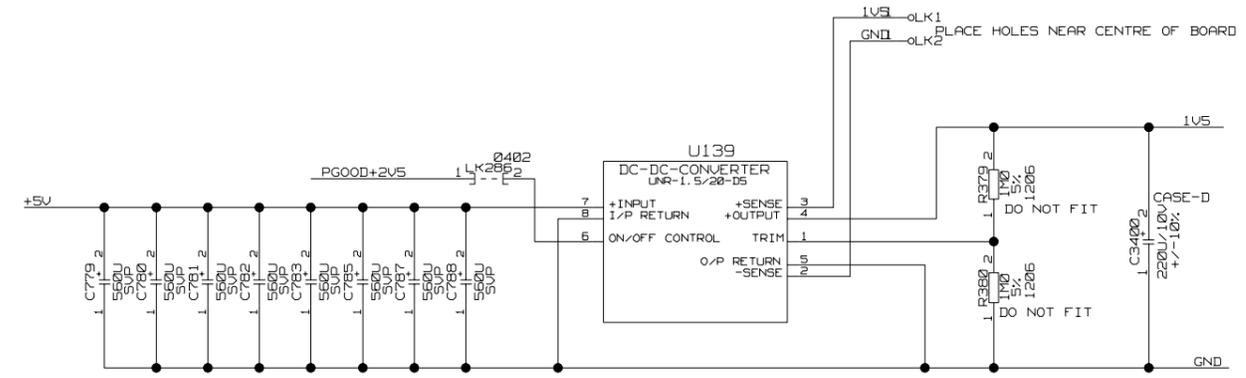
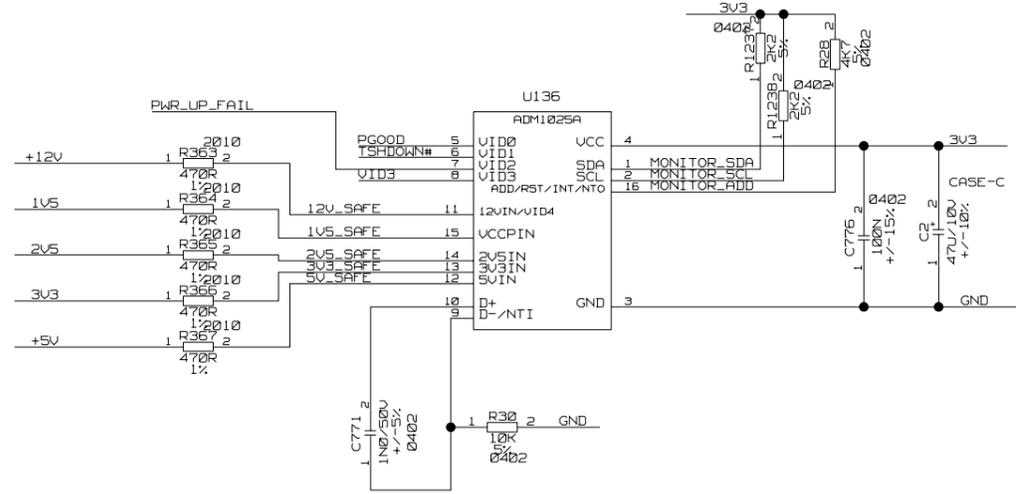
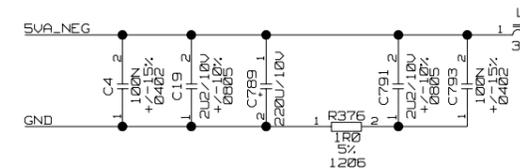
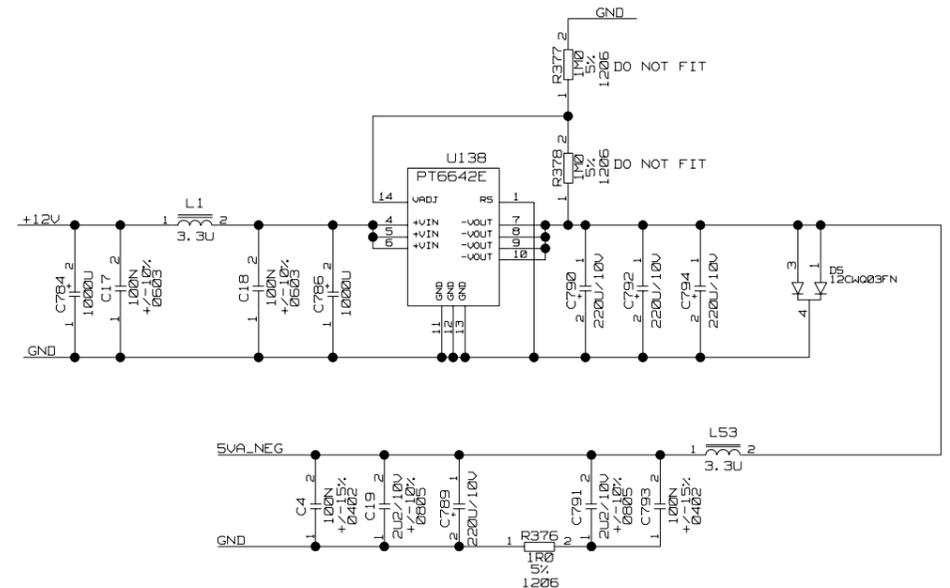
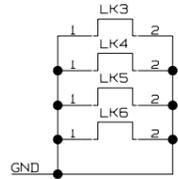
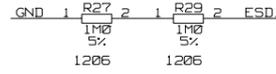
PLACE RESISTORS AT DESTINATION

B	12-05-04	TE243	S. TAGHAVI	J. COUGHLAN	J. COUGHLAN	PROVISIONAL
A	13-11-02	----	S. TAGHAVIRAD	S. TAGHAVIRAD	S. TAGHAVIRAD	
ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS
USED ON			CMS			© CCLRC 2002

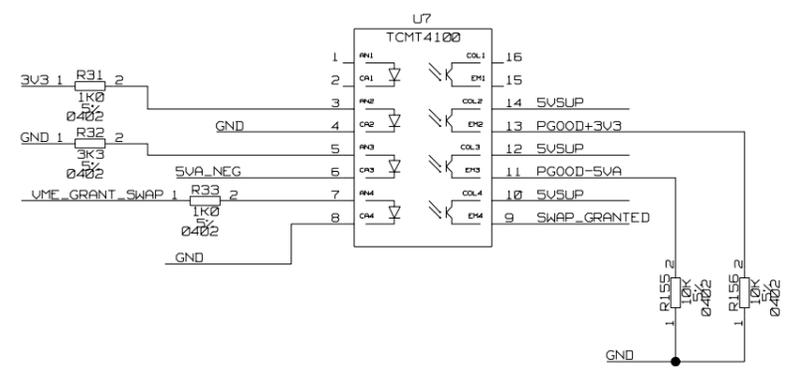
CCLRC COUNCIL FOR THE CENTRAL LABORATORY RUTHERFORD APPLETON LABORATORY, CHILTON, OXON OX11 0QX. OF THE RESEARCH COUNCILS

