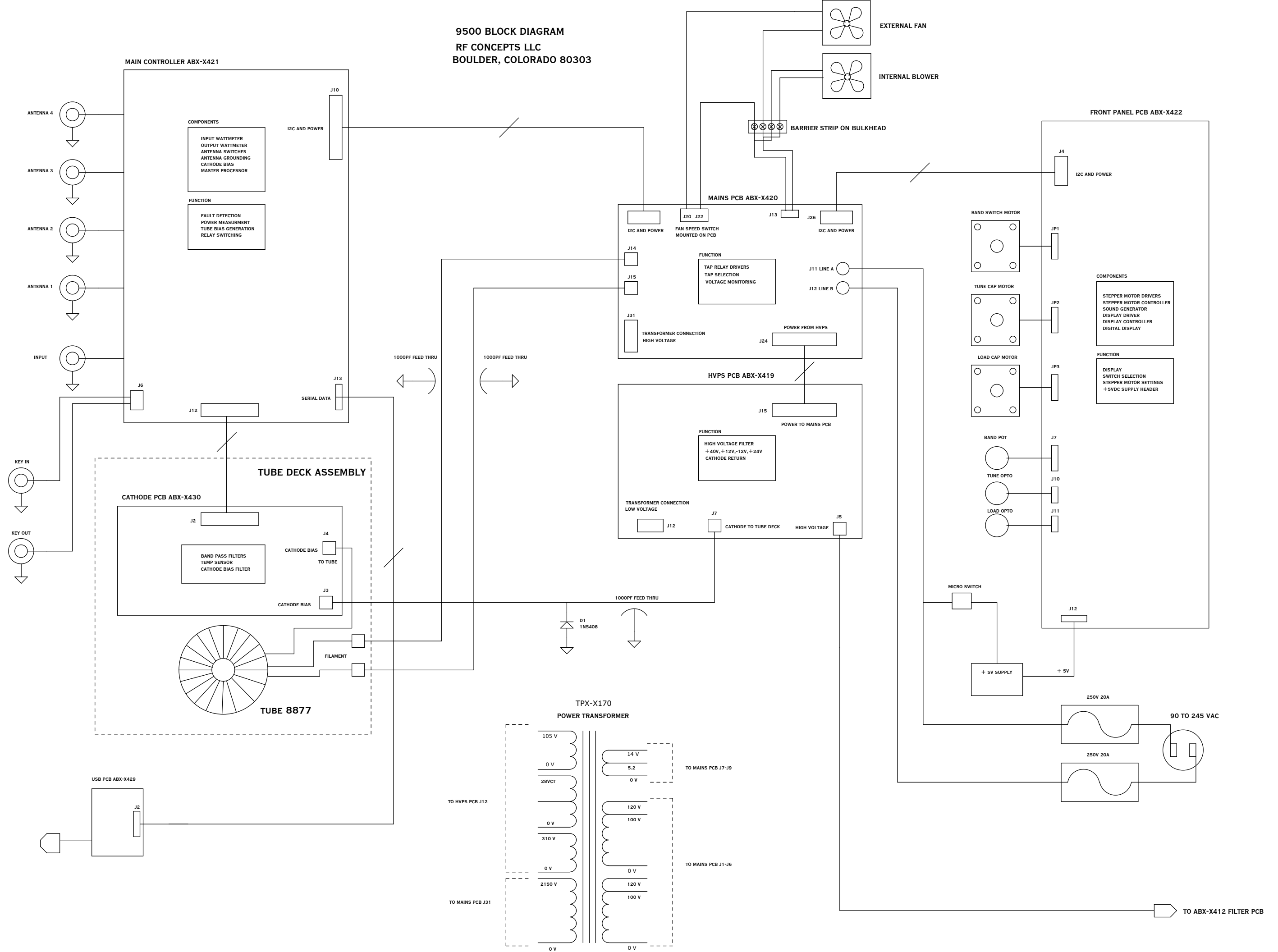


The diagram illustrates the power supply connections for the External Fan and Internal Blower. The External Fan is connected to the +5V and GND rails. The Internal Blower is connected to the +12V and GND rails.



D

C

B

A

6

5

4

3

2

1

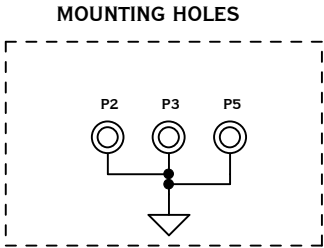
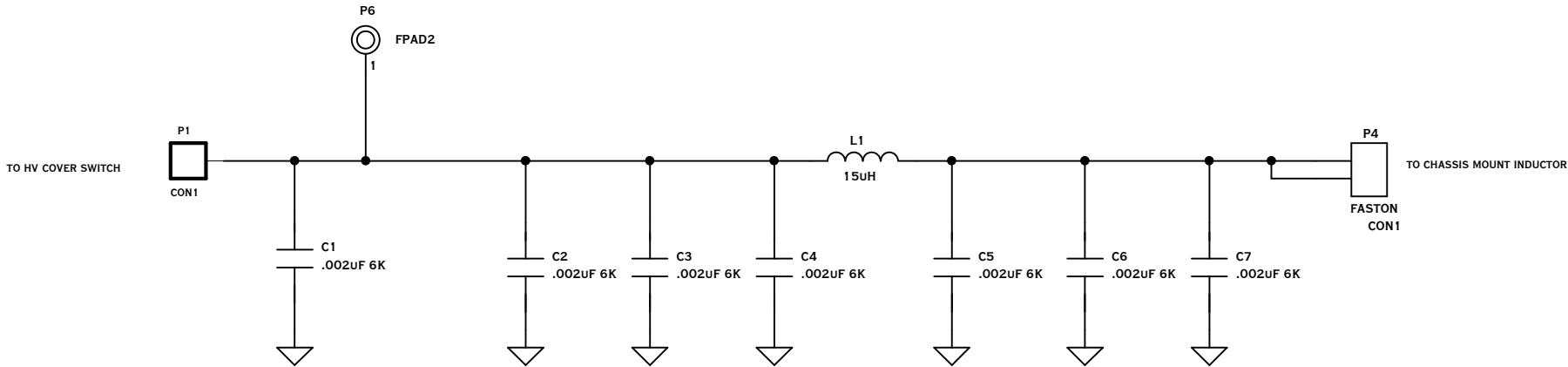
REVISION HISTORY					
REV	ECO NO.	DESCRIPTION	CHANGED BY & DATE	CHECKED BY & DATE	EFFECTIVITY DATE
A		INITIAL RELEASE TO MFG.	BWF 07/19/07	GEH 07/19/07	07/19/07

D

C

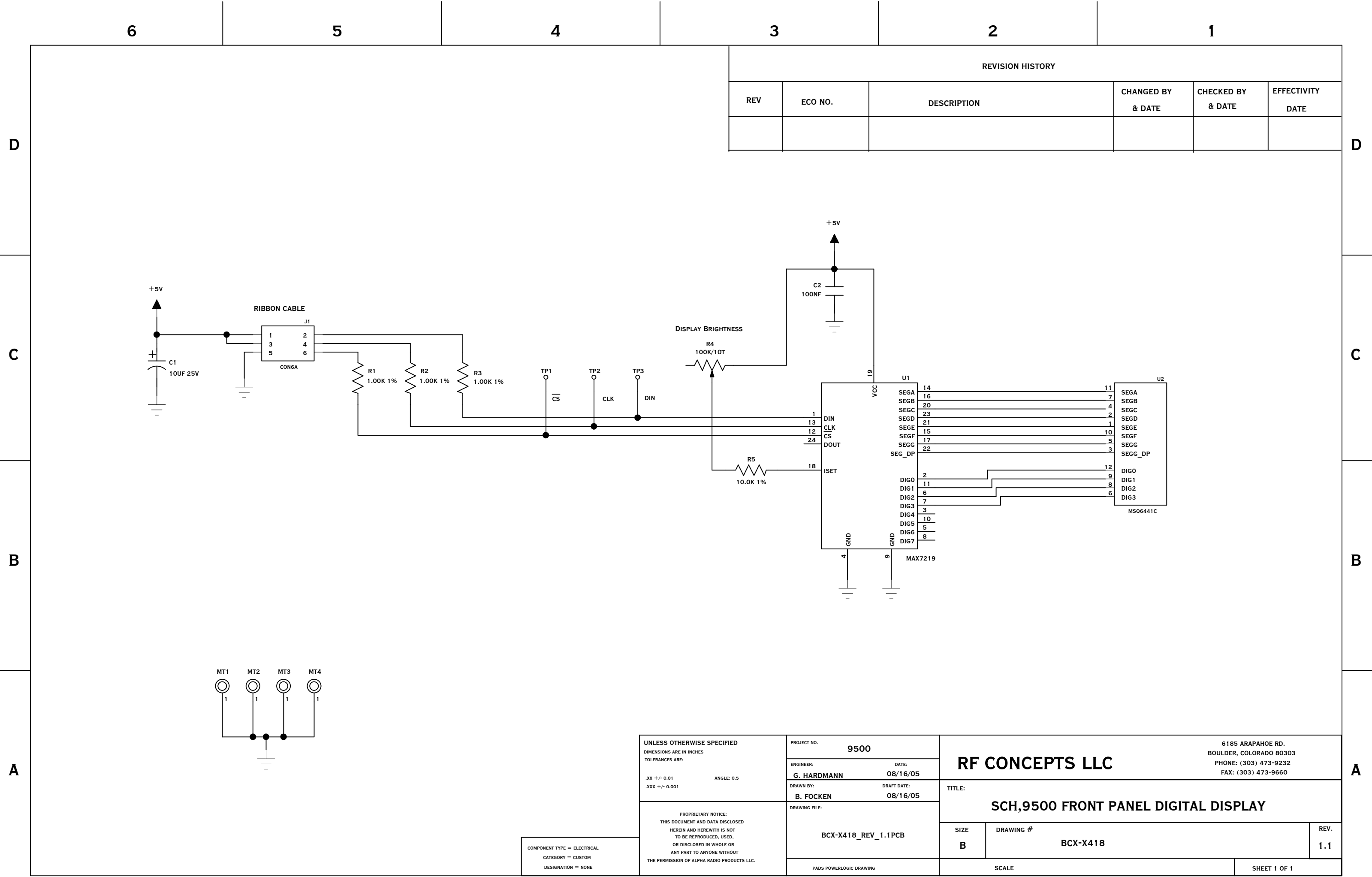
B

A



PROPRIETARY NOTICE:
THIS DOCUMENT AND DATA DISCLOSED
HEREIN AND HERewith IS NOT
TO BE REPRODUCED, USED,
OR DISCLOSED IN WHOLE OR
ANY PART TO ANYONE WITHOUT
THE PERMISSION OF ALPHA RADIO PRODUCTS LLC.

PROJECT NO. 8100/99		RF CONCEPTS LLC		6185 ARAPAHOE RD. BOULDER, COLORADO 80303 PHONE: (303) 473-9232 FAX: (303) 473-9660	
ENGINEER: G. HARDMAN	DATE: 07/19/07			TITLE: SCH,ALPHA 8100/99 CENTER PARTITION FILTER	
DRAWN BY: B. FOCKEN	DRAFT DATE: 07/19/07				
DRAWING FILE: BCX-X412_REV_A.SCH		SIZE B	DRAWING # BCX-X412		REV. A
PADS POWERLOGIC DRAWING		SCALE			SHEET 1 OF 1



