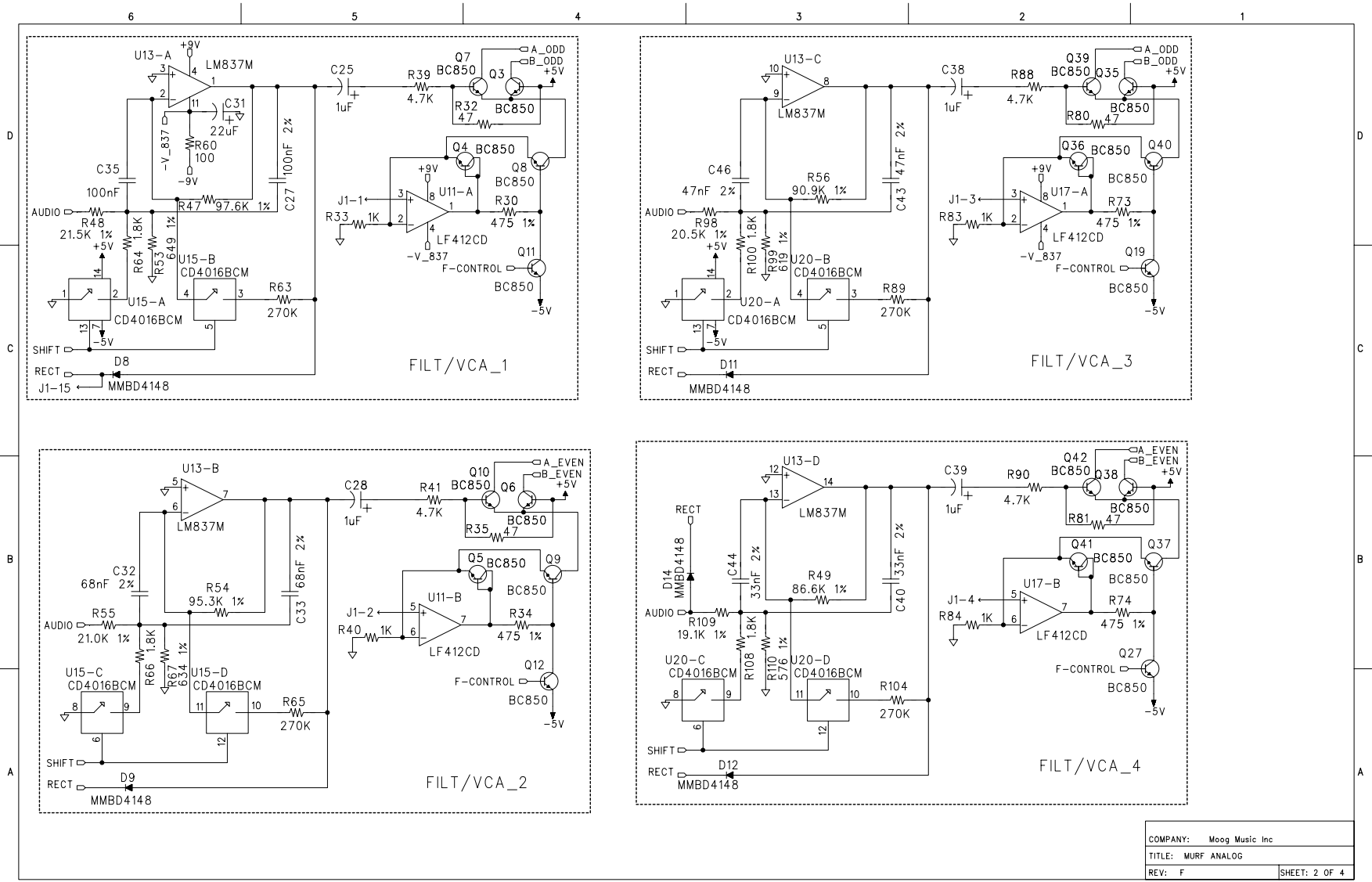