TITLE PC3205M CIRCUI  
CMS TRACKER FED CONNECTORS





TPS75725 IS CONDITIONALLY STABLE  
CONSULT DATA SHEET BEFORE CHANGING CAPACITORS

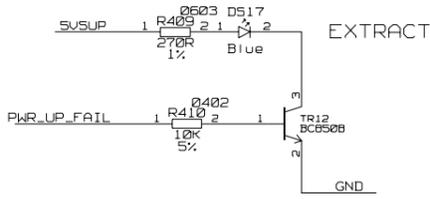
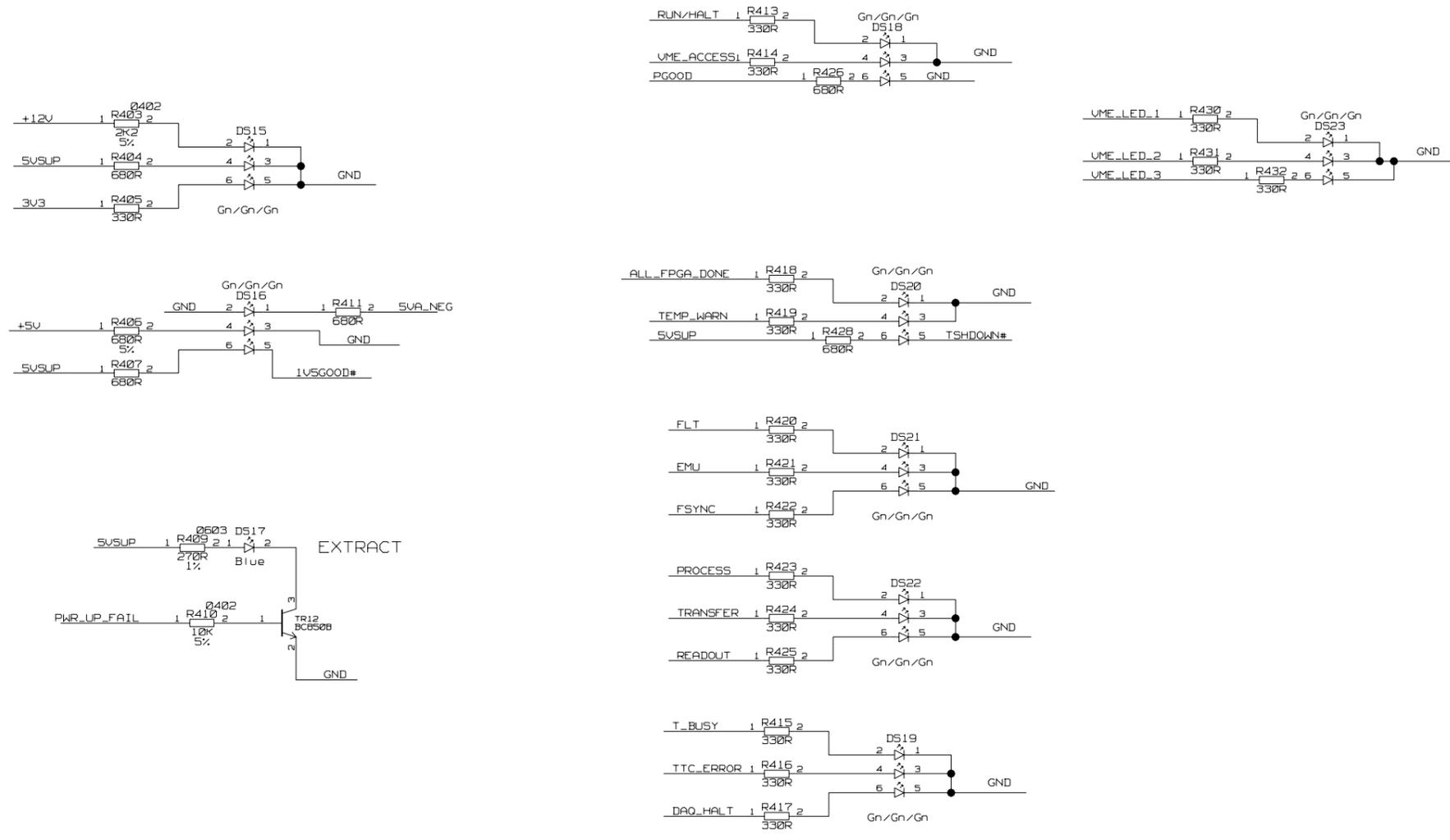


B	12-05-04	TE243	S. TAGHAVI	J. COUGHLAN	J. COUGHLAN	PROVISIONAL
A	13-11-02	----	J. SALISBURY	J. SALISBURY	J. SALISBURY	
ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS
USED ON			CMS		© CCLRC 2002	

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OF THE RESEARCH COUNCILS

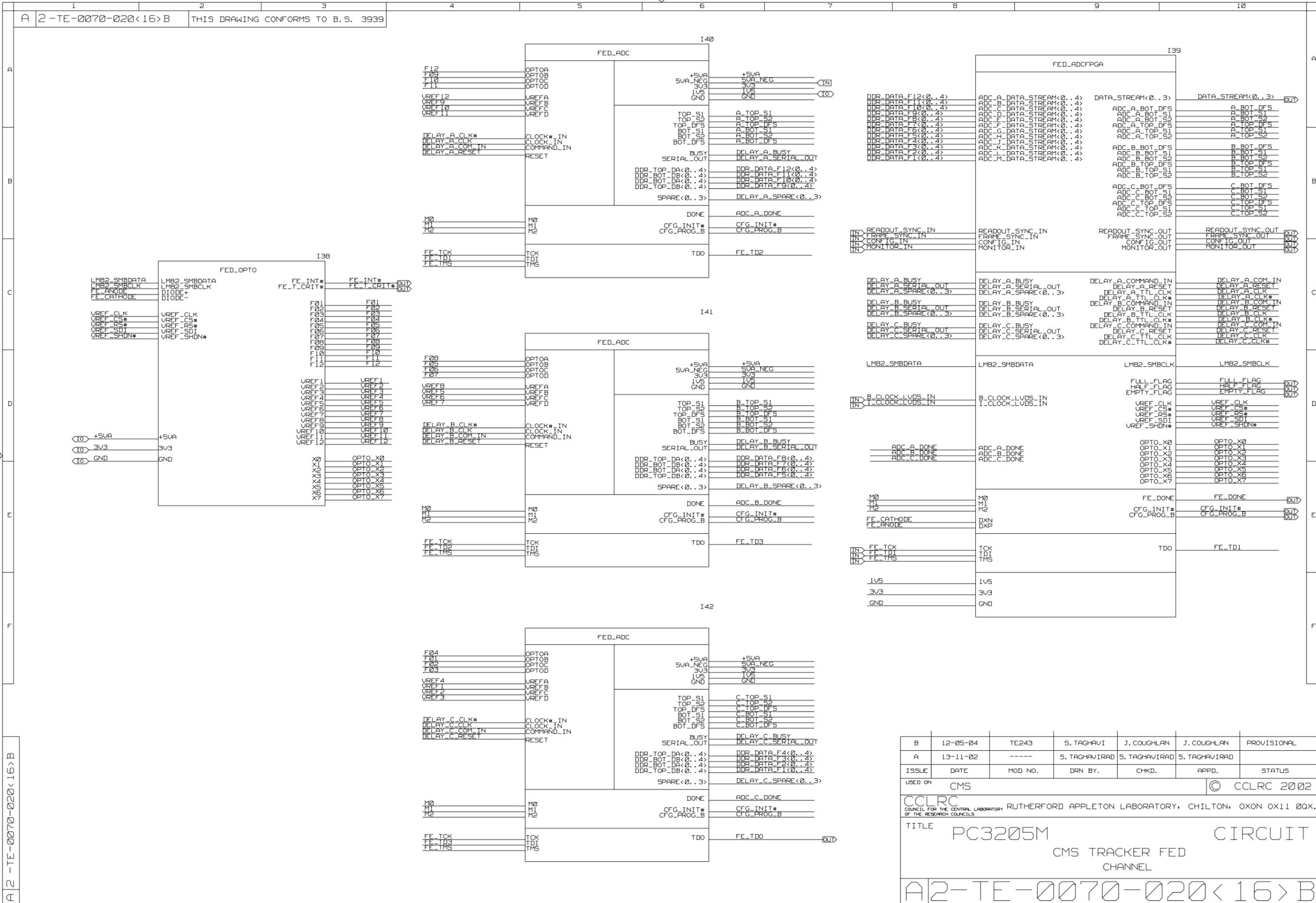
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CMS TRACKER FED  
DC-DC CONVERTORS AND MONITORING



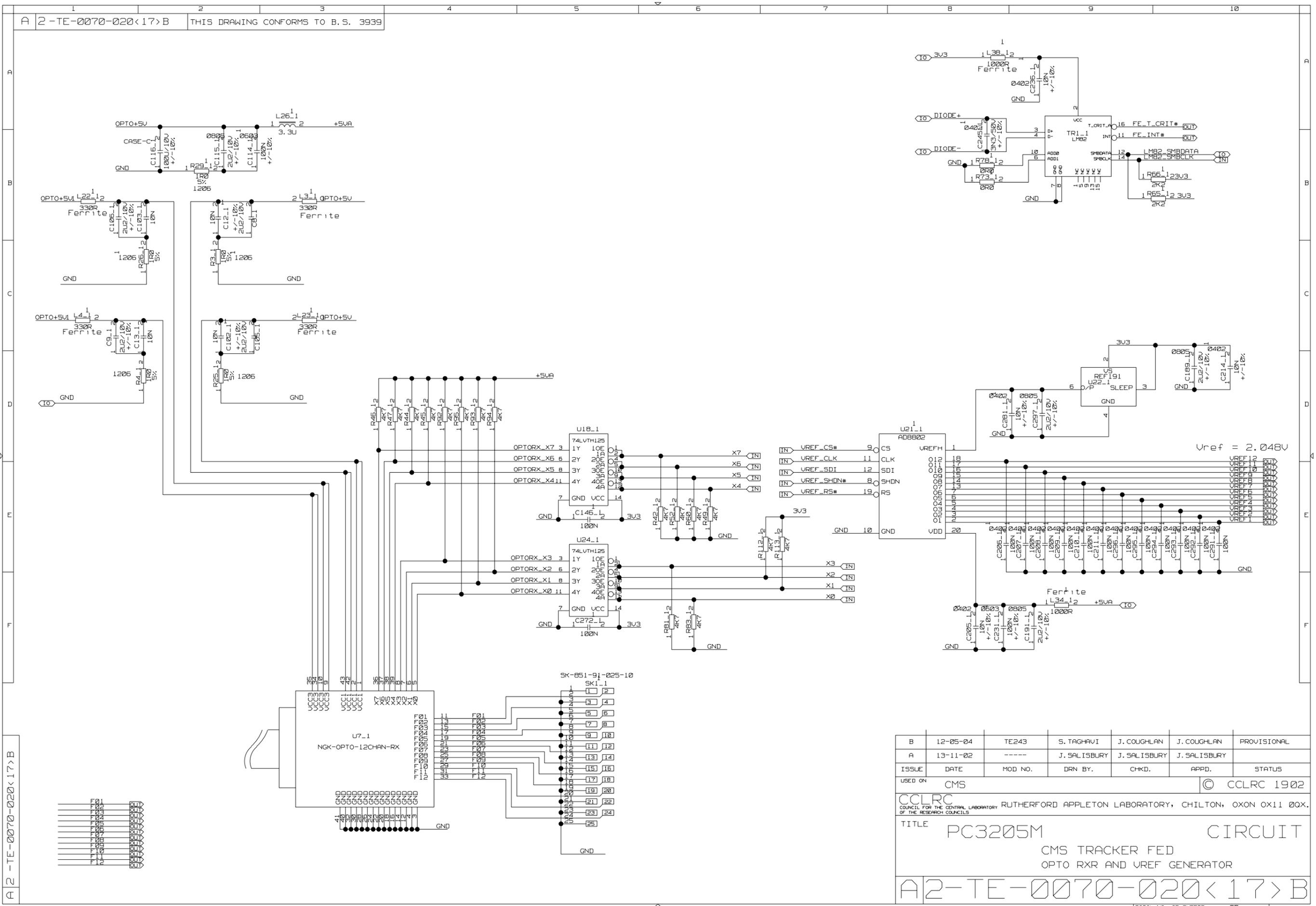


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A	13-11-02	-----	J. SALISBURY	J. SALISBURY	J. SALISBURY	
ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS

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 TITLE PC3205M CIRCUIT  
 CMS TRACKER FED  
 FRONT PANEL DISPLAY

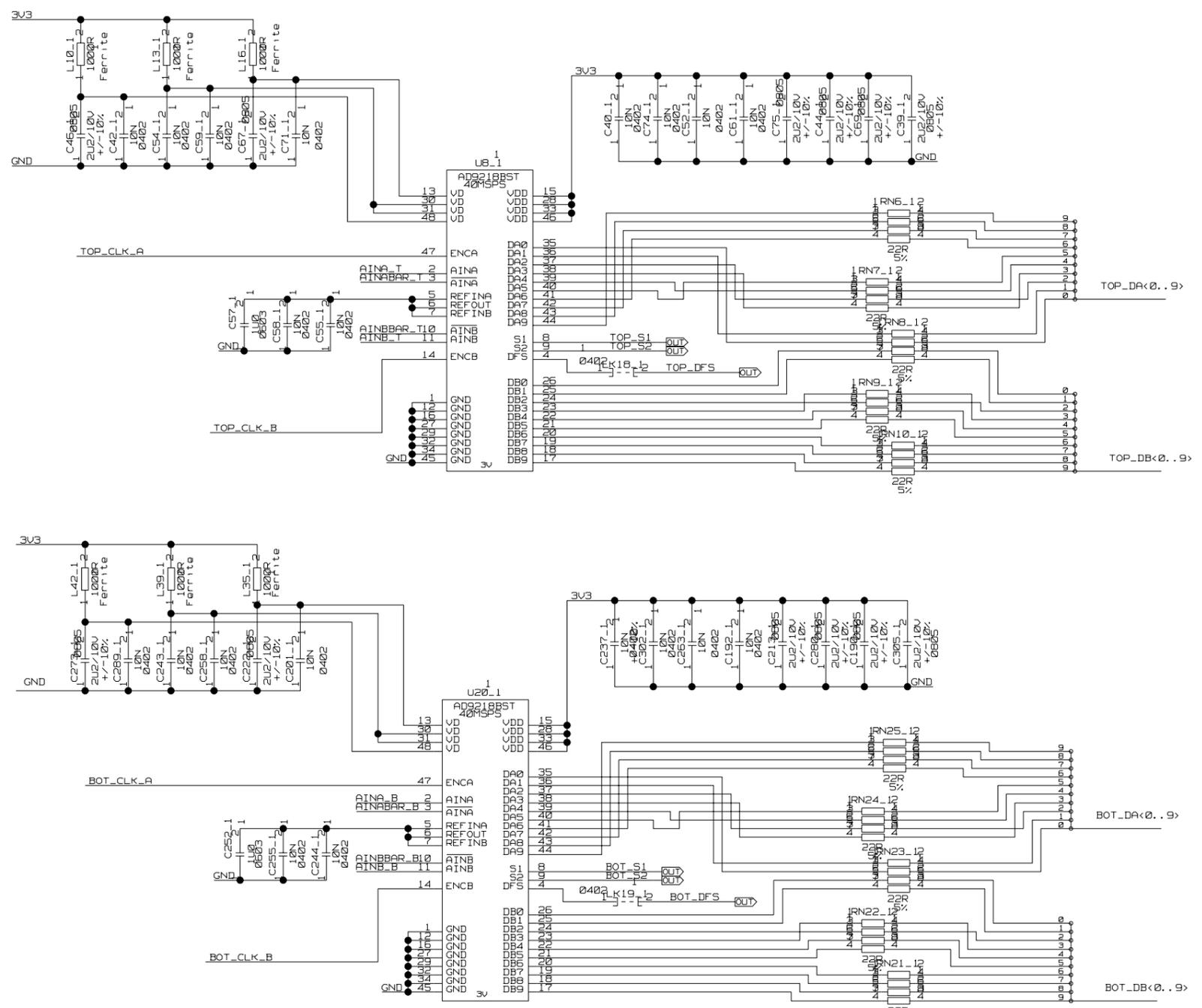
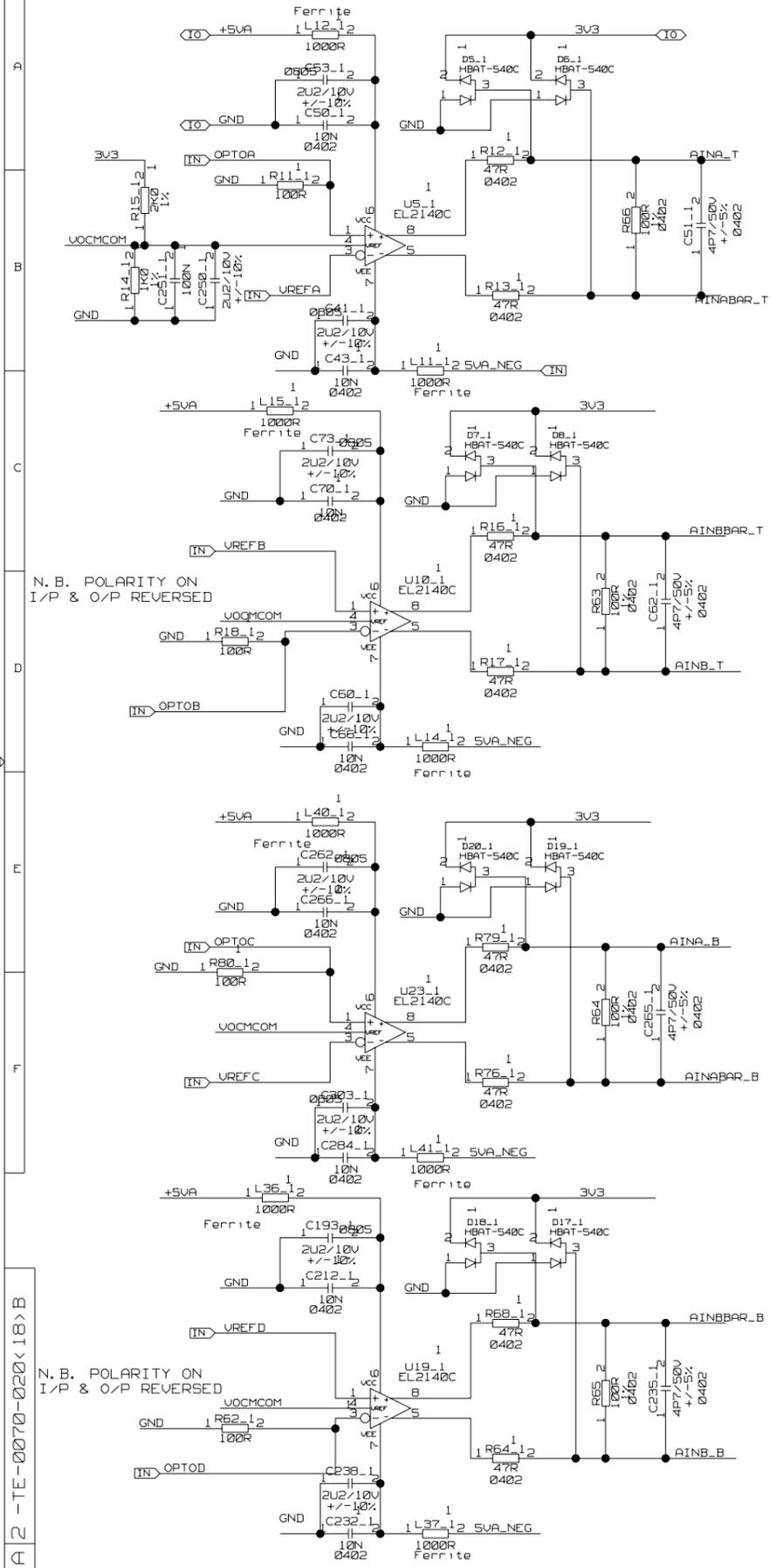