D

C

B

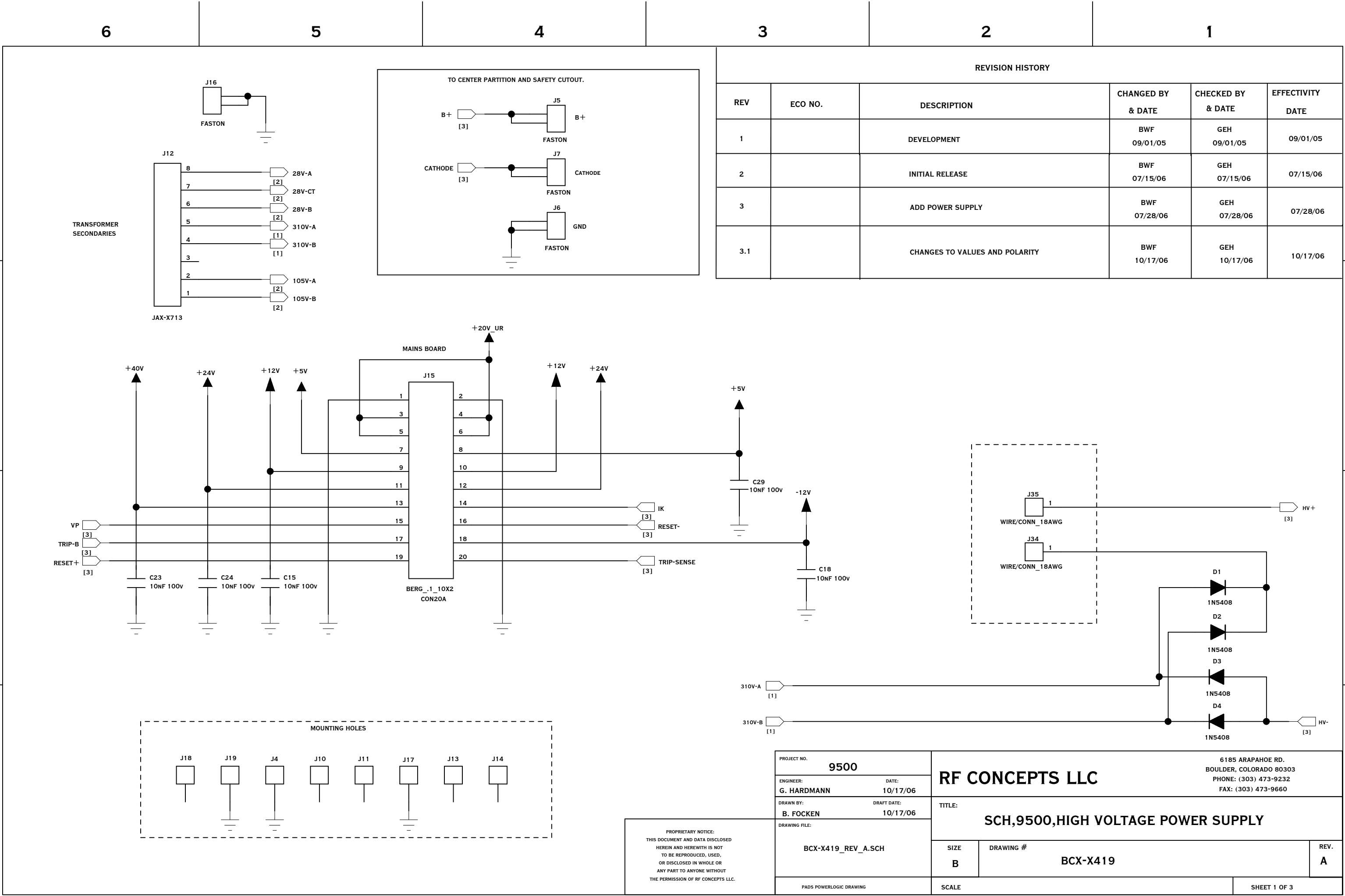
A

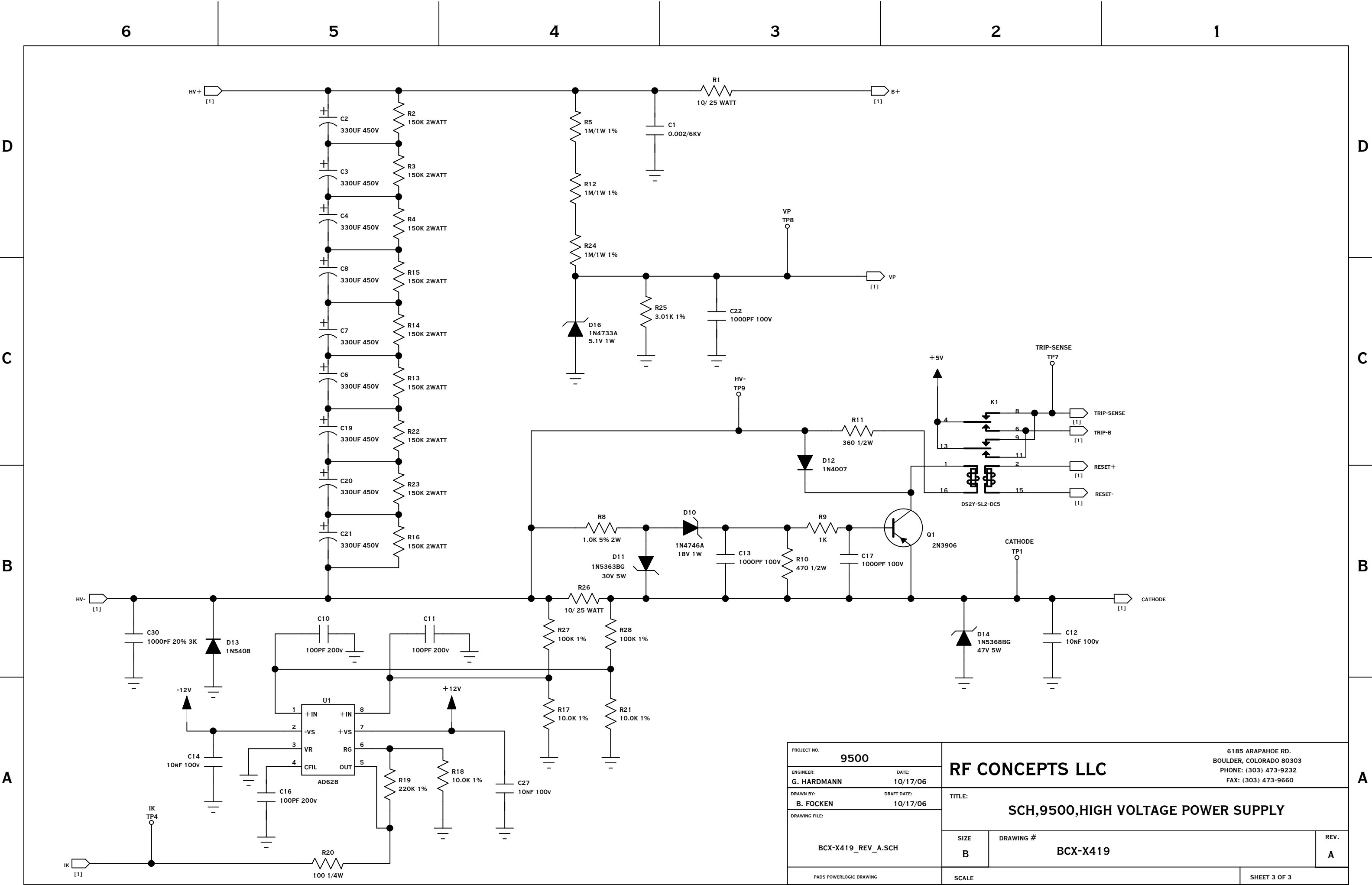
D

C

B

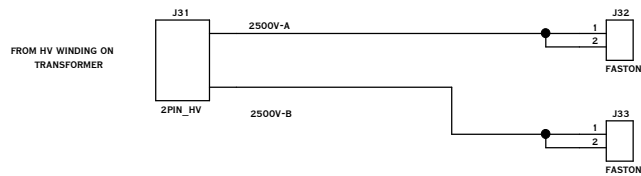
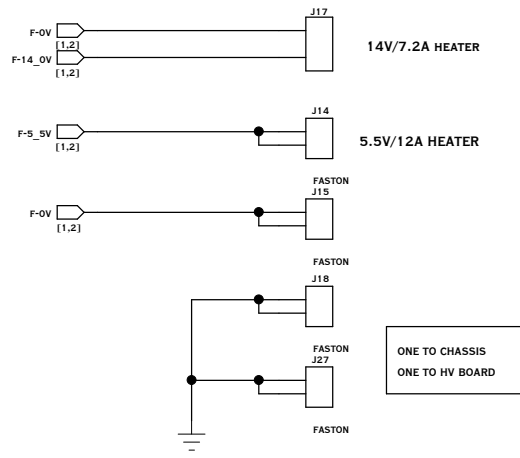
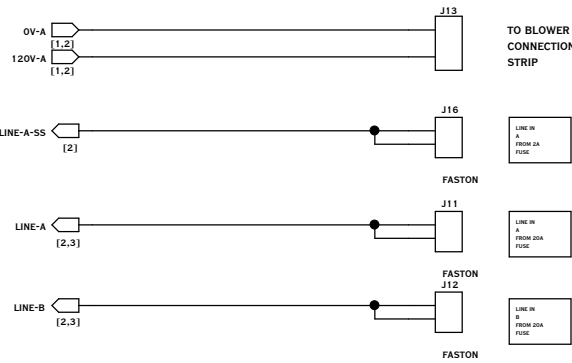
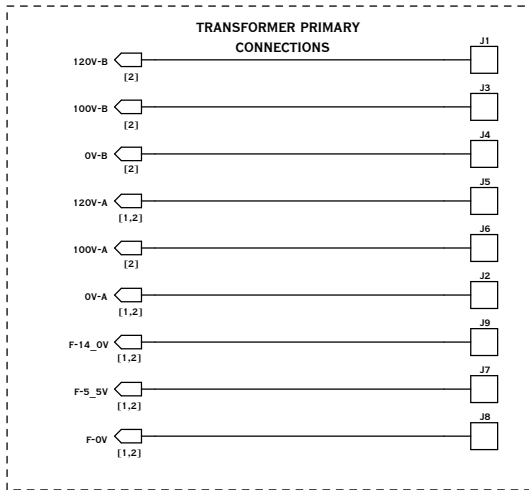
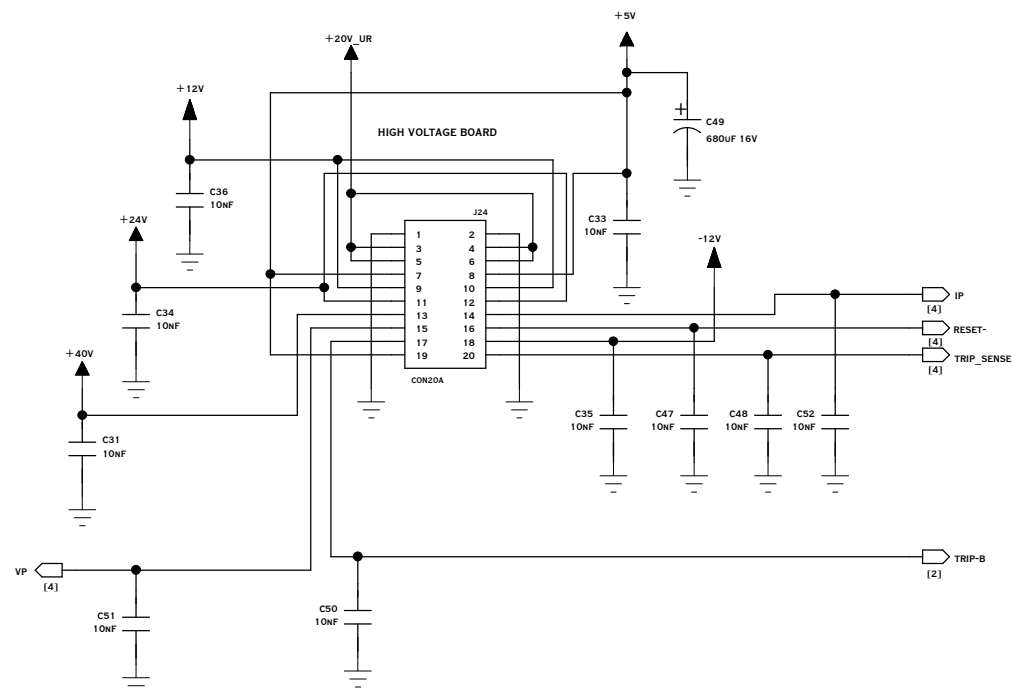
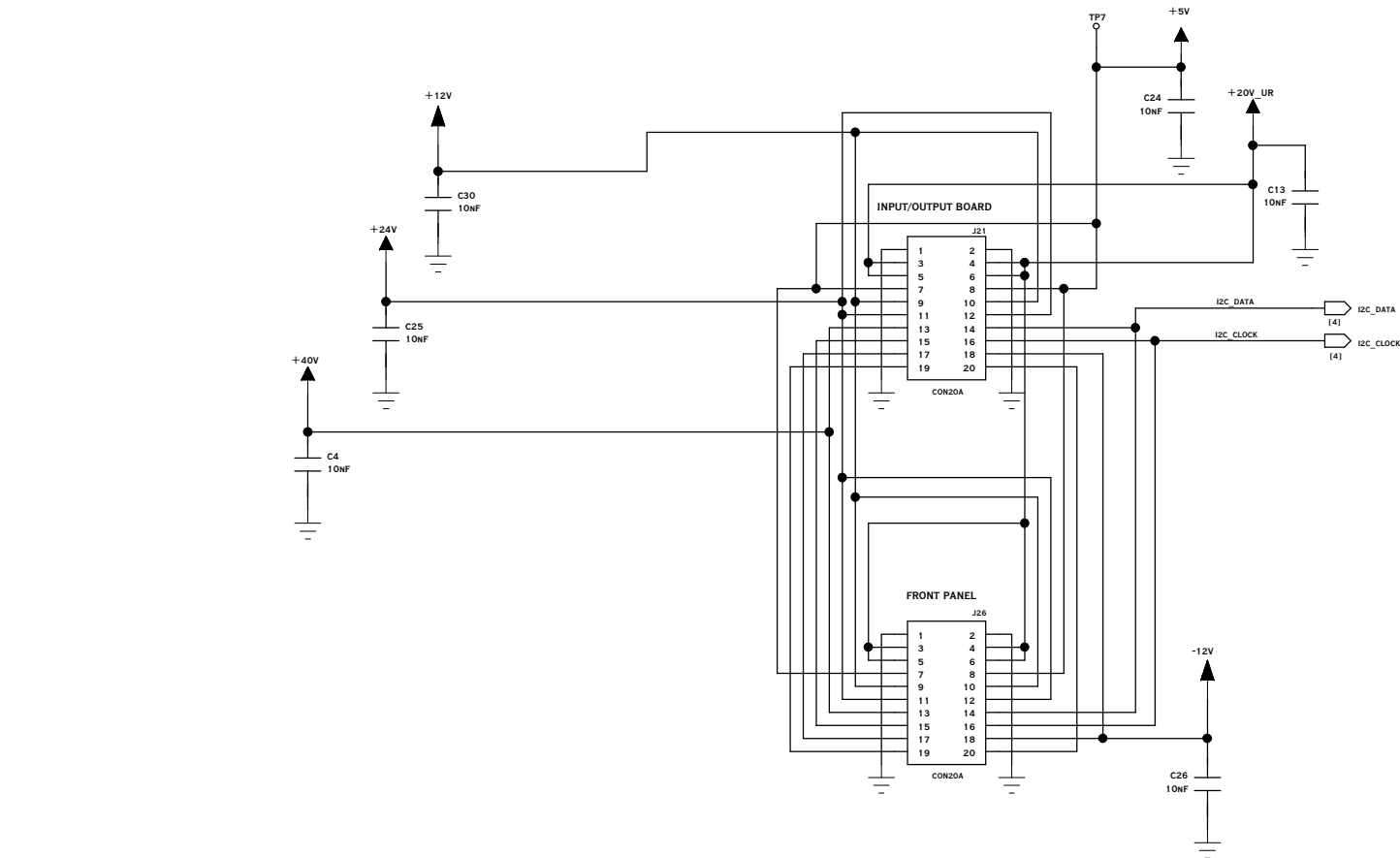
A





PROJECT NO. 9500		RF CONCEPTS LLC 6185 ARAPAHOE RD. BOULDER, COLORADO 80303 PHONE: (303) 473-9232 FAX: (303) 473-9660	
ENGINEER: G. HARDMANN	DATE: 10/17/06		
DRAWN BY: B. FOCKEN	DRAFT DATE: 10/17/06	TITLE: SCH,9500,HIGH VOLTAGE POWER SUPPLY	
DRAWING FILE: BCX-X419_REV_A.SCH		SIZE B	REV. A
PADS POWERLOGIC DRAWING		SCALE	SHEET 3 OF 3

REVISION HISTORY					
REV	ECO NO.	DESCRIPTION	CHANGED BY & DATE	CHECKED BY & DATE	EFFECTIVITY DATE
1		INITIAL RELEASE	BWF 09/07/05	BWF 09/07/05	09/07/05
2		CHANGE TO PROCESSOR PIN OUT	BWF 12/21/05	BWF 12/21/05	12/21/05
2.1		CHANGED RELAYS	BWF 12/29/05	GEH 12/29/05	12/29/05
2.2/3		CHANGE PARTS	BWF 04/11/06	GEH 04/11/06	04/11/06
4		CHANGE AC SENSE CIRCUIT	BWF 07/24/06	GEH 07/24/06	07/24/06
5		ADD POWER SUPPLY	BWF 07/31/06	GEH 07/31/06	07/31/06
A		RELEASE TO MFG	BWF 11/13/07	GEH 11/13/07	11/13/07



BRIDGE RECTIFIER
MOUNTED ON BULK HEAD

PROPRIETARY NOTICE:
THIS DOCUMENT AND DATA DISCLOSED
HEREIN AND HEREINWITH IS NOT
TO BE REPRODUCED, USED,
OR DISCLOSED IN WHOLE OR
ANY PART TO ANYONE WITHOUT
THE PERMISSION OF RF CONCEPTS LLC.

PROJECT NO. 9500	RF CONCEPTS LLC 6185 ARAPAHOE RD. BOULDER, COLORADO 80303 PHONE: (303) 473-9232 FAX: (303) 473-9660		
ENGINEER: G. HARDMAN	DATE: 11/13/07	TITLE: SCH.9500 MAINS	
DRAWN BY: B.FOCKEN	DRAFT DATE: 11/13/07	SIZE C	REV. A
DRAWING FILE: BCX-X420_REV_A.SCH	DRAWING # BCX-X420 CONNECTORS		
PAGE POWERLOGIC DRAWING	SCALE		SHEET 1 OF 4

6

5

4

3

2

1

D

C

B

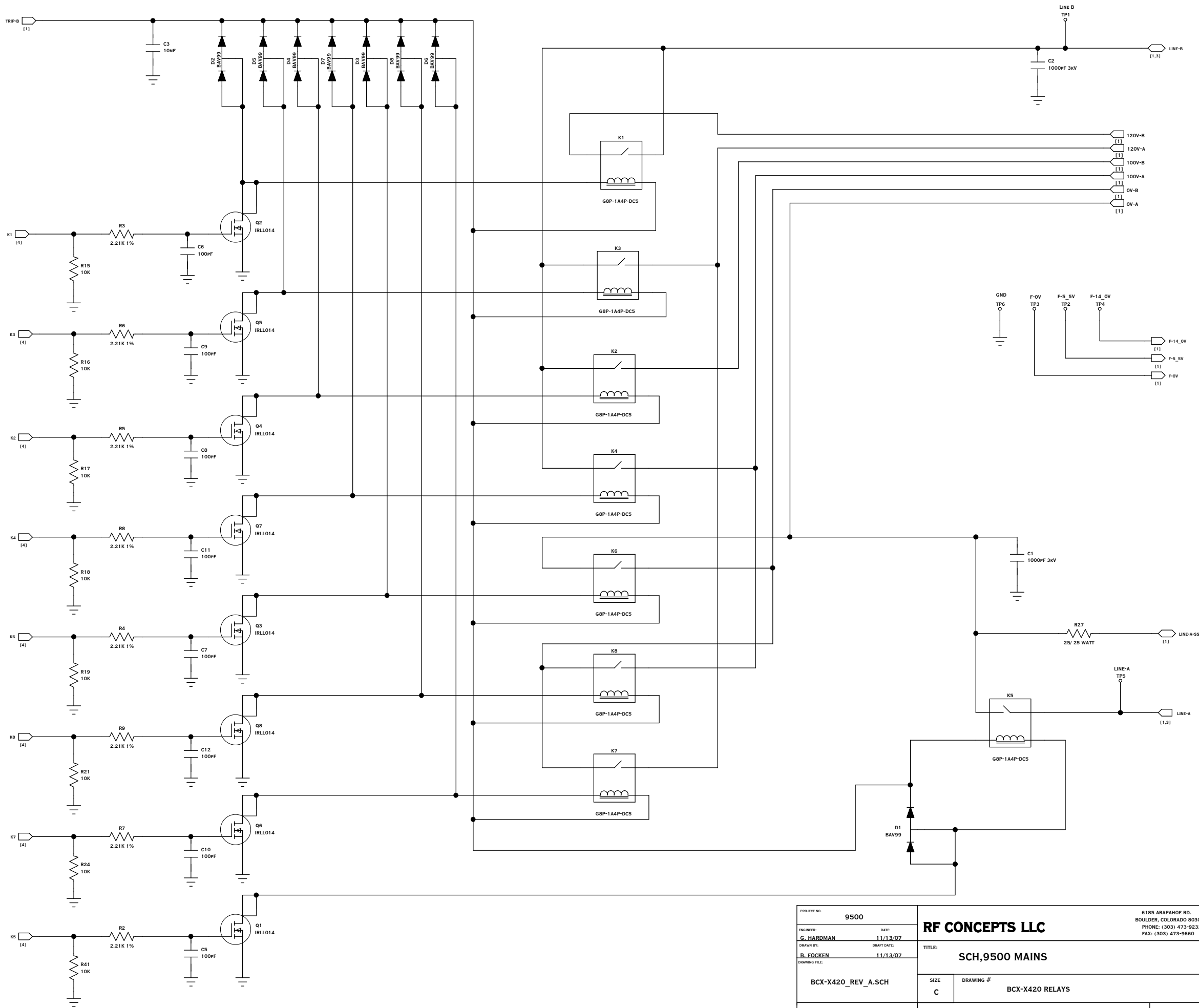
A

D

C

B

A



PROJECT NO. 9500		RF CONCEPTS LLC		6185 ARAPAHOE RD. BOULDER, COLORADO 80303 PHONE: (303) 473-9232 FAX: (303) 473-9660	
ENGINEER: G. HARDMAN	DATE: 11/13/07			TITLE: SCH,9500 MAINS	
DRAWN BY: B. FOCKEN	DRAFT DATE: 11/13/07	SIZE C		DRAWING # BCX-X420 RELAYS	REV. A
DRAWING FILE: BCX-X420_REV_A.SCH		SCALE		SHEET 2 OF 4	
PADS POWERLOGIC DRAWING					

6

5

4

3

2

1

D

D

C

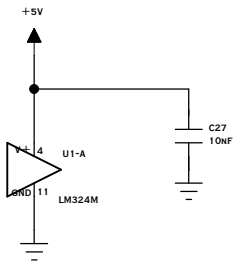
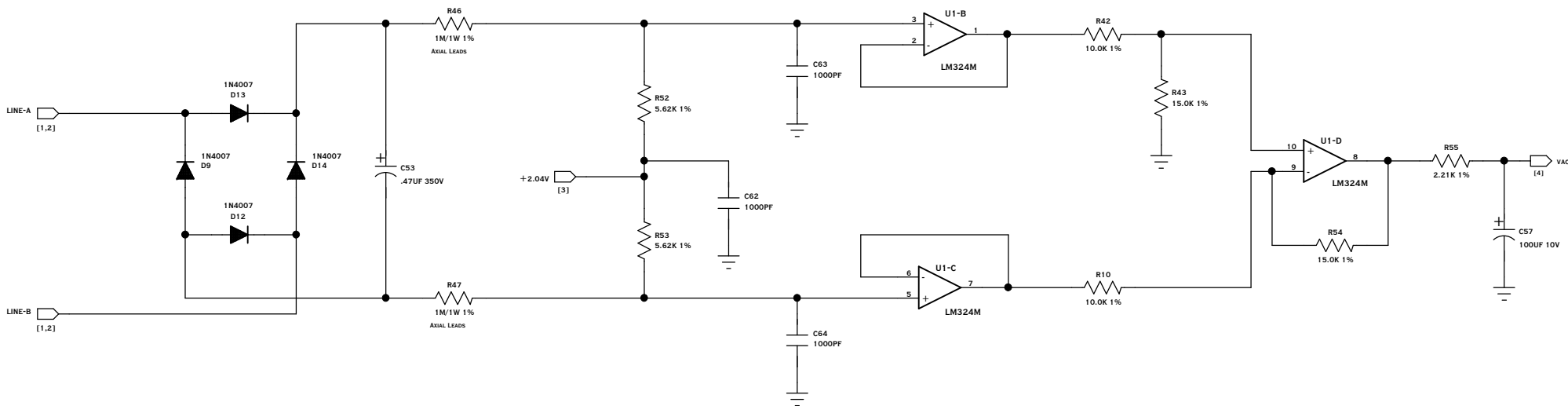
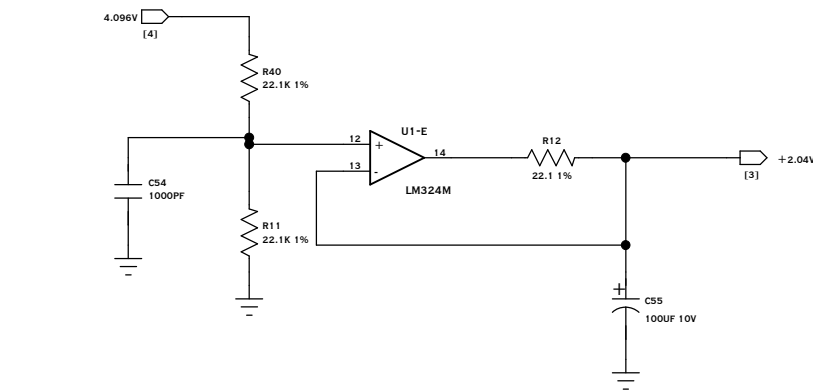
C

B

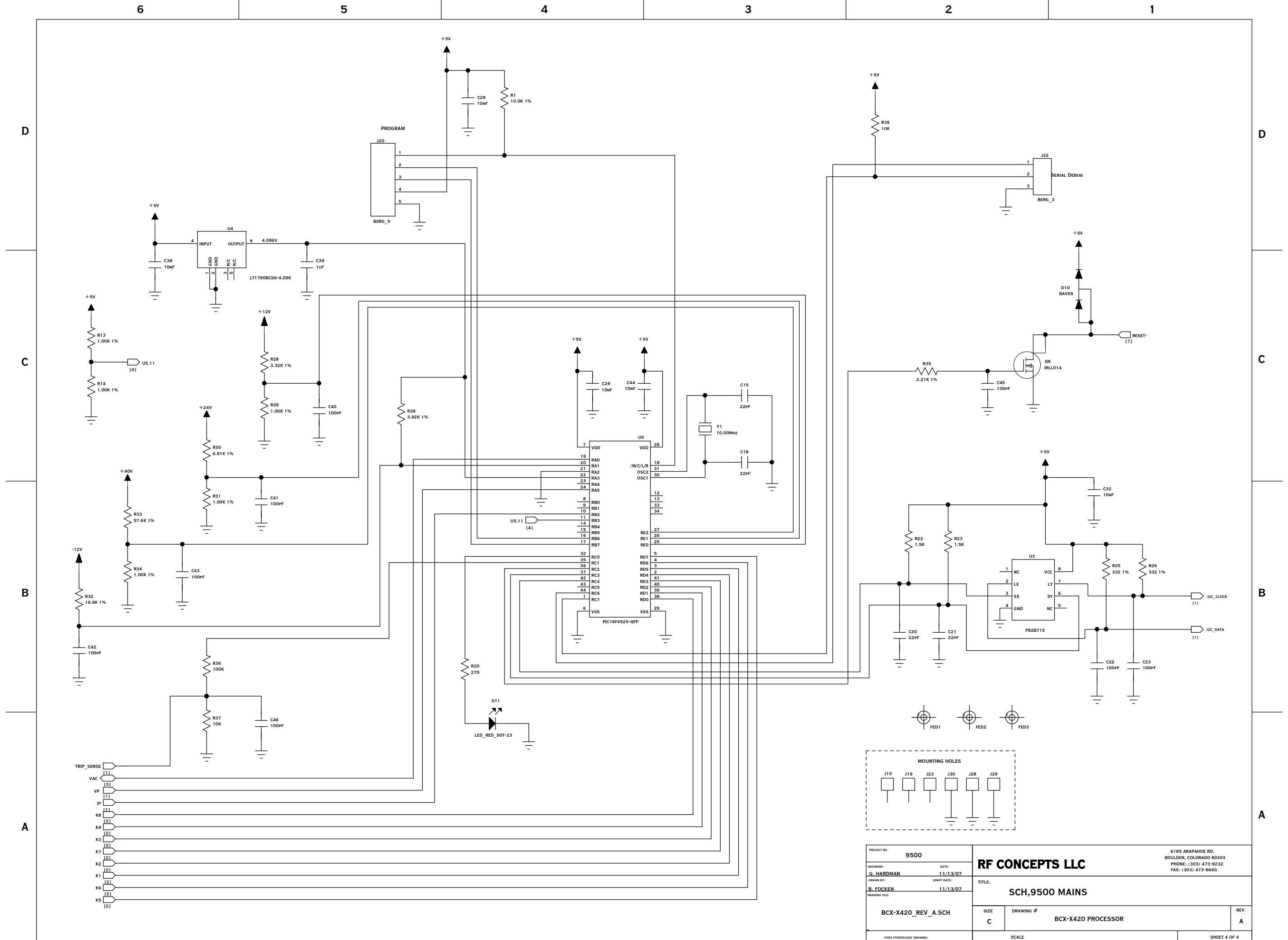
B

A

A



PROJECT NO. 9500		RF CONCEPTS LLC		6185 ARAPAHOE RD. BOULDER, COLORADO 80303 PHONE: (303) 473-9232 FAX: (303) 473-9660	
ENGINEER: G. HARDMAN	DATE: 11/13/07			TITLE: SCH,9500 MAINS	
DRAWN BY: B. FOCKEN	DRAFT DATE: 11/13/07				
DRAWING FILE: BCX-X420_REV_A.SCH		SIZE C	DRAWING # BCX-X420 MAINS SENSOR		REV. A
PADS POWERLOGIC DRAWING		SCALE		SHEET 3 OF 4	