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A	13-11-02	----	S. TAGHAVIRAD	S. TAGHAVIRAD	S. TAGHAVIRAD	
ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS
USED ON						© CCLRC 2002
CCLRC COUNCIL FOR THE CENTRAL LABORATORY RUTHERFORD APPLETON LABORATORY, CHILTON, OXON OX11 0QX. OF THE RESEARCH COUNCILS						
TITLE			PC3205M CIRCUIT			
CMS TRACKER FED CHANNEL						
A2-TE-0070-020<16>B						



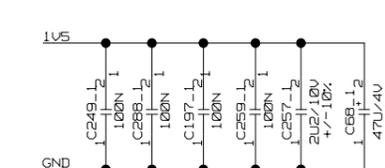
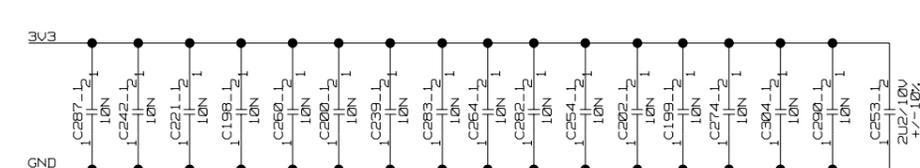
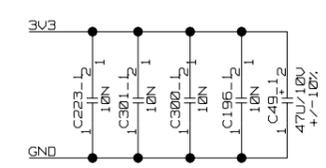
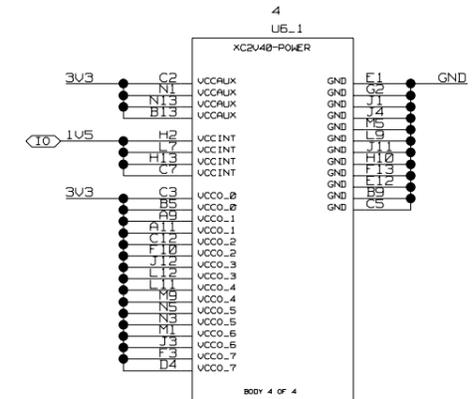
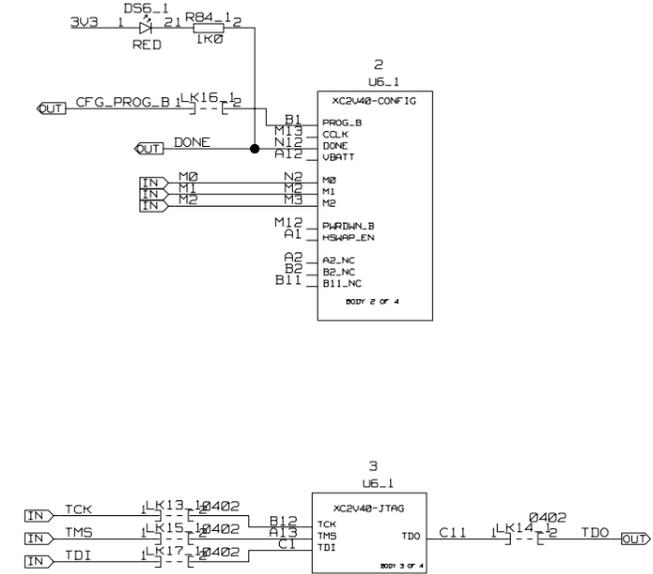
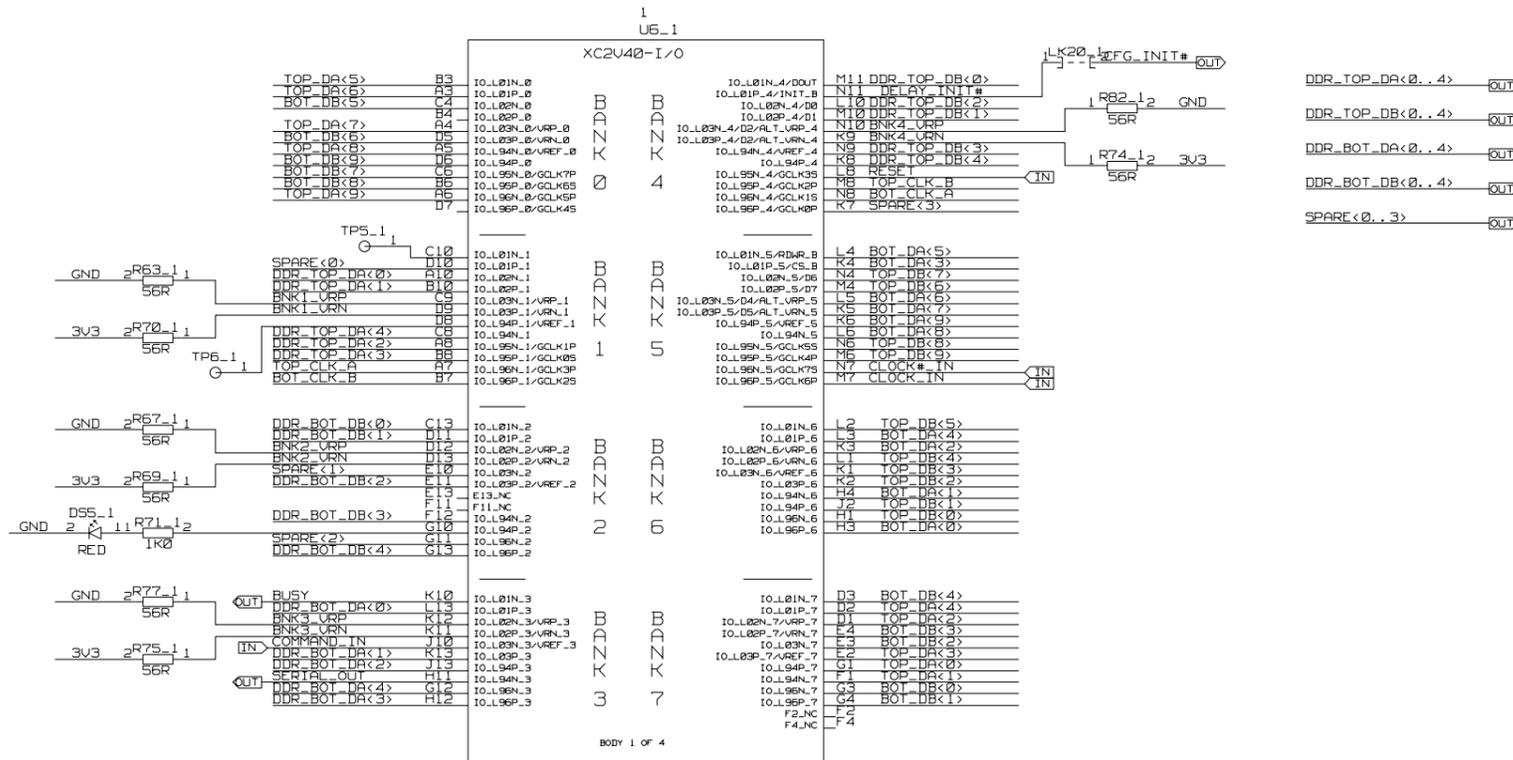
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B	12-05-04	TE243	S. TAGHAVI	J. COUGHLAN	J. COUGHLAN	PROVISIONAL
A	13-11-02	----	J. SALISBURY	J. SALISBURY	J. SALISBURY	
ISSUE	DATE	MOD NO.	DRN BY.	CHKD.	APPD.	STATUS
USED ON	CMS					© CCLRC 1902
CCLRC COUNCIL FOR THE CENTRAL LABORATORY RUTHERFORD APPLETON LABORATORY, CHILTON, OXON OX11 0QX.						
TITLE			PC3205M		CIRCUIT	
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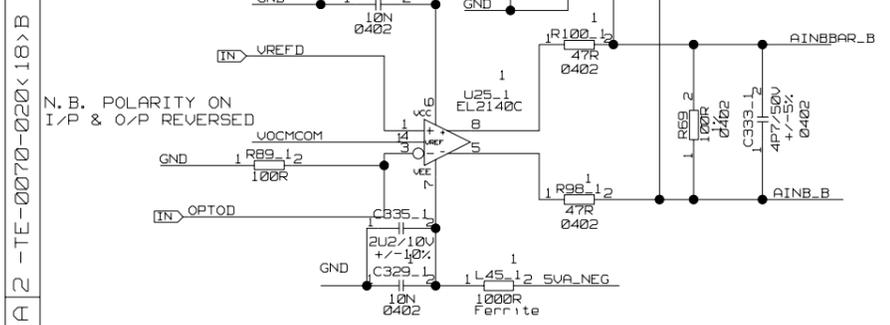
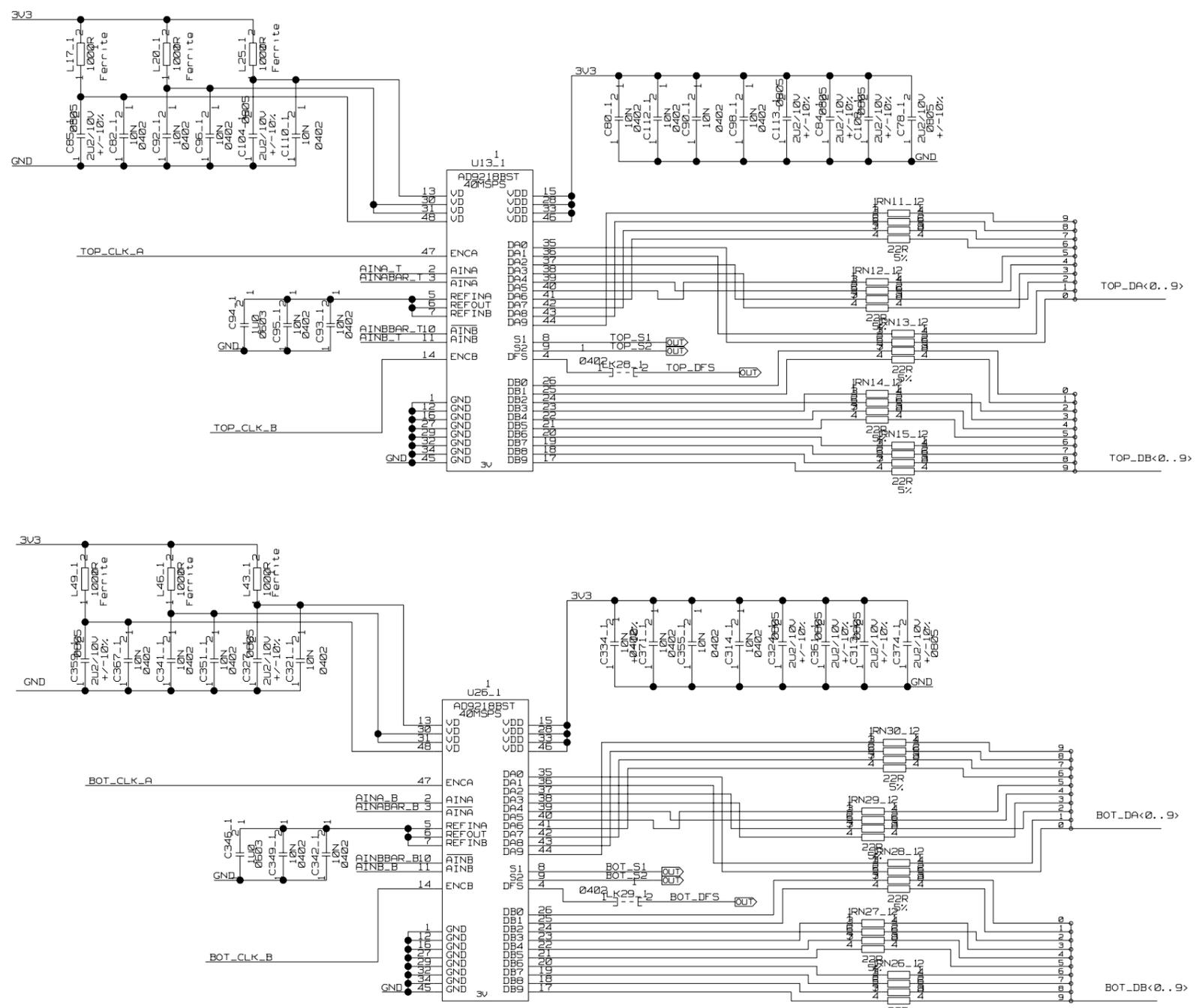
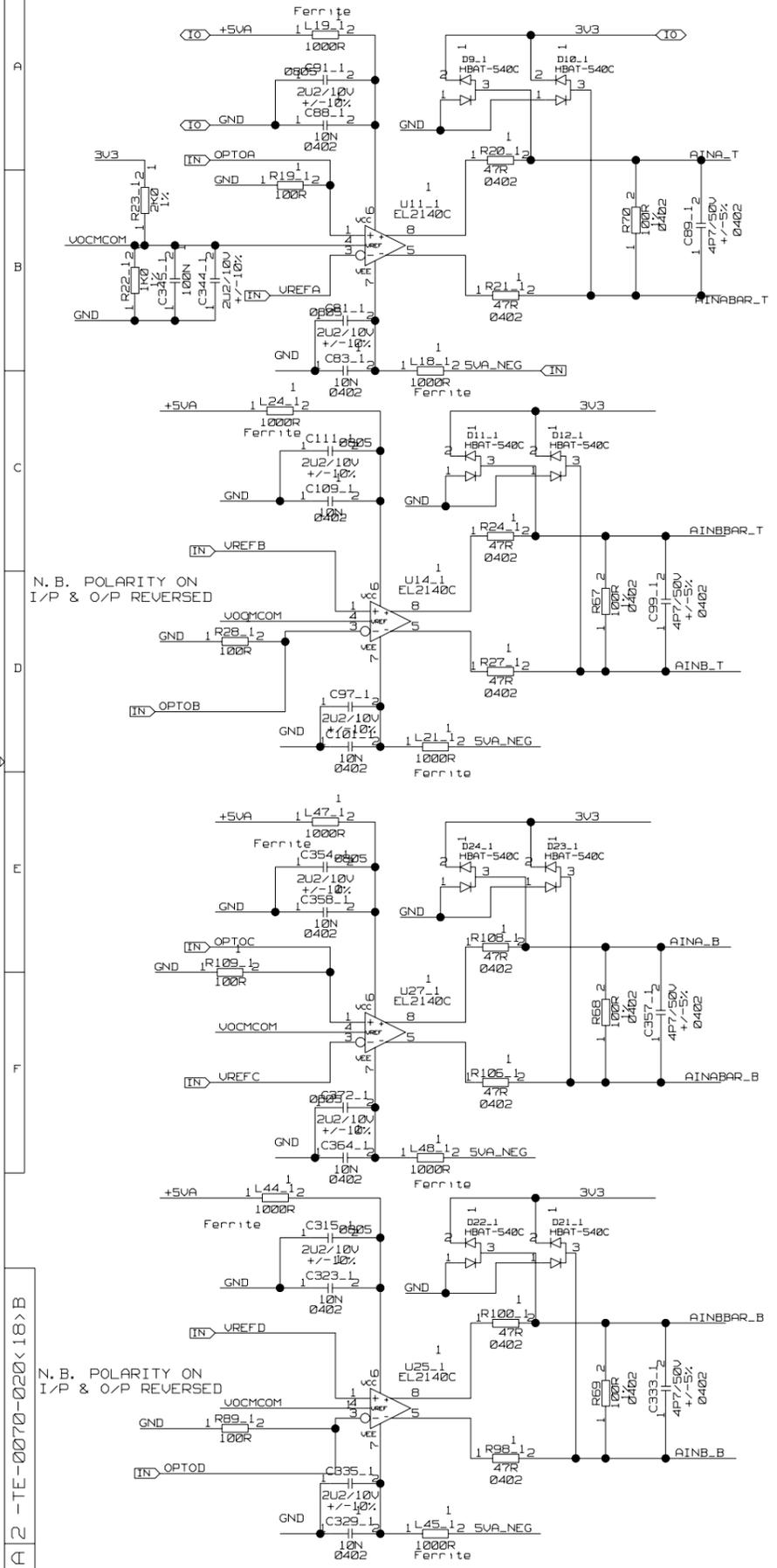