6

5

4

3

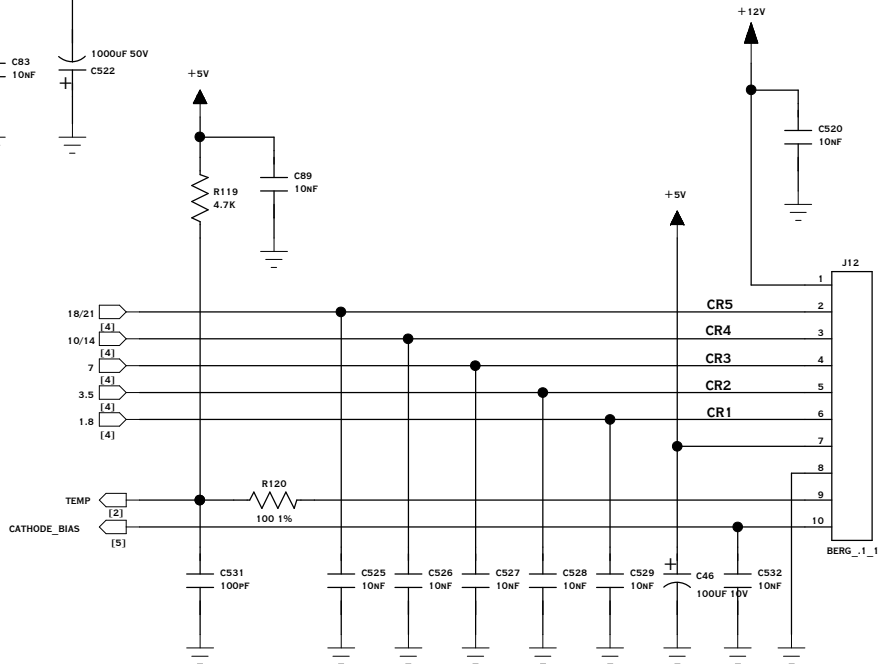
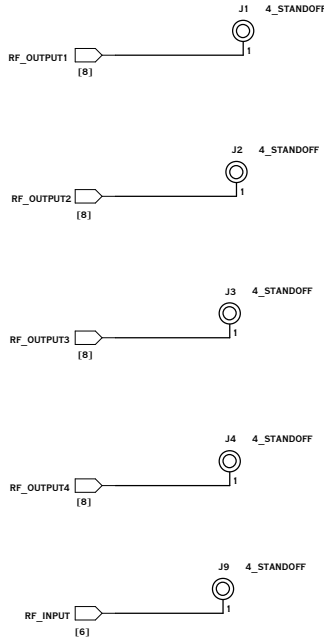
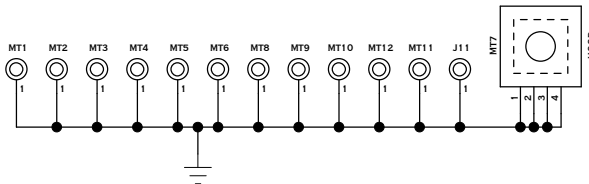
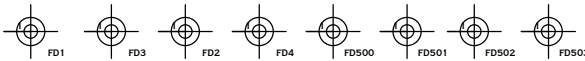
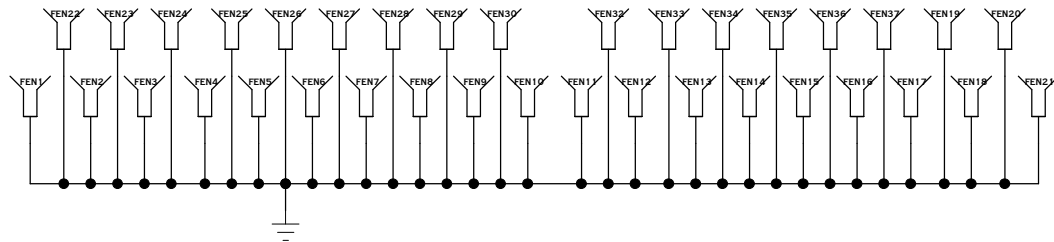
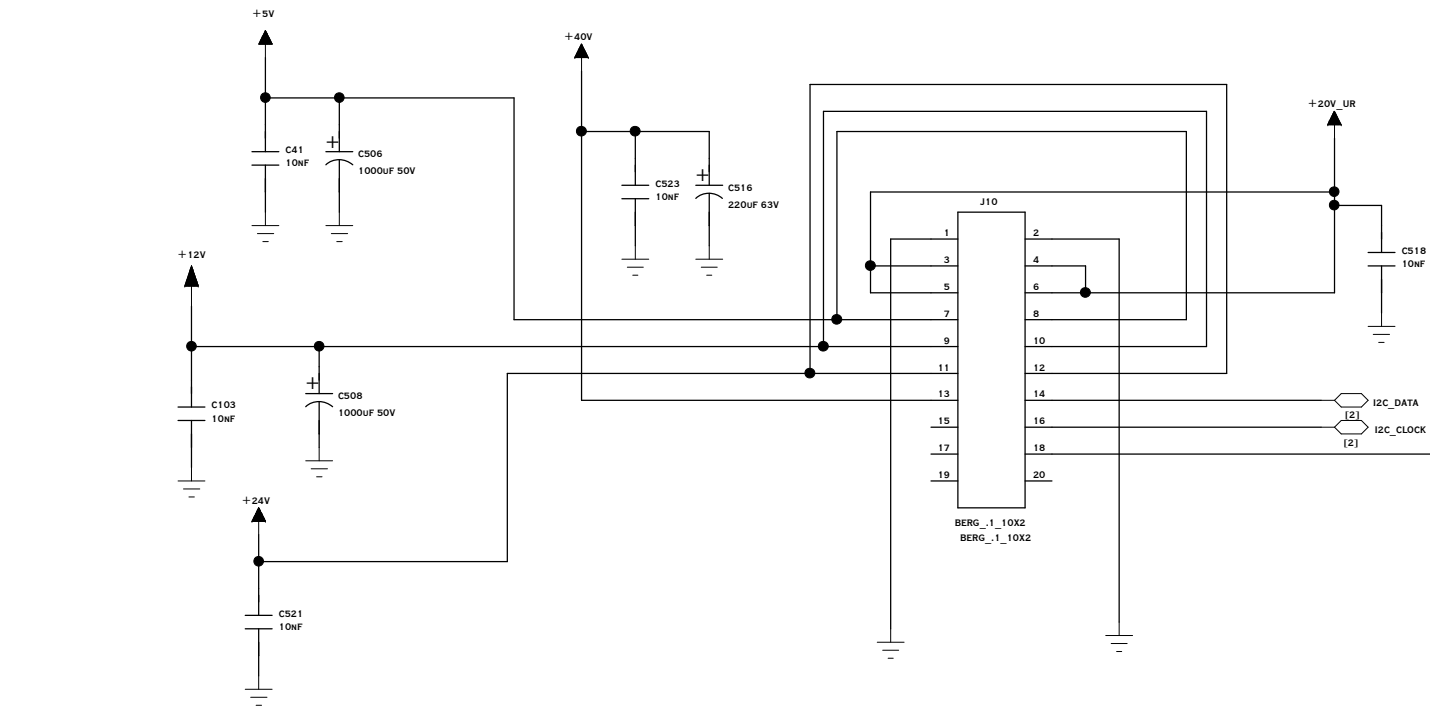
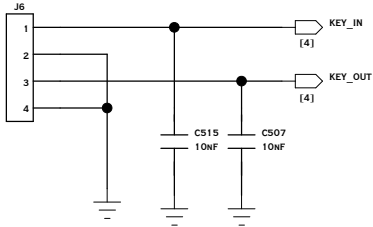
2

1

REVISION HISTORY

REV	ECO NO.	DESCRIPTION	CHANGED BY & DATE	CHECKED BY & DATE	EFFECTIVITY DATE
1		INITIAL RELEASE	BWF 11/09/06	GEH 11/09/06	11/09/06
2		CHANGES TO WATT METERS	BWF 12/08/06	GEH 12/08/06	12/08/06
3		CHANGES TO WATT METERS AND PROCESSOR	BWF 01/03/07	GEH 01/03/07	01/03/07

TO REAR PANEL RCA'S



TO MATCH BOARD

PROPRIETARY NOTICE:
THIS DOCUMENT AND DATA DISCLOSED
HEREIN AND HEREWITH IS NOT
TO BE REPRODUCED, USED,
OR DISCLOSED IN WHOLE OR
ANY PART TO ANYONE WITHOUT
THE PERMISSION OF RF CONCEPTS LLC.

PROJECT NO.	9500
ENGINEER:	G. HARDMAN
DATE:	07/25/08
DRAWN BY:	R. FOCKEN
DRAFT DATE:	07/25/08
DRAWING FILE:	BCX-X421_REV_A.SCH
CONNECTORS	
PAGE POWERLOGIC DRAWING	

RF CONCEPTS LLC

6185 ARAPAHOE RD.
BOULDER, COLORADO 80303
PHONE: (303) 473-9232
FAX: (303) 473-9660

TITLE:
SCH.OUTPUT/CONTROLLER,9500

SIZE
C
DRAWING #
BCX-X421

REV.
A

6

5

4

3

2

1

D

D

C

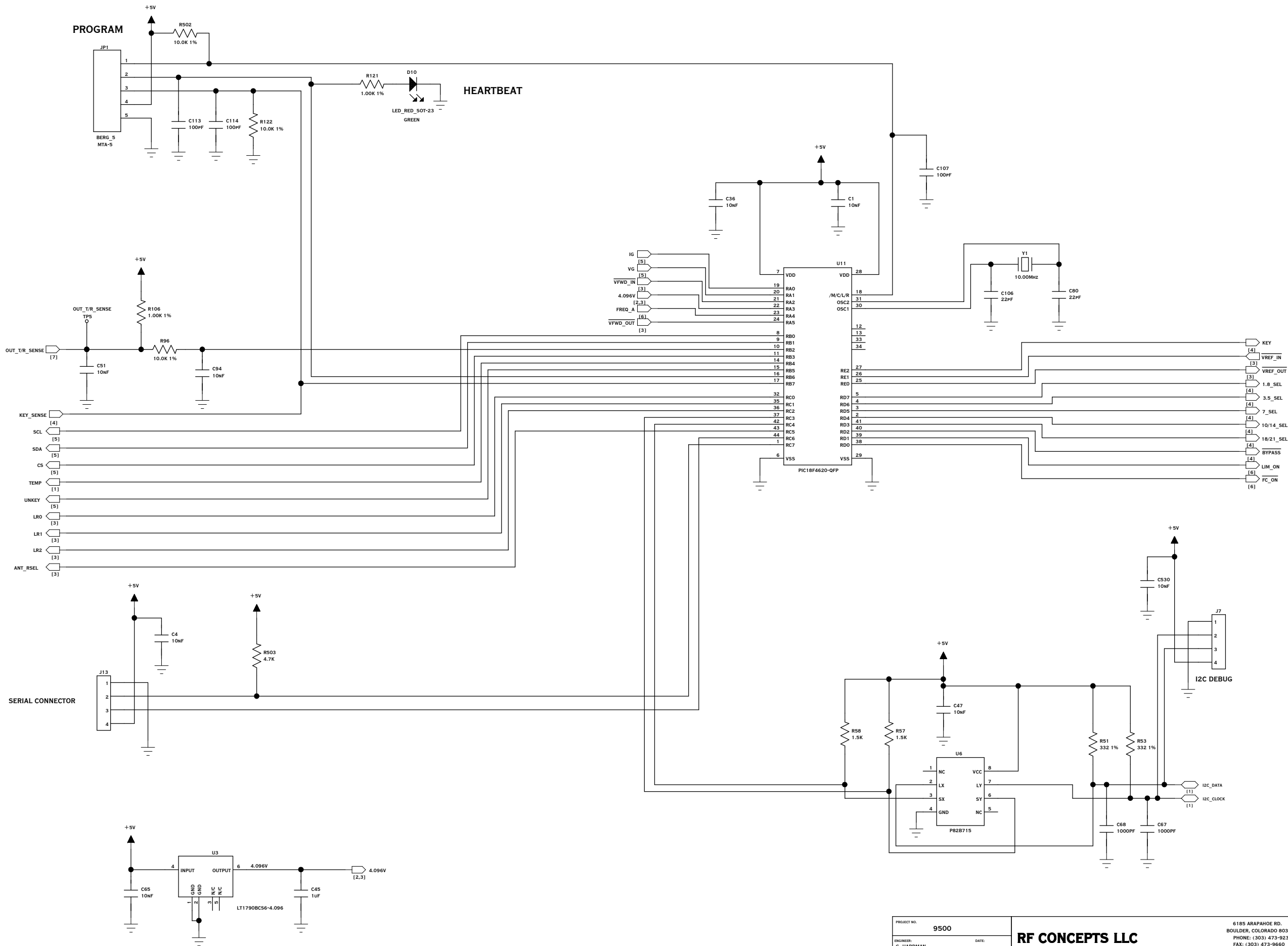
C

B

B

A

A



PROJECT NO. 9500		RF CONCEPTS LLC		6185 ARAPAHOE RD. BOULDER, COLORADO 80303 PHONE: (303) 473-9232 FAX: (303) 473-9660	
ENGINEER: G. HARDMAN	DATE: 07/25/08			TITLE: SCH,OUTPUT/CONTROLLER,9500	
DRAWN BY: B. FOCKEN	DRAFT DATE: 07/25/08				
DRAWING FILE:					
BCX-X421_REV_A.SCH CONTROLLER		SIZE C	DRAWING # BCX-X421	REV. A	
PADS POWERLOGIC DRAWING		SCALE			SHEET 2 OF 8

6

5

4

3

2

1

D

C

B

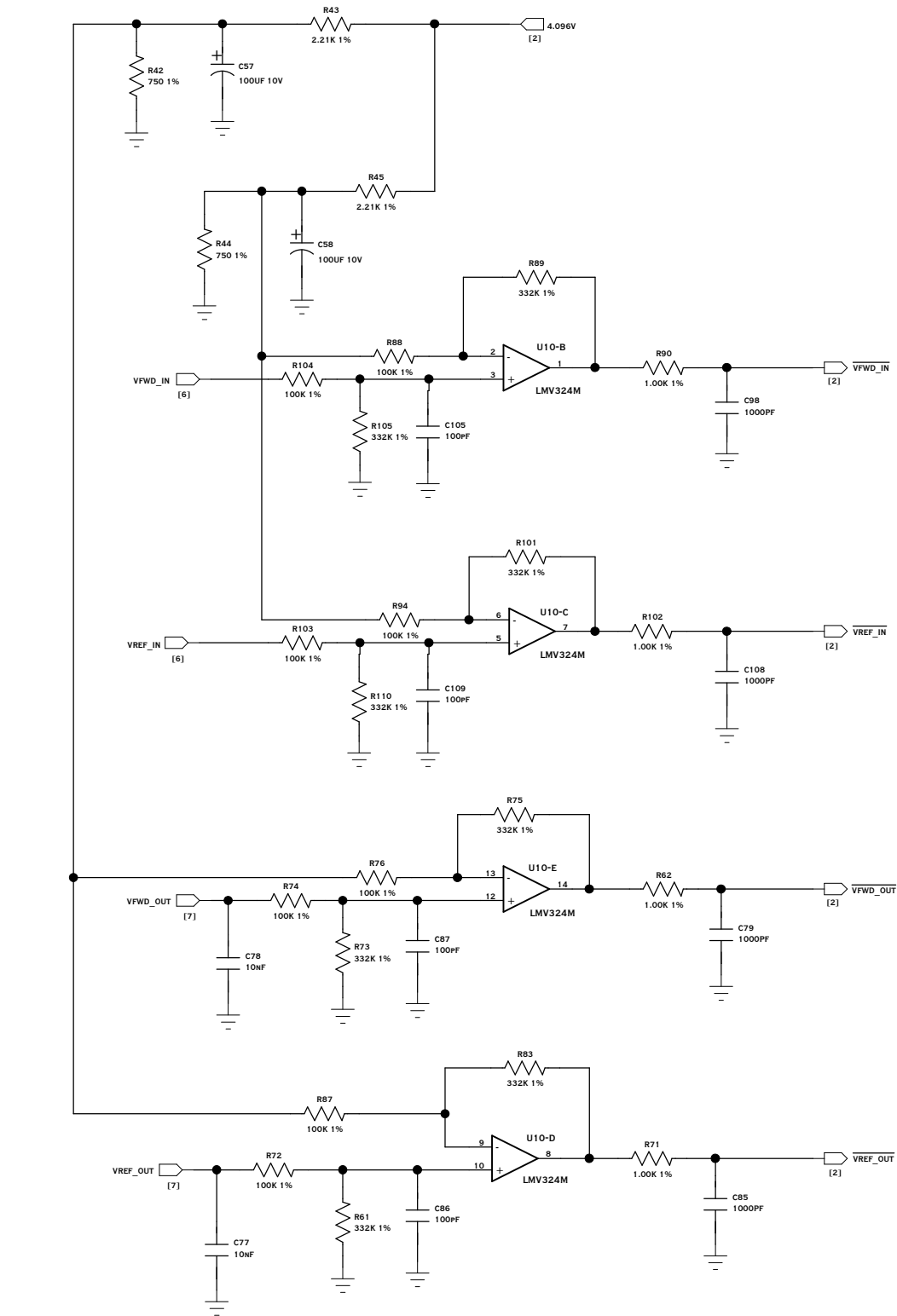
A

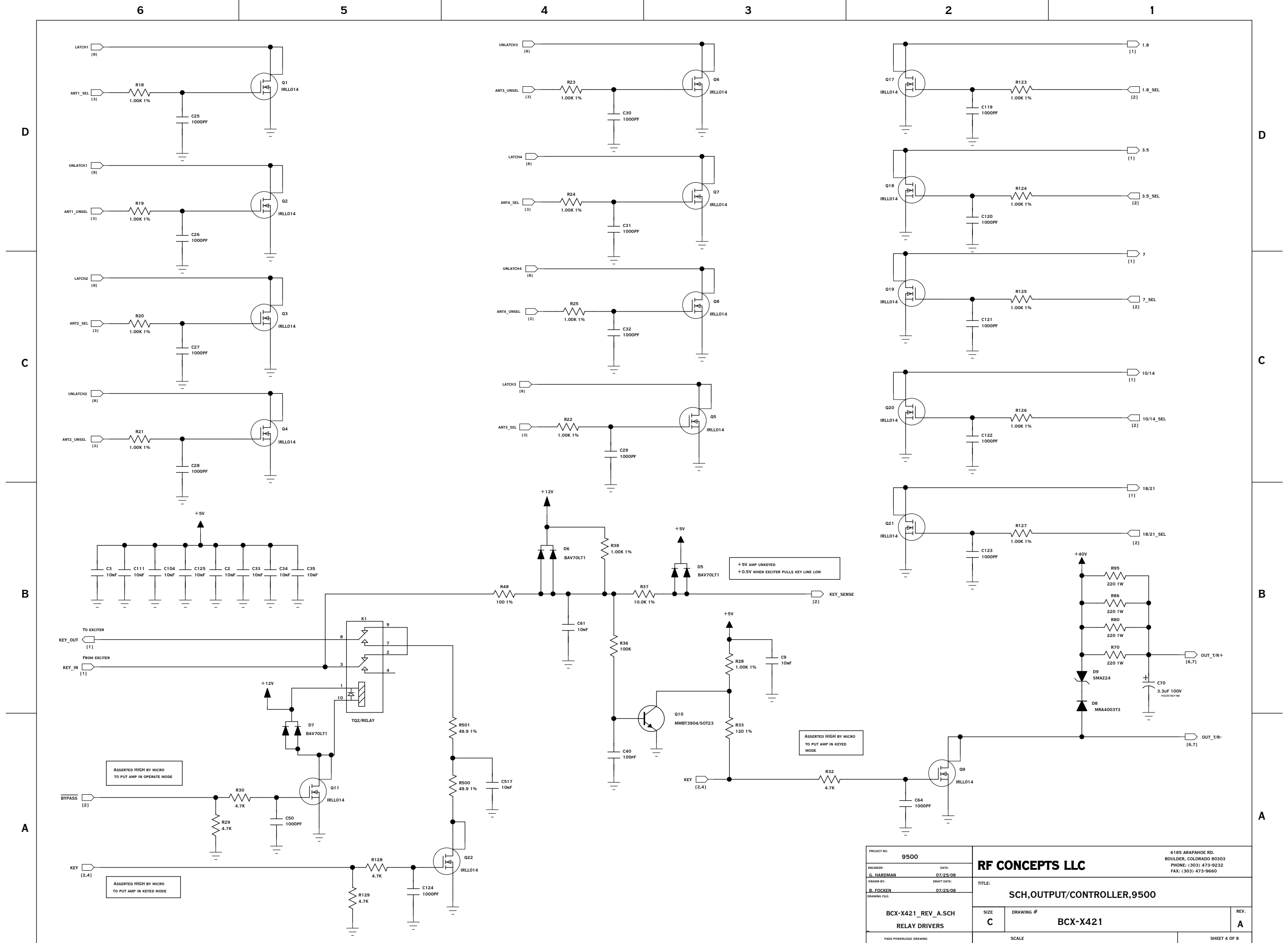
D

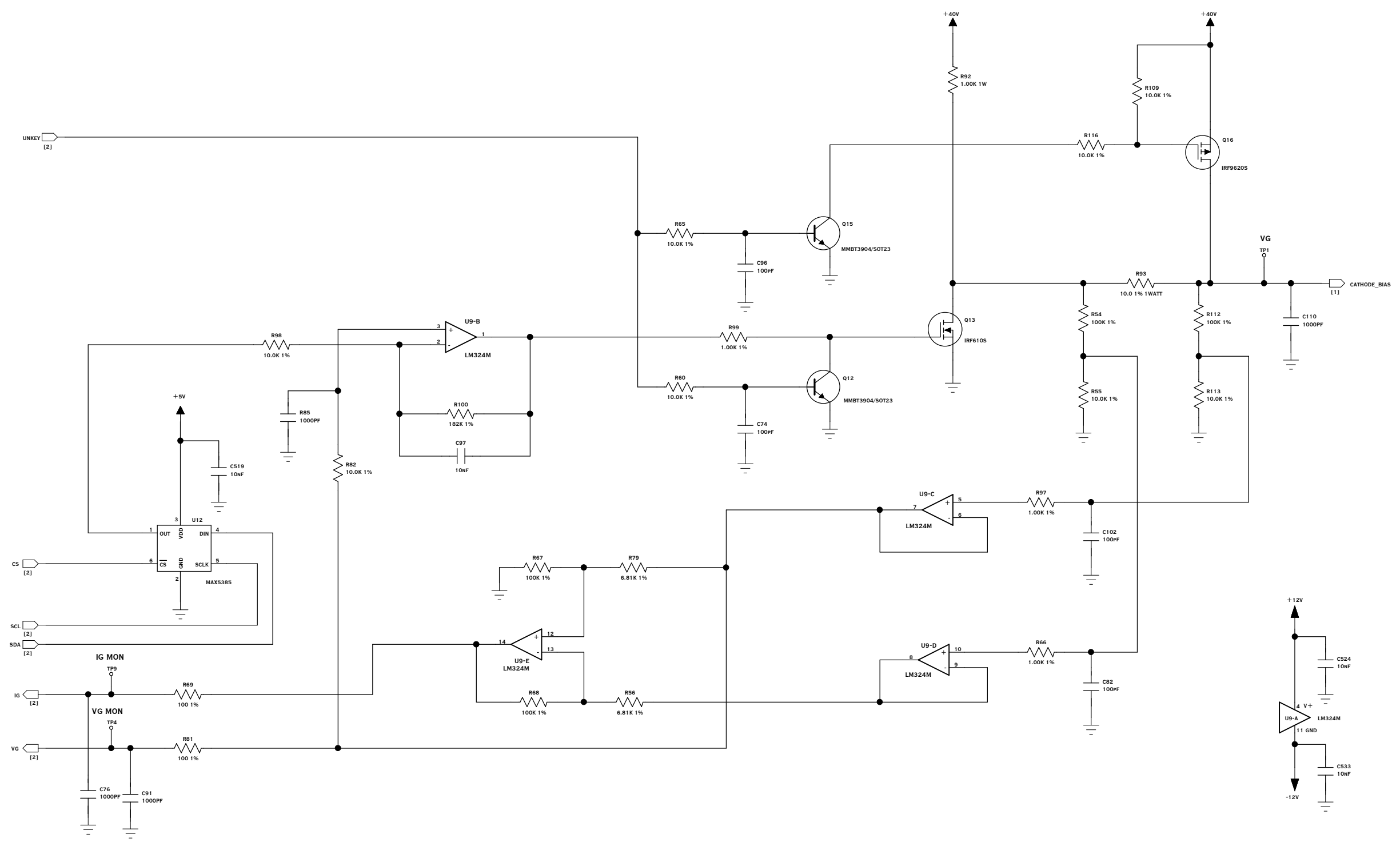
C

B

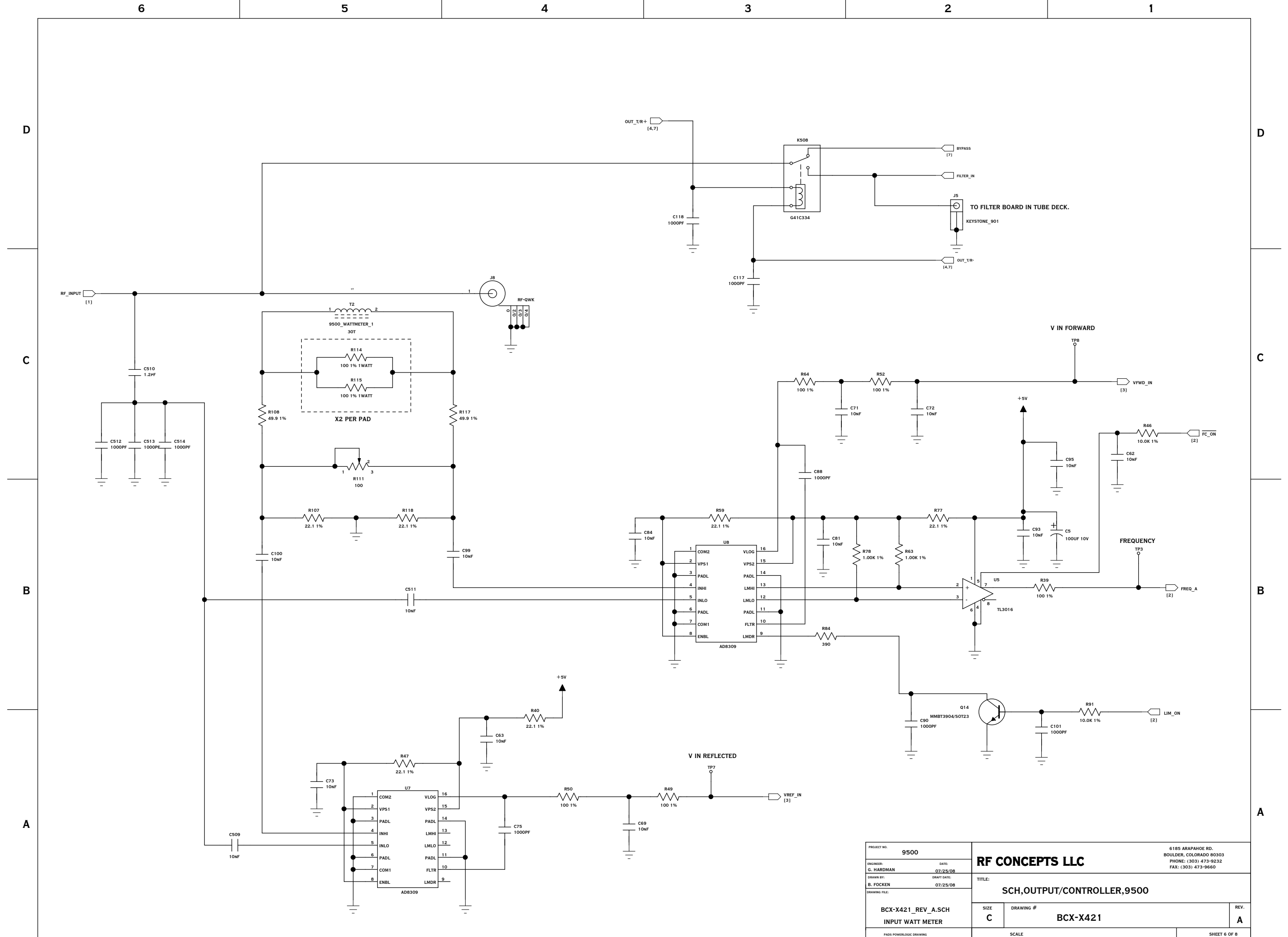
A







PROJECT NO. 9500		RF CONCEPTS LLC		6185 ARAPAHOE RD. BOULDER, COLORADO 80303	
ENGINEER: G. HARDMAN	DATE: 07/25/08			PHONE: (303) 473-9232	
DRAWN BY: B. FOCKEN	DRAFT DATE: 07/25/08	TITLE: SCH,OUTPUT/CONTROLLER,9500		FAX: (303) 473-9660	
DRAWING FILE: BCX-X421_REV_A.SCH		SIZE C	DRAWING # BCX-X421	REV. A	
PADS POWERLOGIC DRAWING		SCALE		SHEET 5 OF 8	