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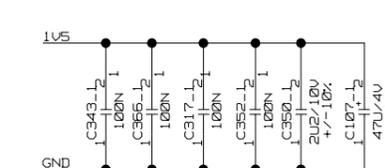
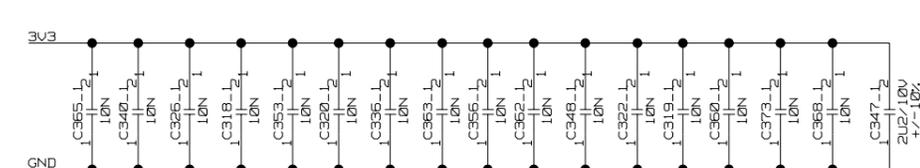
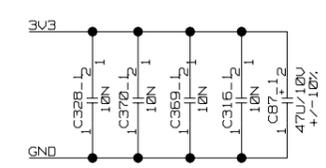
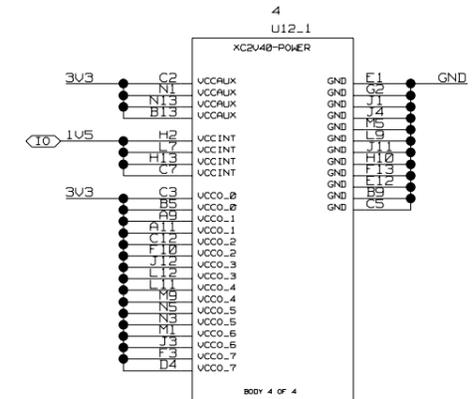
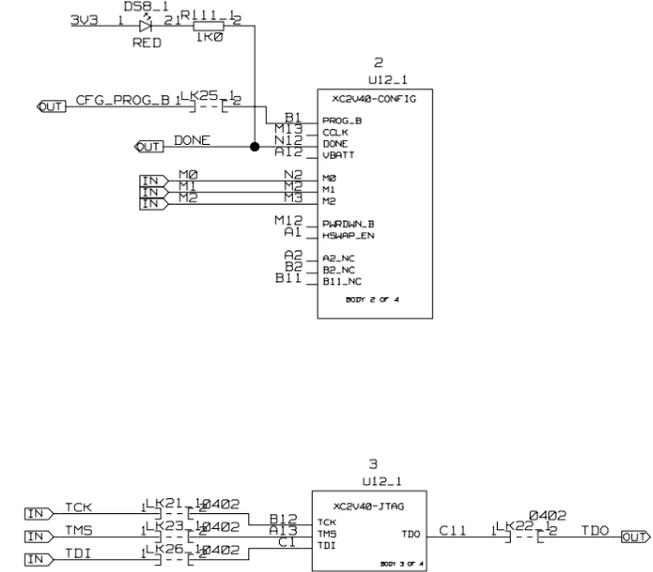
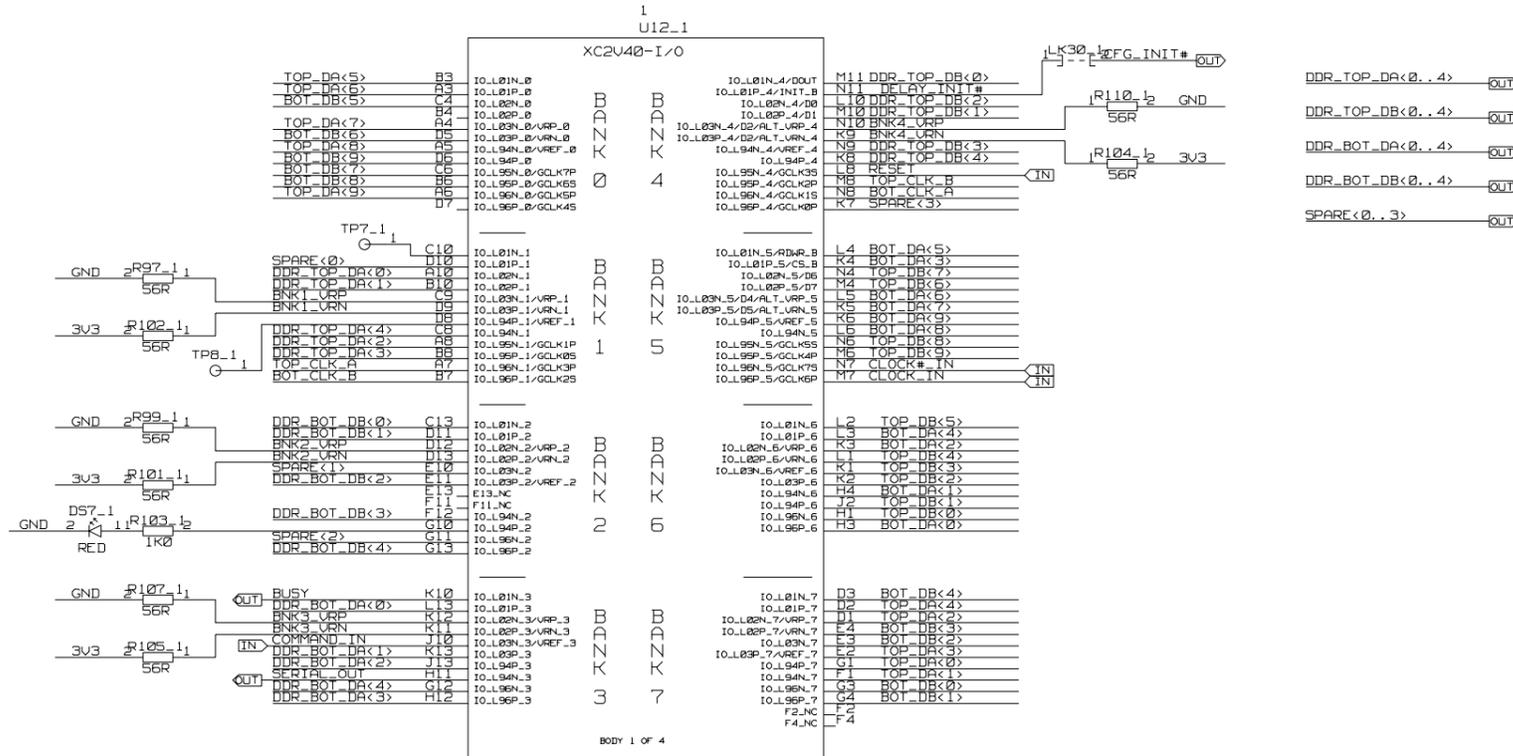
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A	13-11-02	----	J. SALISBURY	J. SALISBURY	J. SALISBURY	
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TITLE			PC3205M		CIRCUIT	
CMS TRACKER FED DIFFERENTIAL OP AMPS AND 10 BIT ADCS						
A2-TE-0070-020<18>B						