6

5

4

3

2

1

D

D

C

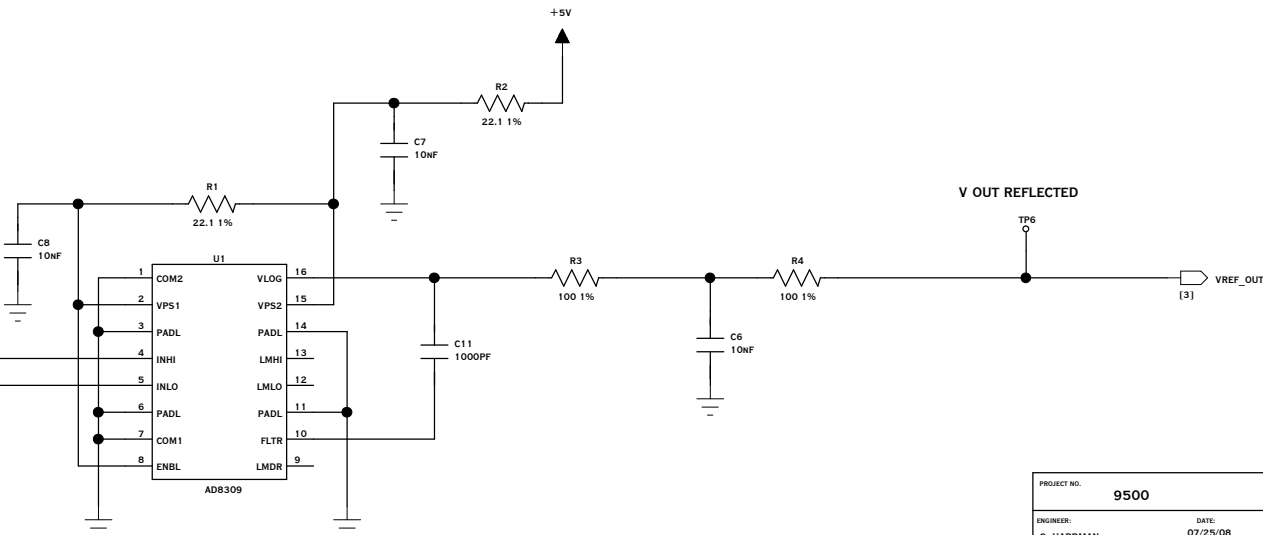
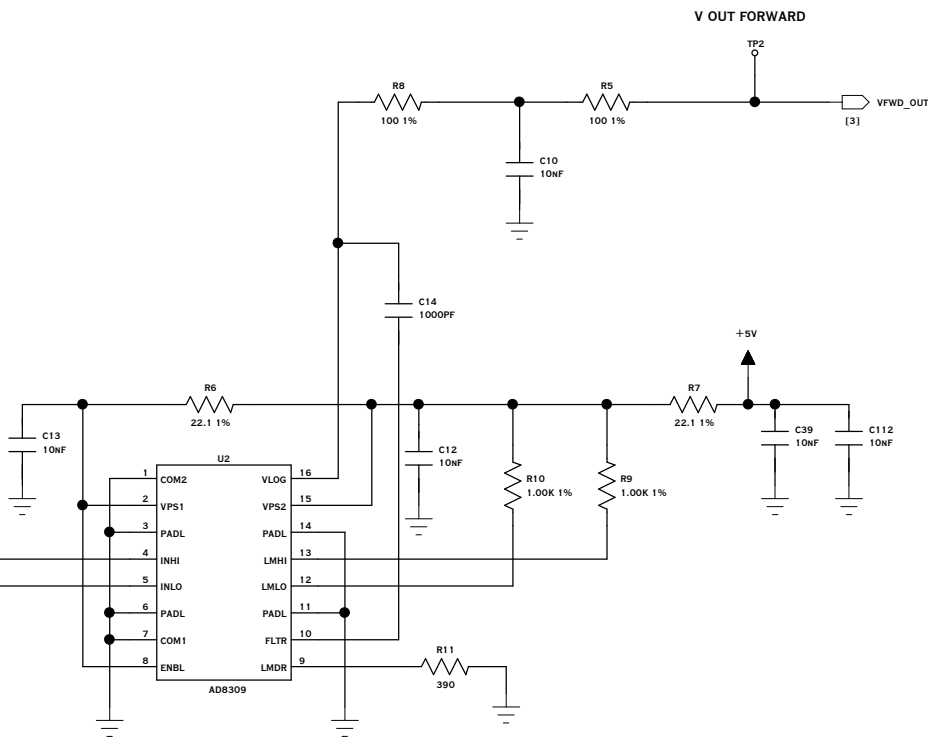
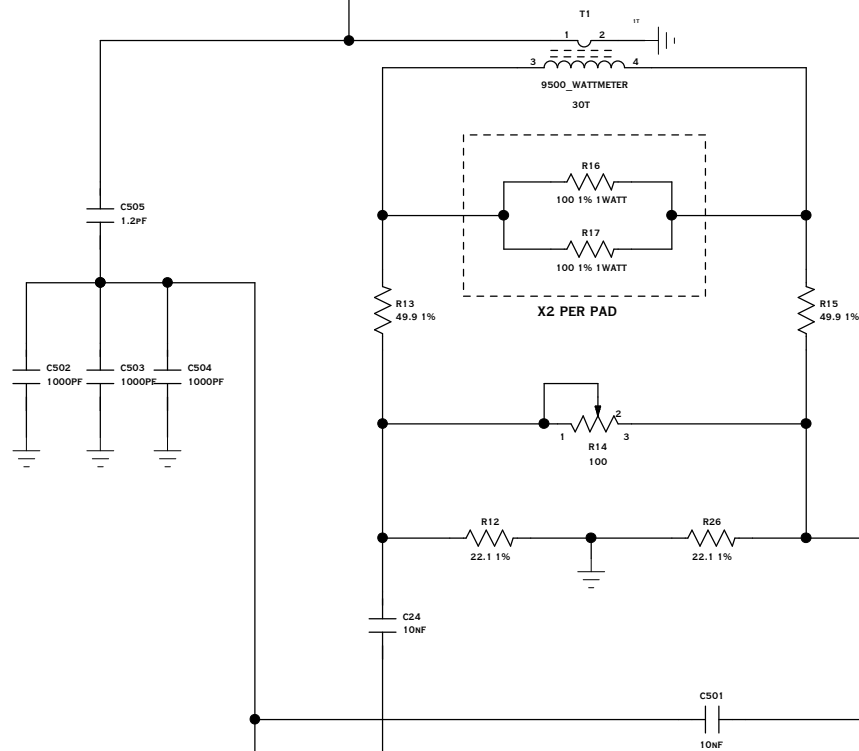
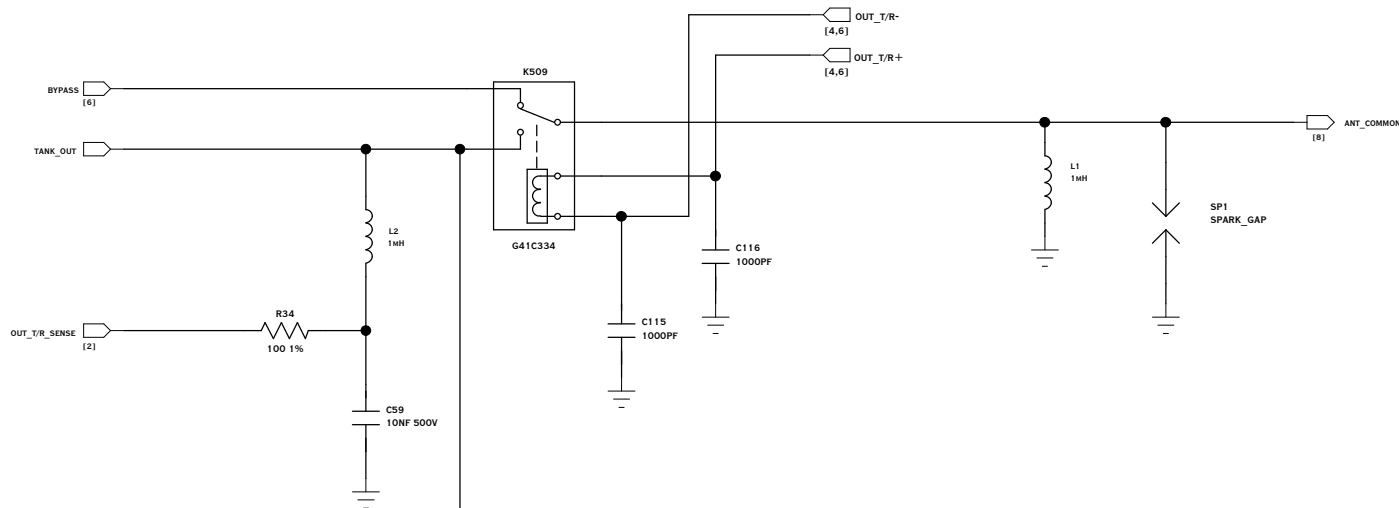
C

B

B

A

A



PROJECT NO. 9500		RF CONCEPTS LLC		6185 ARAPAHOE RD. BOULDER, COLORADO 80303	
ENGINEER: G. HARDMAN	DATE: 07/25/08			PHONE: (303) 473-9232	
DRAWN BY: R. FOCKEN	DRAFT DATE: 07/25/08	TITLE: SCH,OUTPUT/CONTROLLER,9500		FAX: (303) 473-9660	
DRAWING FILE: BCX-X421_REV_A.SCH OUTPUT WATT METER		SIZE C	DRAWING # BCX-X421	REV. A	
PADS POWERLOGIC DRAWING		SCALE			SHEET 7 OF 8