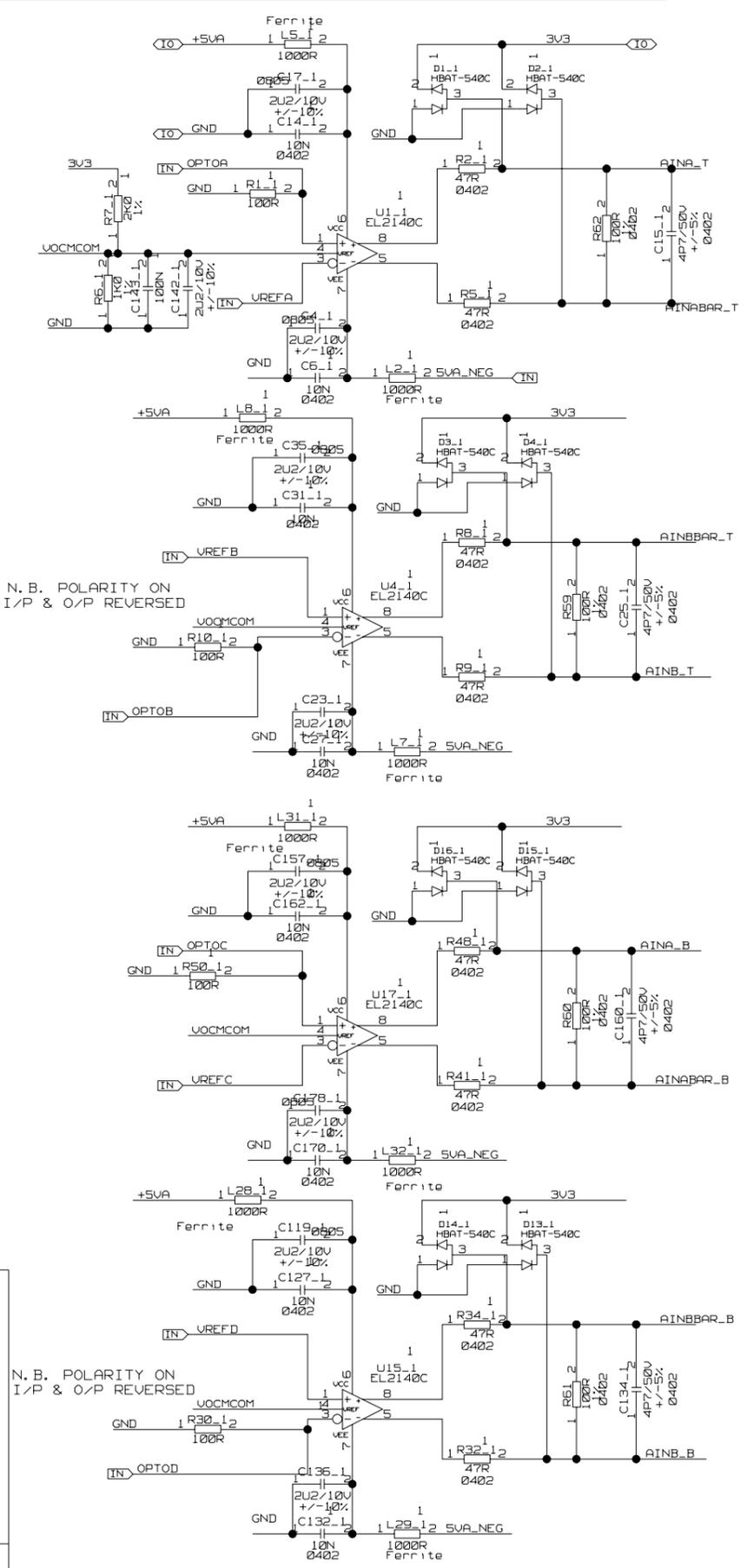
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A	13-11-02	----	S. TAGHAVIRAD	S. TAGHAVIRAD	S. TAGHAVIRAD	
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TITLE			PC3205M		CIRCUIT	
CMS TRACKER FED DELAY FPGA						
A2-TE-0070-020<19>B						



B	12-05-04	TE243	S. TAGHAVI	J. COUGHLAN	J. COUGHLAN	PROVISIONAL
A	13-11-02	----	J. SALISBURY	J. SALISBURY	J. SALISBURY	
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TITLE			PC3205M		CIRCUIT	
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A2-TE-0070-020<18>B						
TOTAL NO. OF SHEETS						95