6

5

4

3

2

1

D

D

C

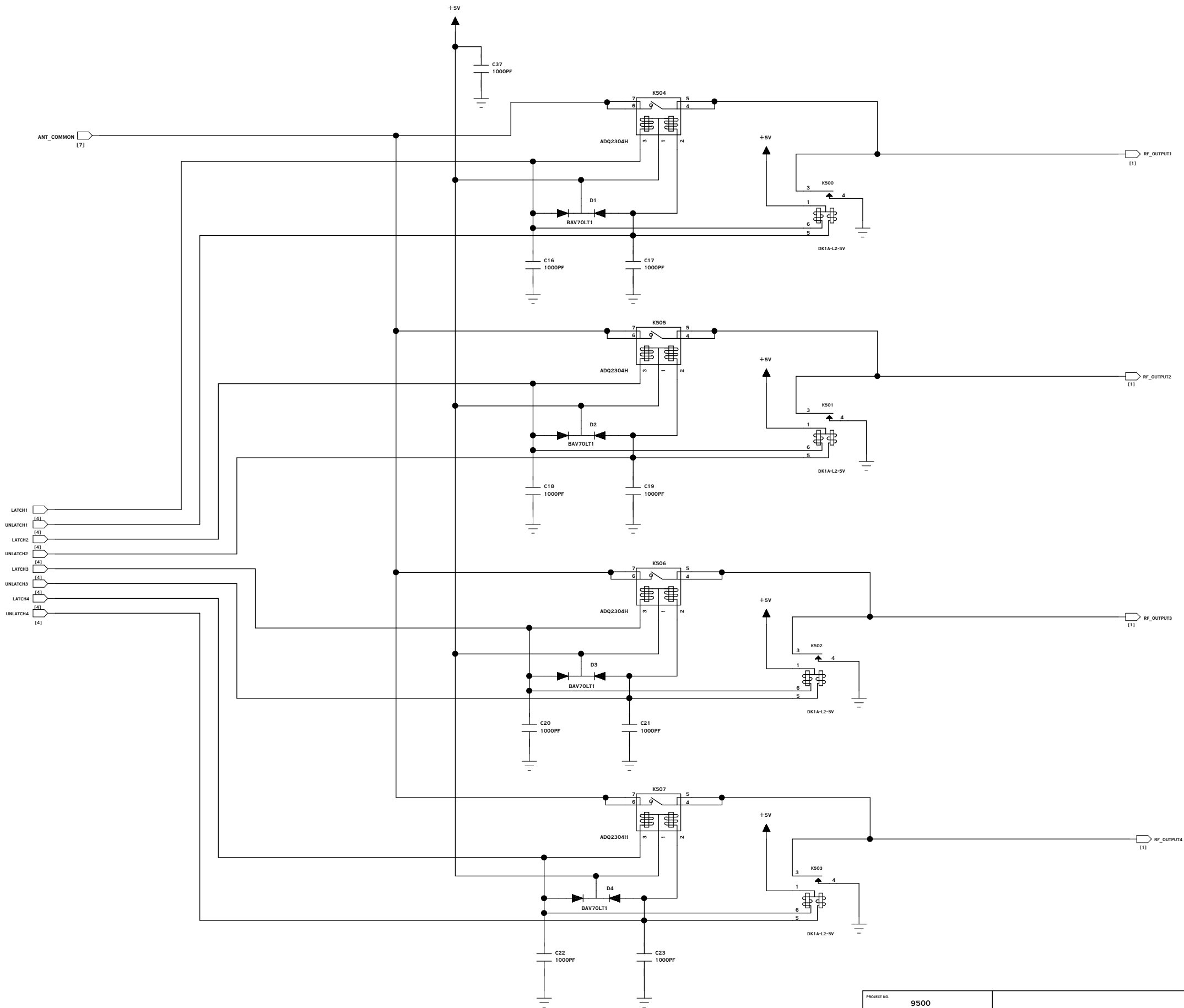
C

B

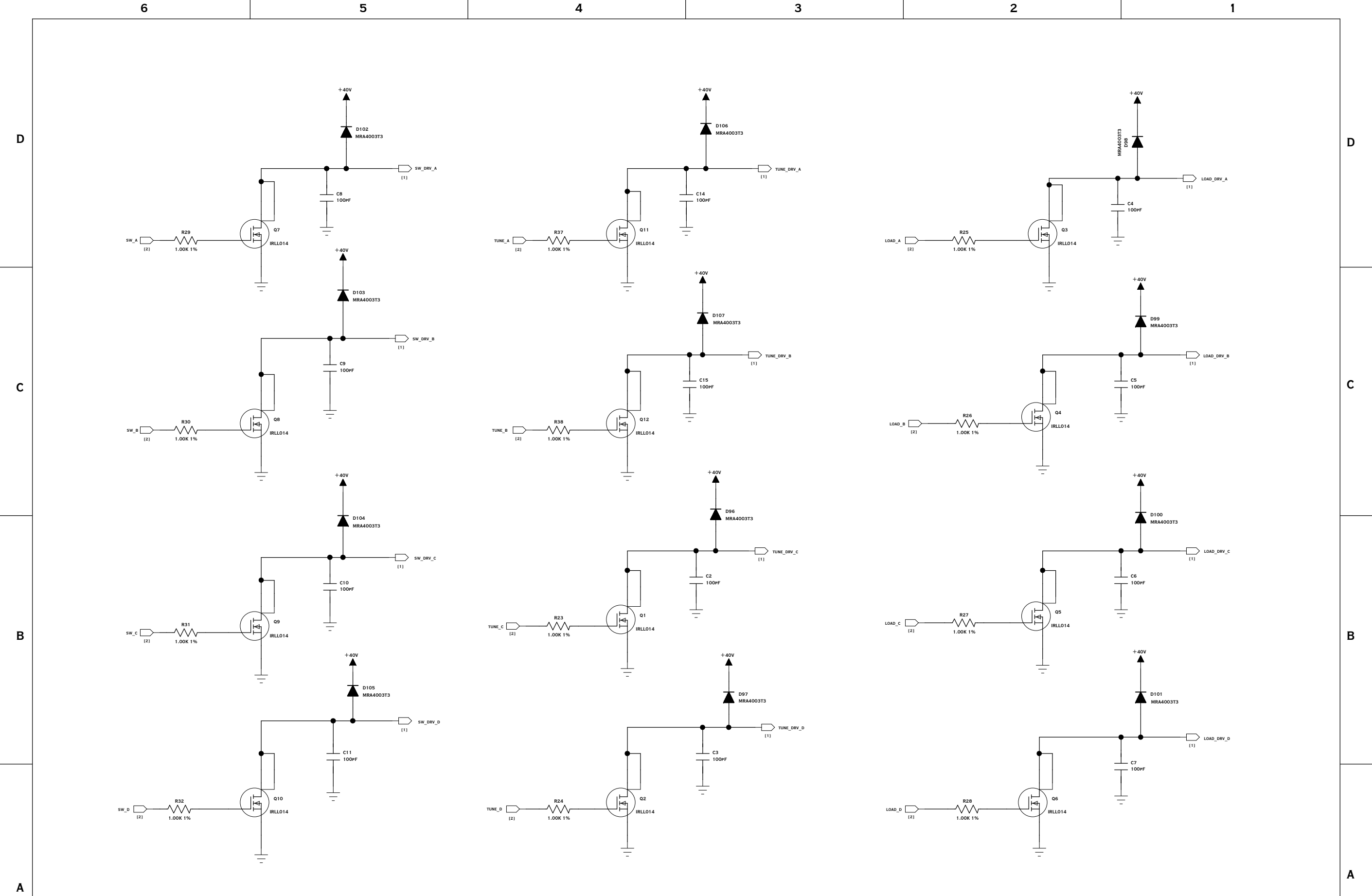
B

A

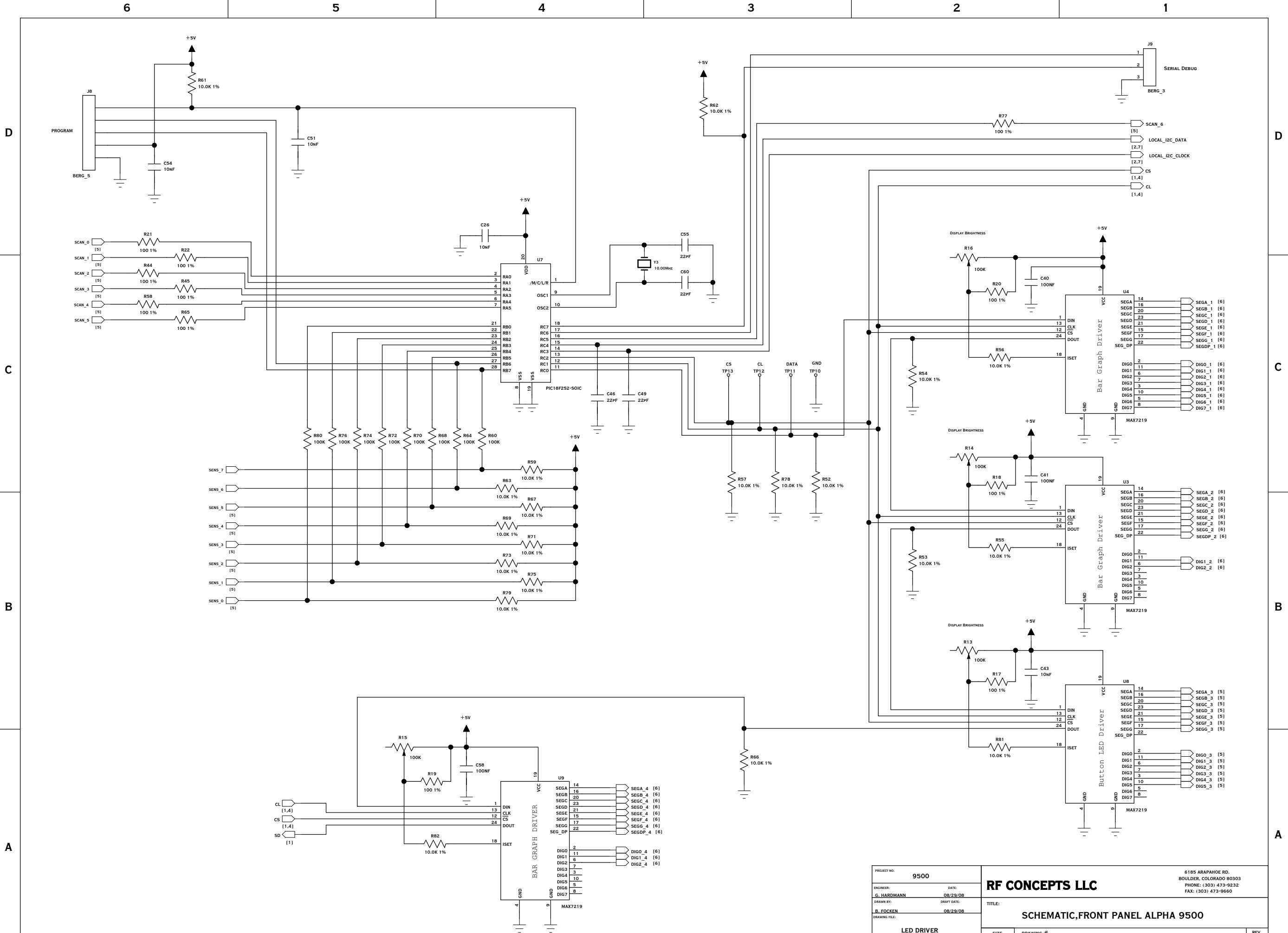
A



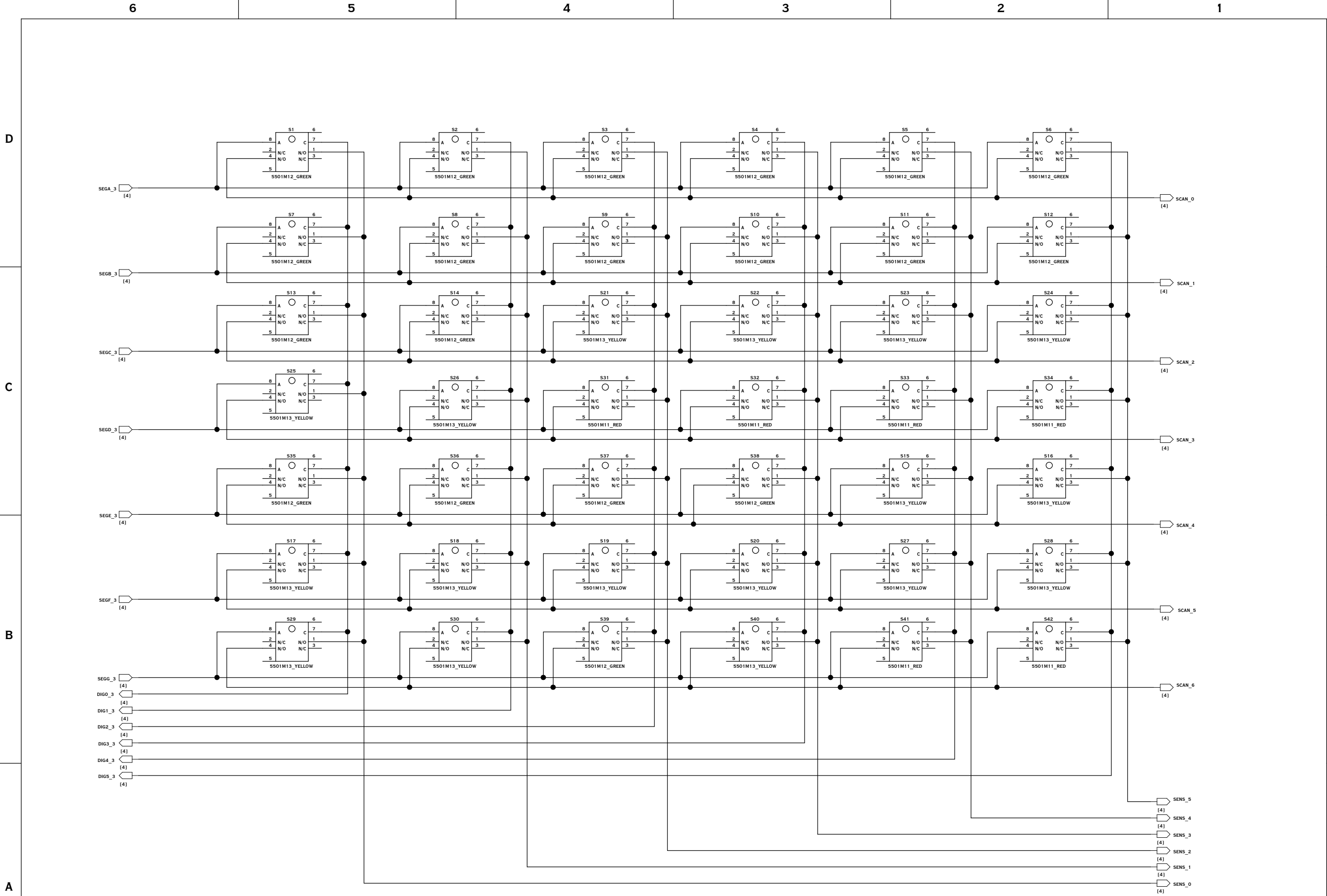
PROJECT NO. 9500		RF CONCEPTS LLC 6185 ARAPAHOE RD. BOULDER, COLORADO 80303 PHONE: (303) 473-9232 FAX: (303) 473-9660	
ENGINEER: G. HARDMAN	DATE: 07/25/08		
DRAWN BY: B. FOCKEN	DRAFT DATE: 07/25/08		
DRAWING FILE:			
BCX-X421_REV_A.SCH ANTENNA RELAYS		TITLE: SCH,OUTPUT/CONTROLLER,9500	
SIZE C	DRAWING # BCX-X421		REV. A
PADS POWERLOGIC DRAWING		SCALE	SHEET 8 OF 8



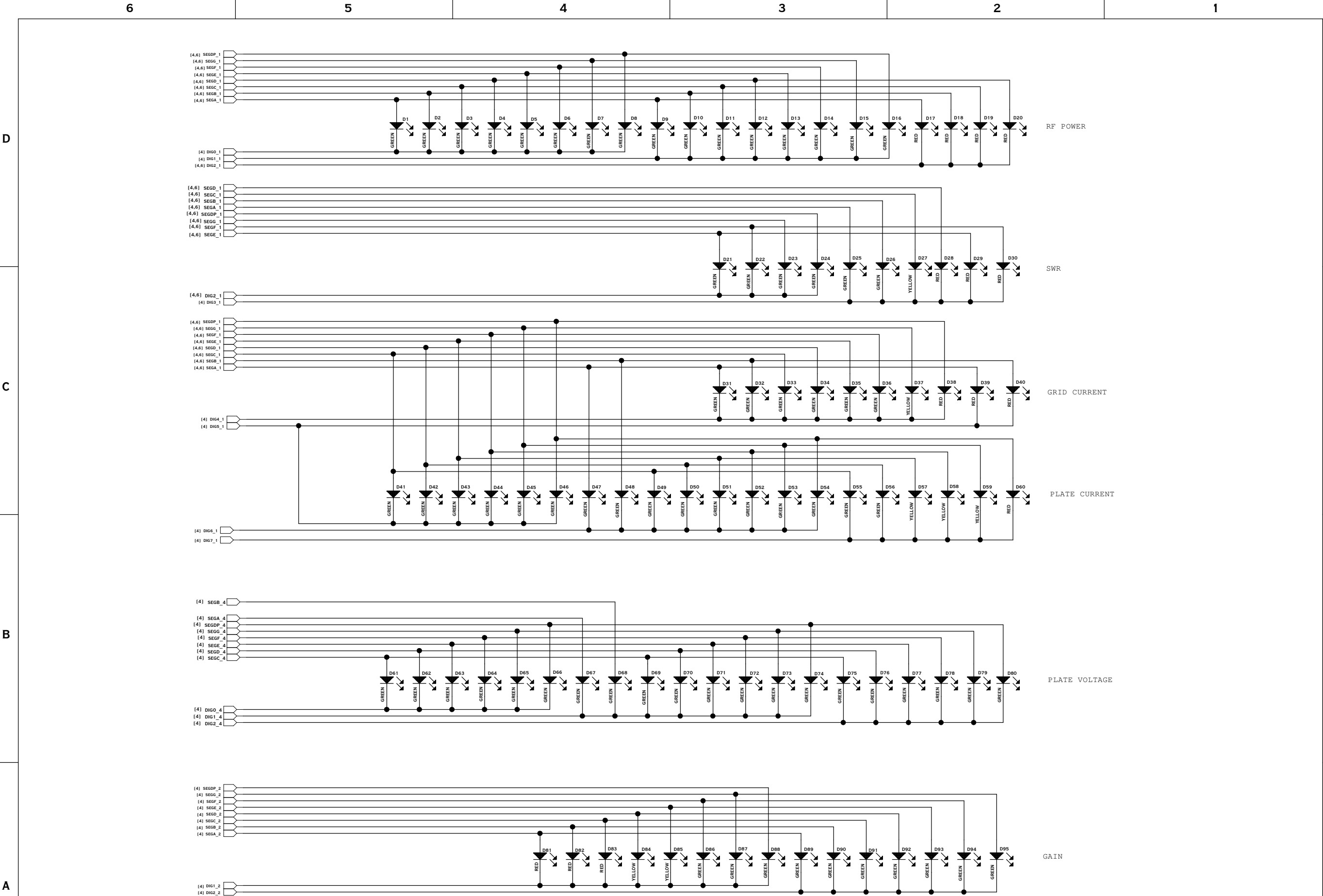
PROJECT NO. 9500		RF CONCEPTS LLC		6185 ARAPAHOE RD. BOULDER, COLORADO 80303 PHONE: (303) 473-9232 FAX: (303) 473-9660	
ENGINEER: G. HARDMANN DATE: 08/29/08					
DRAWN BY: B. FOCKEN DRAFT DATE: 08/29/08		TITLE: SCHEMATIC,FRONT PANEL ALPHA 9500			
DRAWING FILE: MOTOR DRIVERS BCX-X422_REV_A.SCH					
		SIZE C	DRAWING # BCX-X422	REV. A	
PADS POWERLOGIC DRAWING		SCALE		SHEET 3 OF 7	



PROJECT NO. 9500		RF CONCEPTS LLC		6185 ARAPAHOE RD. BOULDER, COLORADO 80303 PHONE: (303) 473-9232 FAX: (303) 473-9660	
ENGINEER: G. HARDMANN	DATE: 08/29/08			TITLE: SCHEMATIC,FRONT PANEL ALPHA 9500	
DRAWN BY: R. FOCKEN	DRAFT DATE: 08/29/08				
DRAWING FILE: LED DRIVER BCX-X422_REV_A.SCH	SIZE C	DRAWING # BCX-X422	REV. A	SHEET 4 OF 7	
PADS POWERLOGIC DRAWING		SCALE			



PROJECT NO. 9500		RF CONCEPTS LLC		6185 ARAPAHOE RD. BOULDER, COLORADO 80303 PHONE: (303) 473-9232 FAX: (303) 473-9660	
ENGINEER: G. HARDMANN	DATE: 08/29/08				
DRAWN BY: B. FOCKEN	DRAFT DATE: 08/29/08				
DRAWING FILE:					
SWITCHES BCX-X422_REV_A.SCH		TITLE: SCHEMATIC,FRONT PANEL ALPHA 9500			
SIZE C		DRAWING # BCX-X422			REV. A
PADS POWERLOGIC DRAWING		SCALE			SHEET 5 OF 7



PROJECT NO. 9500		RF CONCEPTS LLC		6185 ARAPAHOE RD. BOULDER, COLORADO 80303 PHONE: (303) 473-9232 FAX: (303) 473-9660	
ENGINEER: G. HARDMANN	DATE: 08/29/08			TITLE: SCHEMATIC,FRONT PANEL ALPHA 9500	
DRAWN BY: B. FOCKEN	DRAFT DATE: 08/29/08				
DRAWING FILE: LED ARRAY BCX-X422_REV_A.SCH		SIZE C	DRAWING # BCX-X422		REV. A
PADS POWERLOGIC DRAWING		SCALE			SHEET 6 OF 7