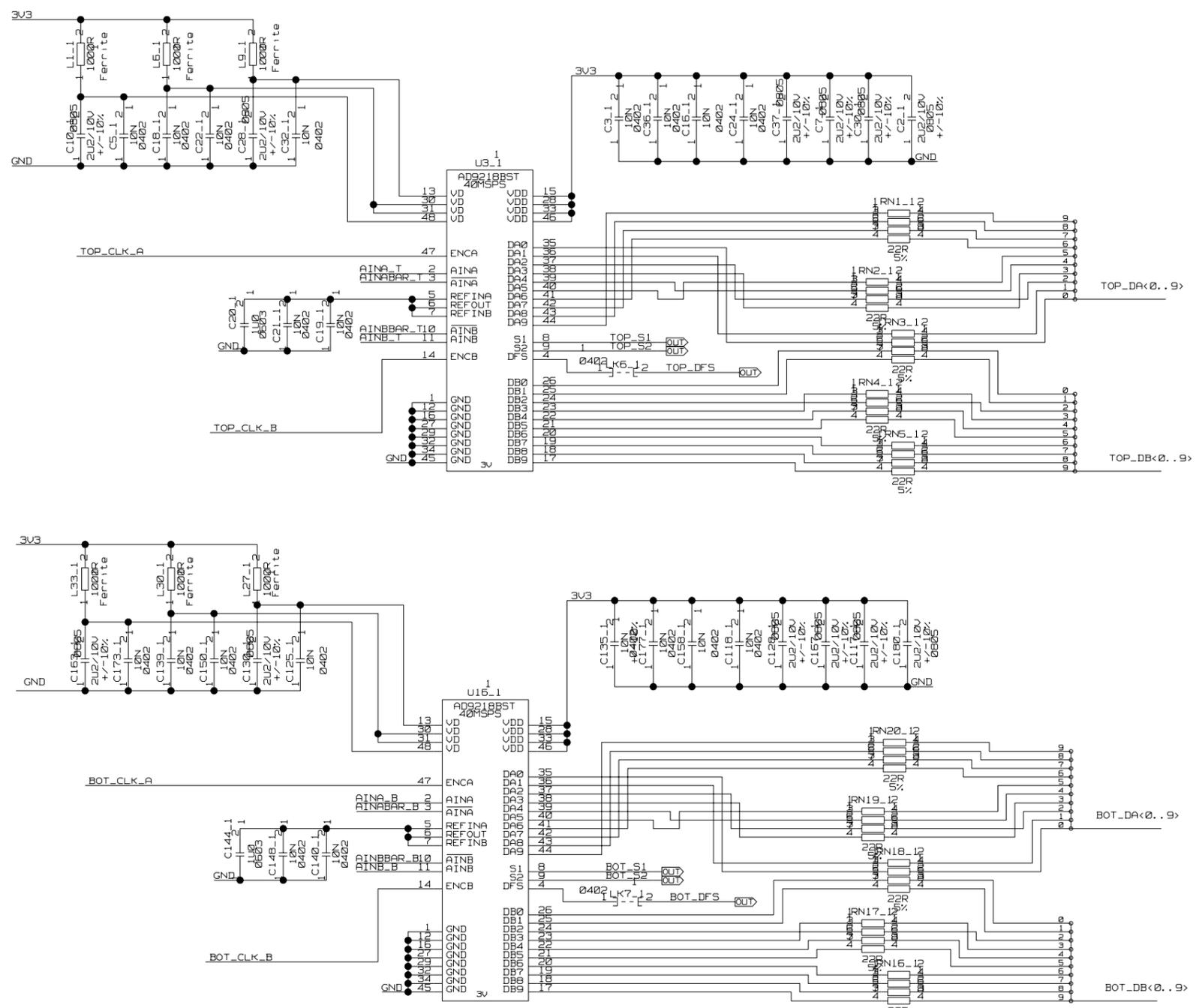


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A	13-11-02	----	S. TAGHAVIRAD	S. TAGHAVIRAD	S. TAGHAVIRAD	
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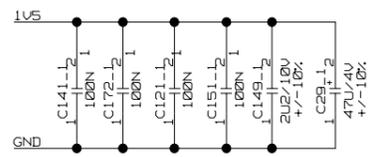
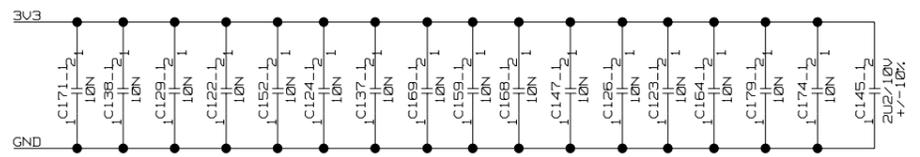
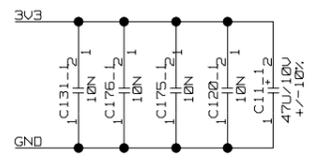
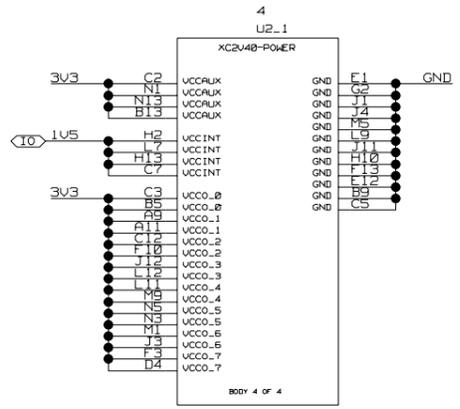
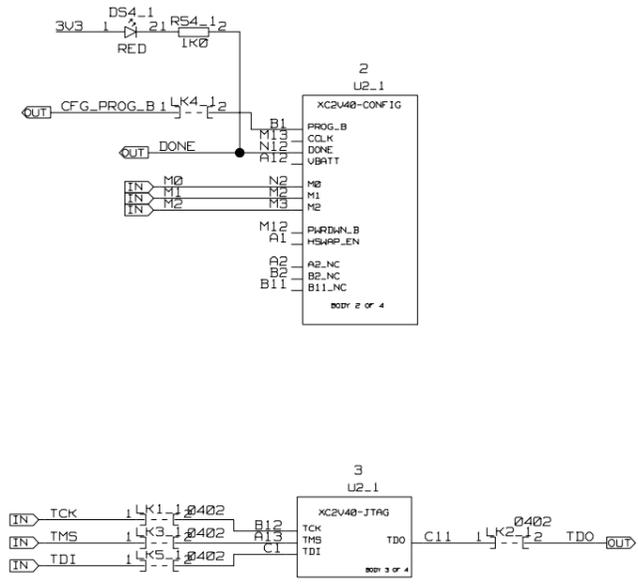
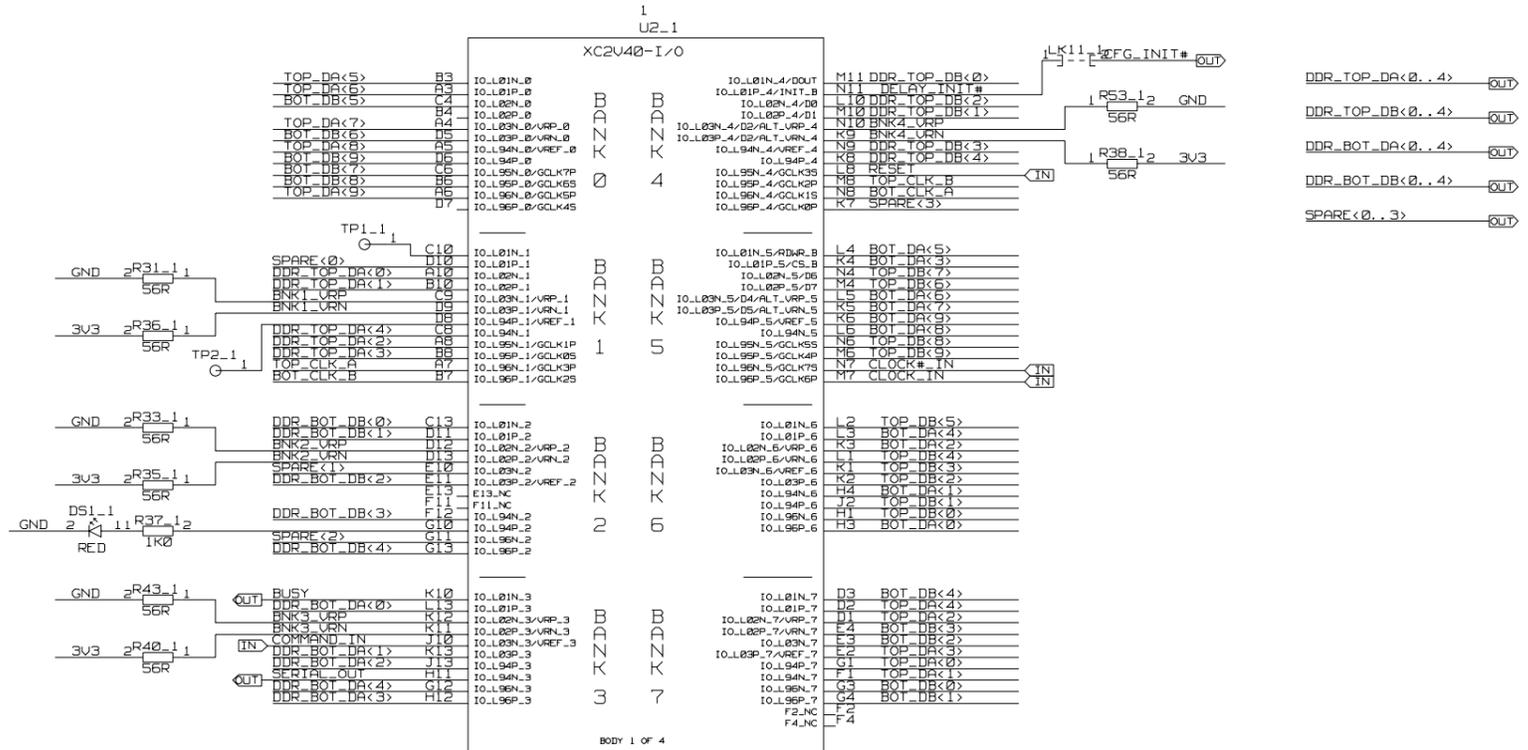