6

5

4

3

2

1

D

D

C

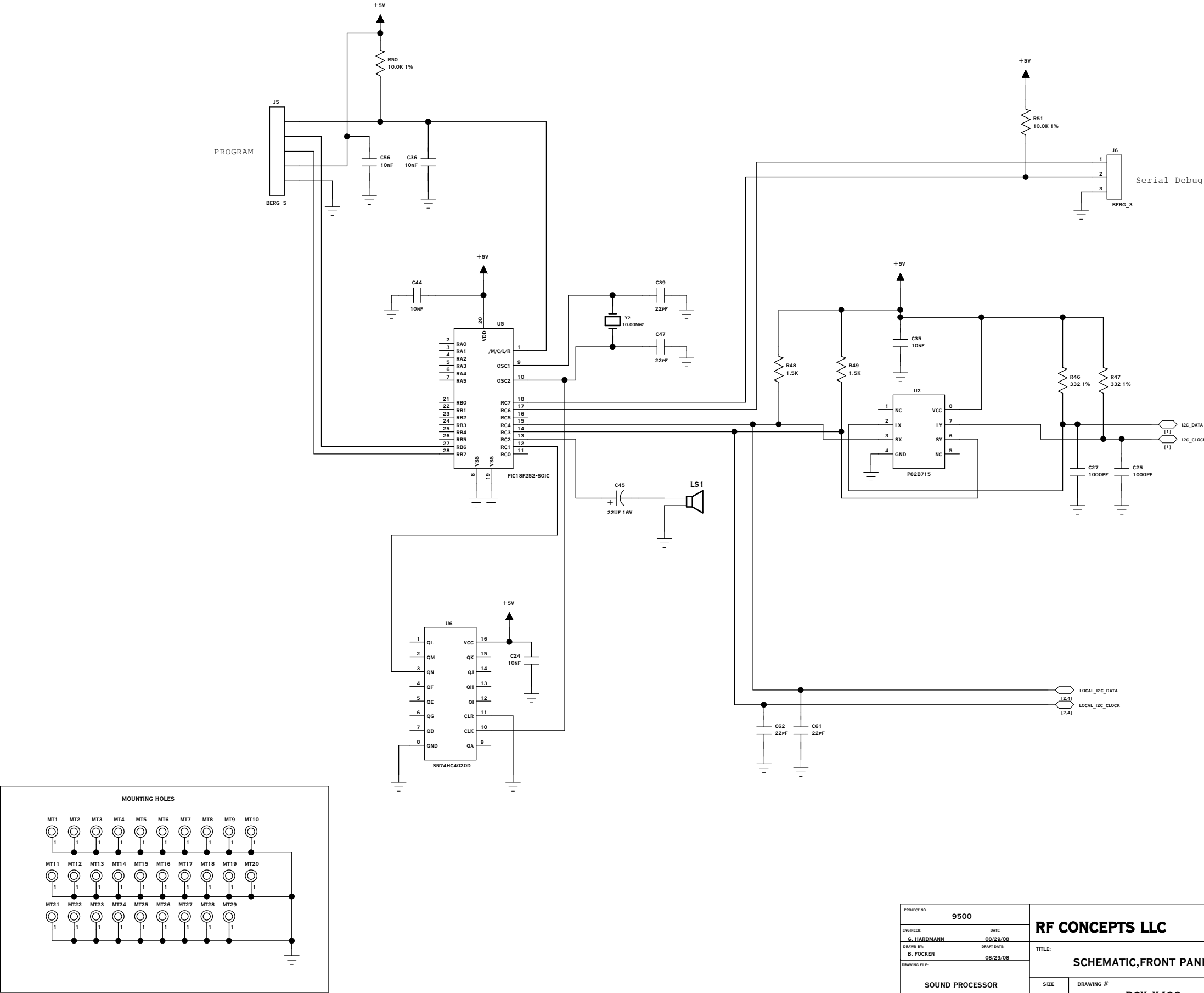
C

B

B

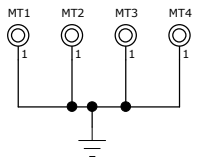
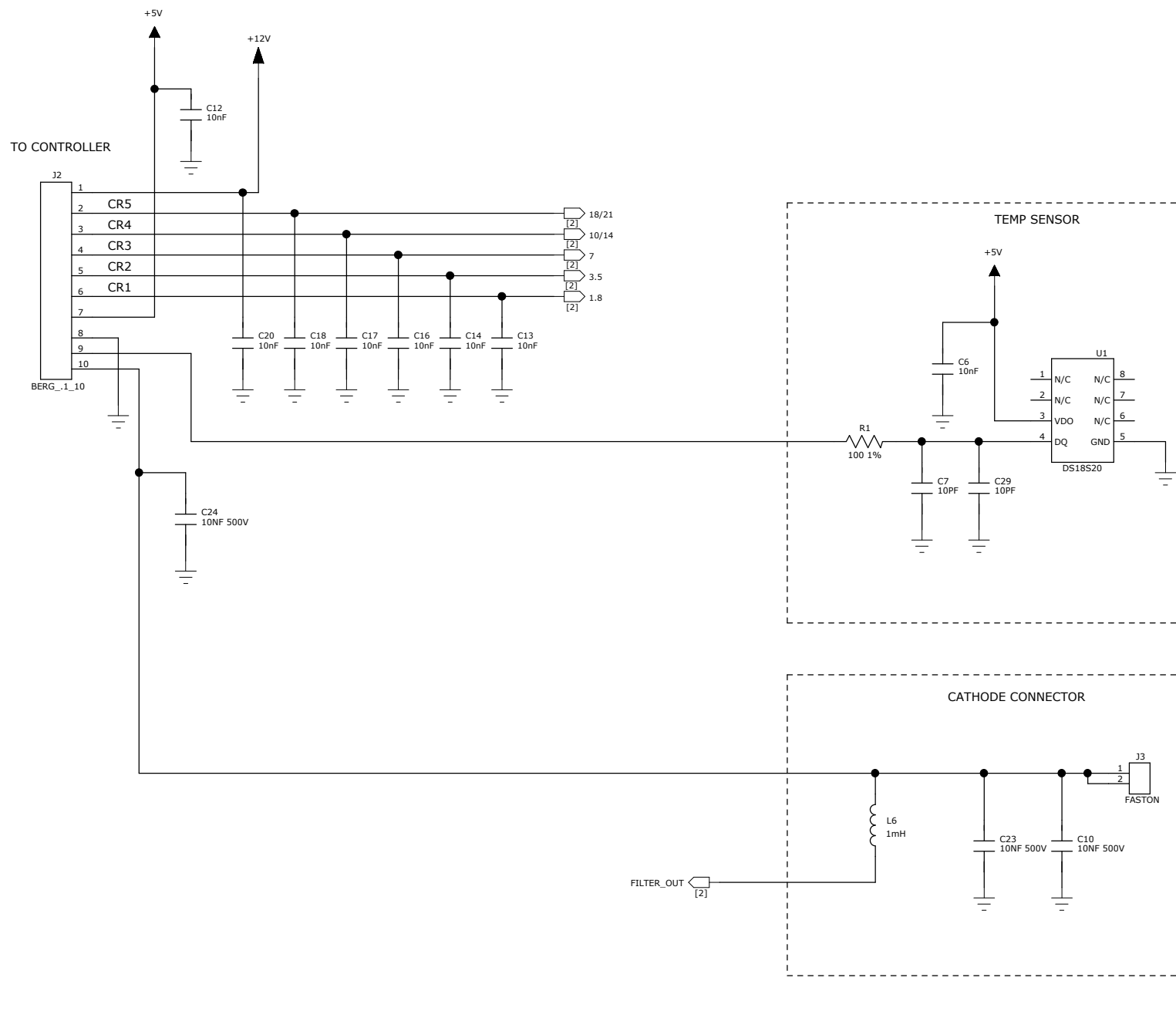
A

A



PROJECT NO. 9500		RF CONCEPTS LLC		6185 ARAPAHOE RD. BOULDER, COLORADO 80303 PHONE: (303) 473-9232 FAX: (303) 473-9660	
ENGINEER: G. HARDMANN	DATE: 08/29/08			TITLE: SCHEMATIC,FRONT PANEL ALPHA 9500	
DRAWN BY: B. FOCKEN	DRAFT DATE: 08/29/08	SIZE C		DRAWING # BCX-X422	REV. A
DRAWING FILE: SOUND PROCESSOR BCX-X422_REV_A.SCH		SCALE		SHEET 7 OF 7	

REVISION HISTORY					
REV	ECO NO.	DESCRIPTION	CHANGED BY & DATE	CHECKED BY & DATE	EFFECTIVITY DATE
1		INITIAL RELEASE	BWF 10/07/06	GEH 10/07/06	10/07/06
2		ADD FAST ON AND RELAY CONNECTIONS.	BWF 11/09/06	GEH 11/09/06	11/09/06
2.1		ADD RCA CONNECTORS	BWF 11/09/06	GEH 11/09/06	11/09/06
3		CONNECT RELAYS TO 12V	BWF 12/01/06	GEH 12/01/06	12/01/06



PROJECT NO. 9500		RF CONCEPTS LLC 6185 ARAPAHOE RD. BOULDER, COLORADO 80303 PHONE: (303) 473-9232 FAX: (303) 473-9660	
ENGINEER: G. HARDMANN	DATE: 12/01/06		
DRAWN BY: B FOCKEN	DRAFT DATE: 12/01/06	TITLE: SCH,INPUT MATCH,9500	
DRAWING FILE:			
BCX-X430_REV_3.SCH	SIZE C	DRAWING # BCX-X430	REV. 3.0
PADS POWERLOGIC DRAWING	SCALE		SHEET 1 OF 2

6

5

4

3

2

1

D

C

B

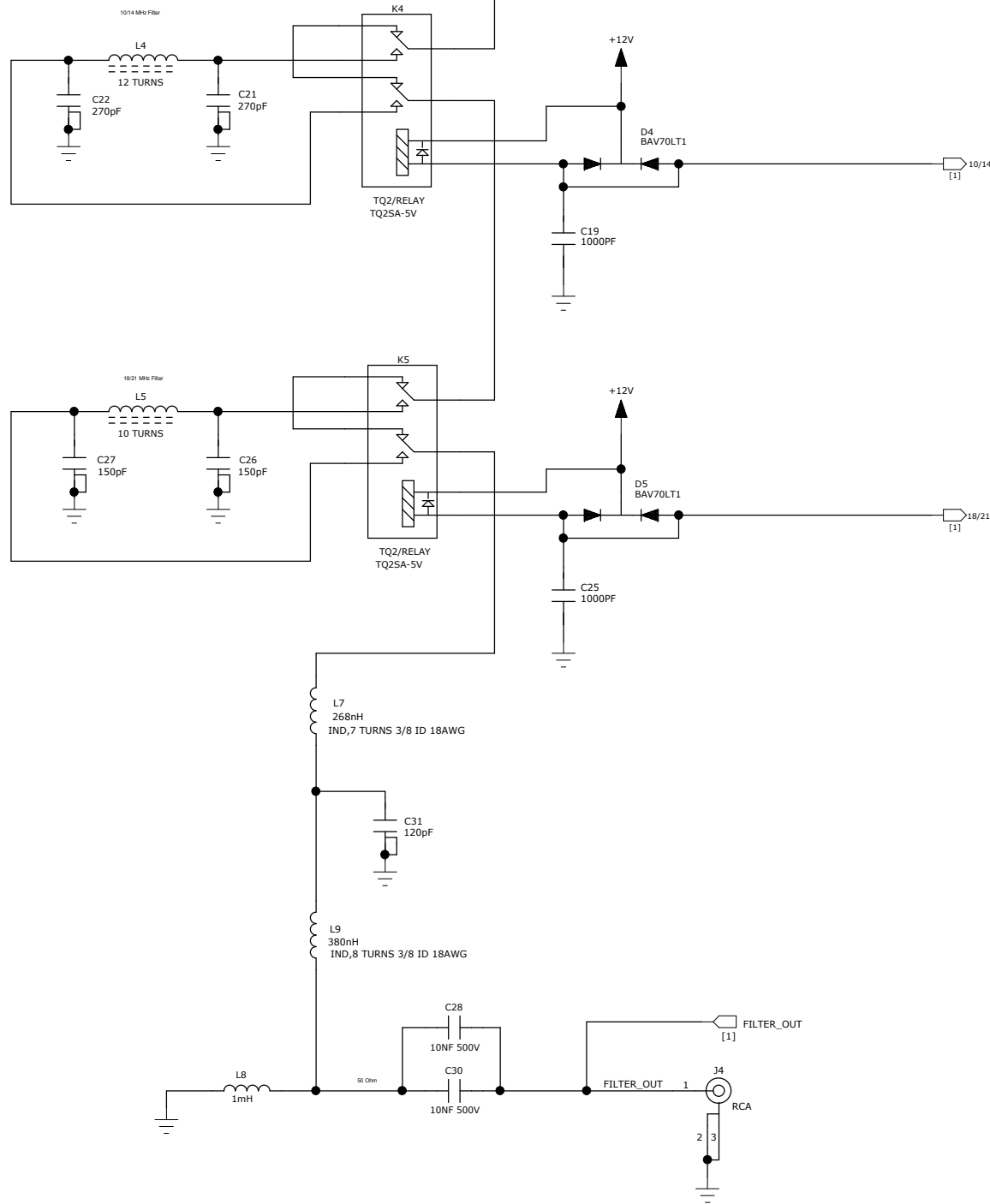
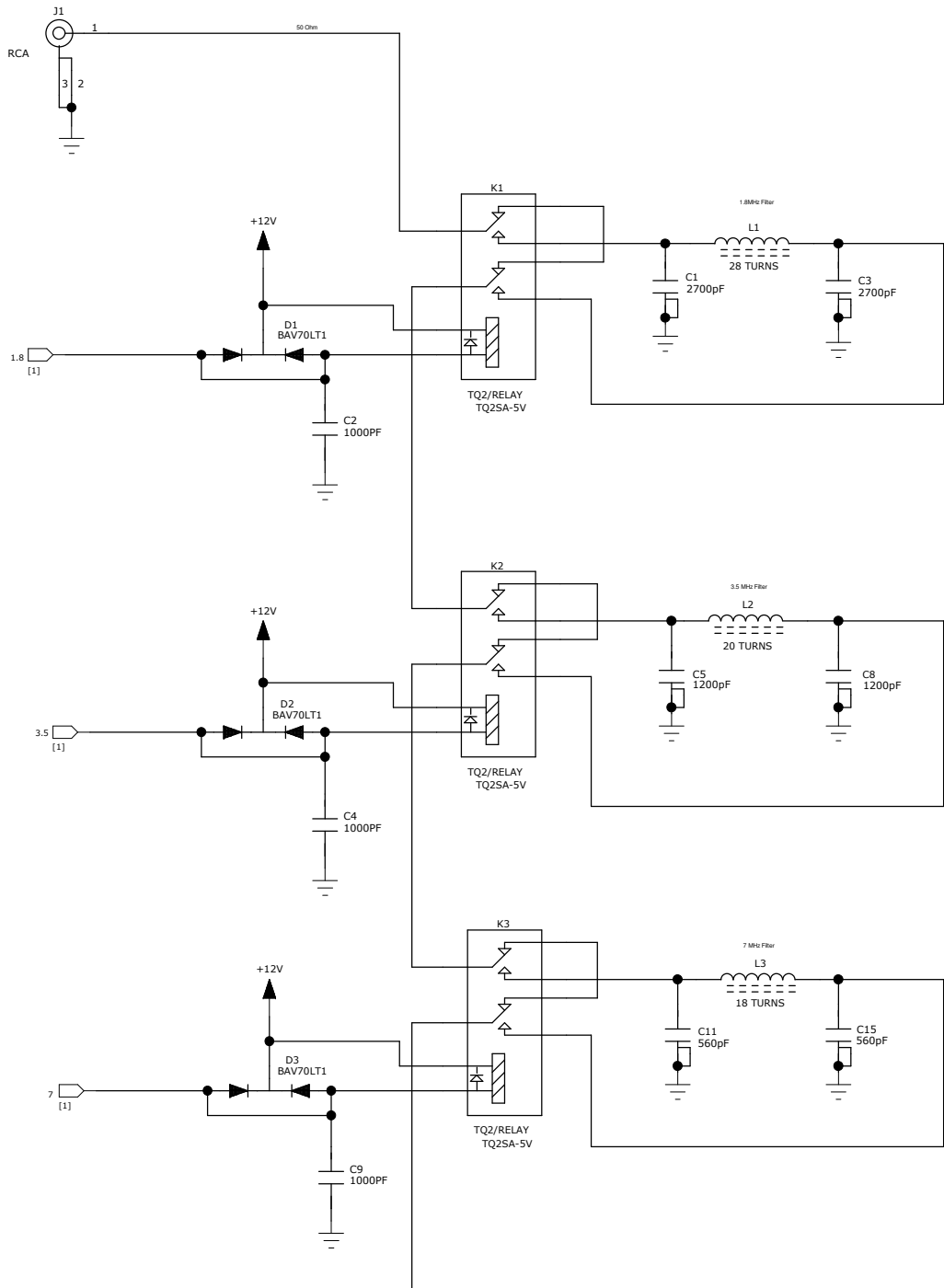
A

D

C

B

A



PROJECT NO. 9500		RF CONCEPTS LLC		6185 ARAPAHOE RD. BOULDER, COLORADO 80303 PHONE: (303) 473-9232 FAX: (303) 473-9660	
ENGINEER: G. HARDMAN	DATE: 11/20/06				
DRAWN BY: B. FOCKEN	DRAFT DATE: 11/20/06				
DRAWING FILE: BCX-X430_REV_3.SCH		TITLE: SCH,INPUT MATCH,9500			
		SIZE C	DRAWING # BCX-X430		REV. 3
PADS POWERLOGIC DRAWING		SCALE		SHEET 2 OF 2	