N.B. POLARITY ON I/P & O/P REVERSED

N.B. POLARITY ON I/P & O/P REVERSED



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TITLE			PC3205M CIRCUIT			
CMS TRACKER FED DIFFERENTIAL OP AMPS AND 10 BIT ADCS						
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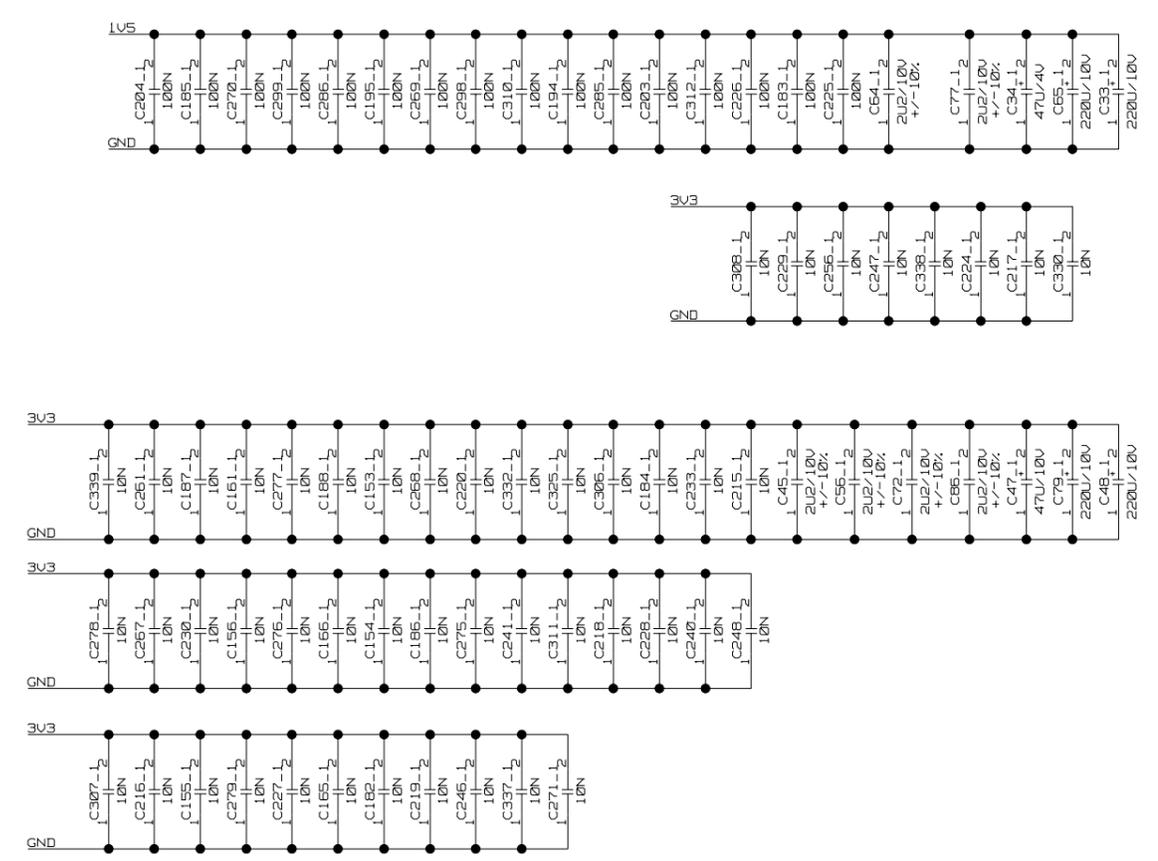
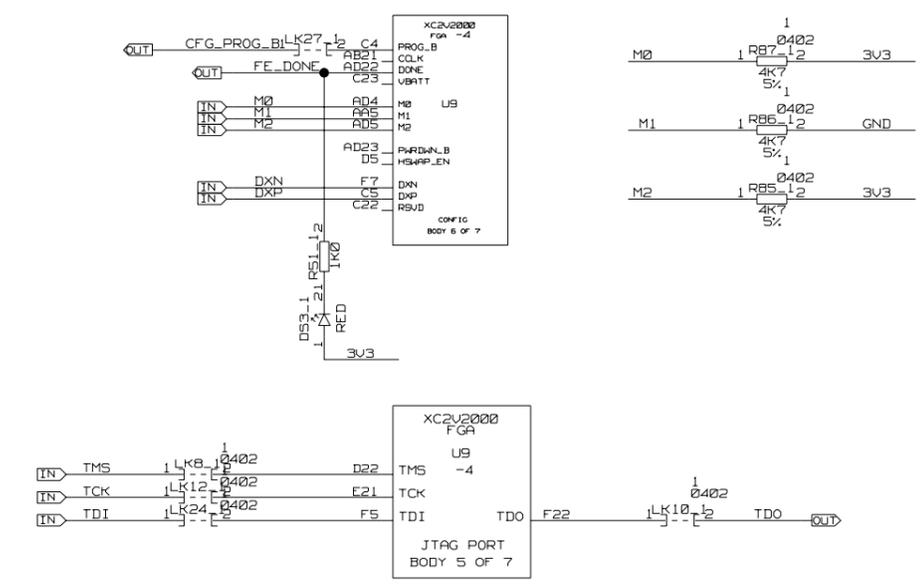
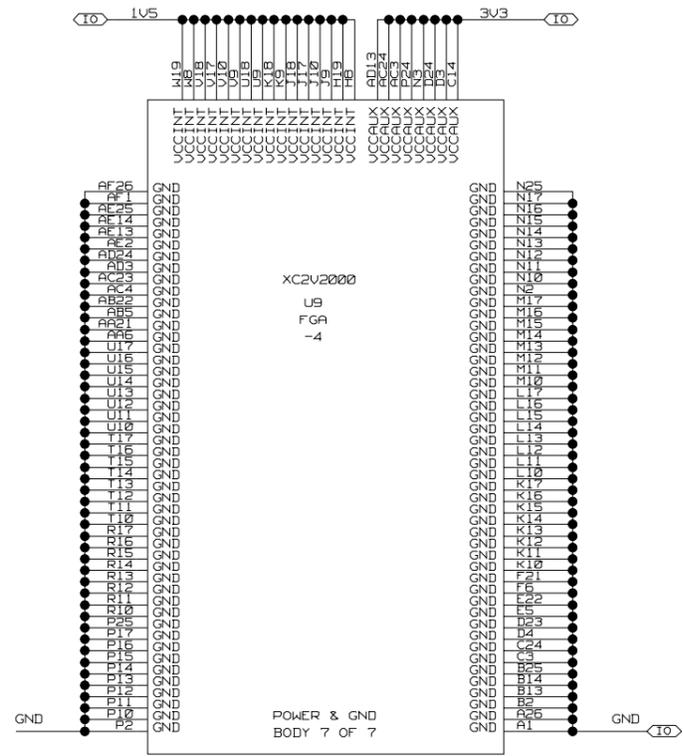


B	12-05-04	TE243	S. TAGHAVI	J. COUGHLAN	J. COUGHLAN	PROVISIONAL
A	13-11-02	----	S. TAGHAVIRAD	S. TAGHAVIRAD	S. TAGHAVIRAD	
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TITLE			PC3205M		CIRCUIT	
CMS TRACKER FED DELAY FPGA						
A2-TE-0070-020<19>B						



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- DELAY\_B\_SPARE<0..3> IN
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B	12-05-04	TE243	S. TAGHAVI	J. COUGHLAN	J. COUGHLAN	PROVISIONAL
A	13-11-02	----	S. TAGHAVIRAD	S. TAGHAVIRAD	S. TAGHAVIRAD	
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TITLE			PC3205M CMS TRACKER FED FRONT END FPGA			
CIRCUIT			A2-TE-0070-020<20>B			
TOTAL NO. OF SHEETS 95						



B	12-05-04	TE243	S. TAGHAVI	J. COUGHLAN	J. COUGHLAN	PROVISIONAL
A	13-11-02	----	S. TAGHAVIRAD	S. TAGHAVIRAD	S. TAGHAVIRAD	
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CMS TRACKER FED FRONT END FPGA						
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