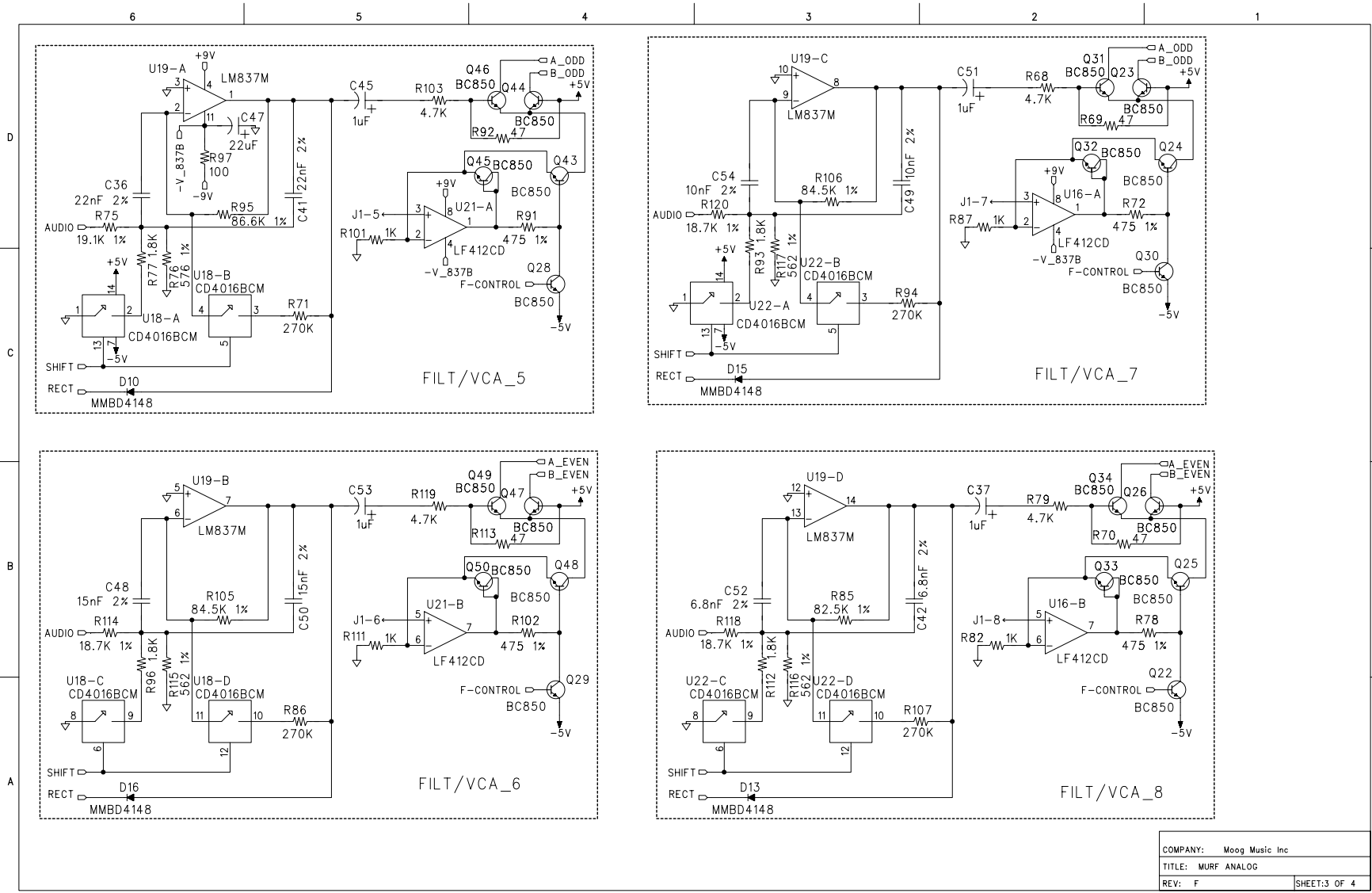


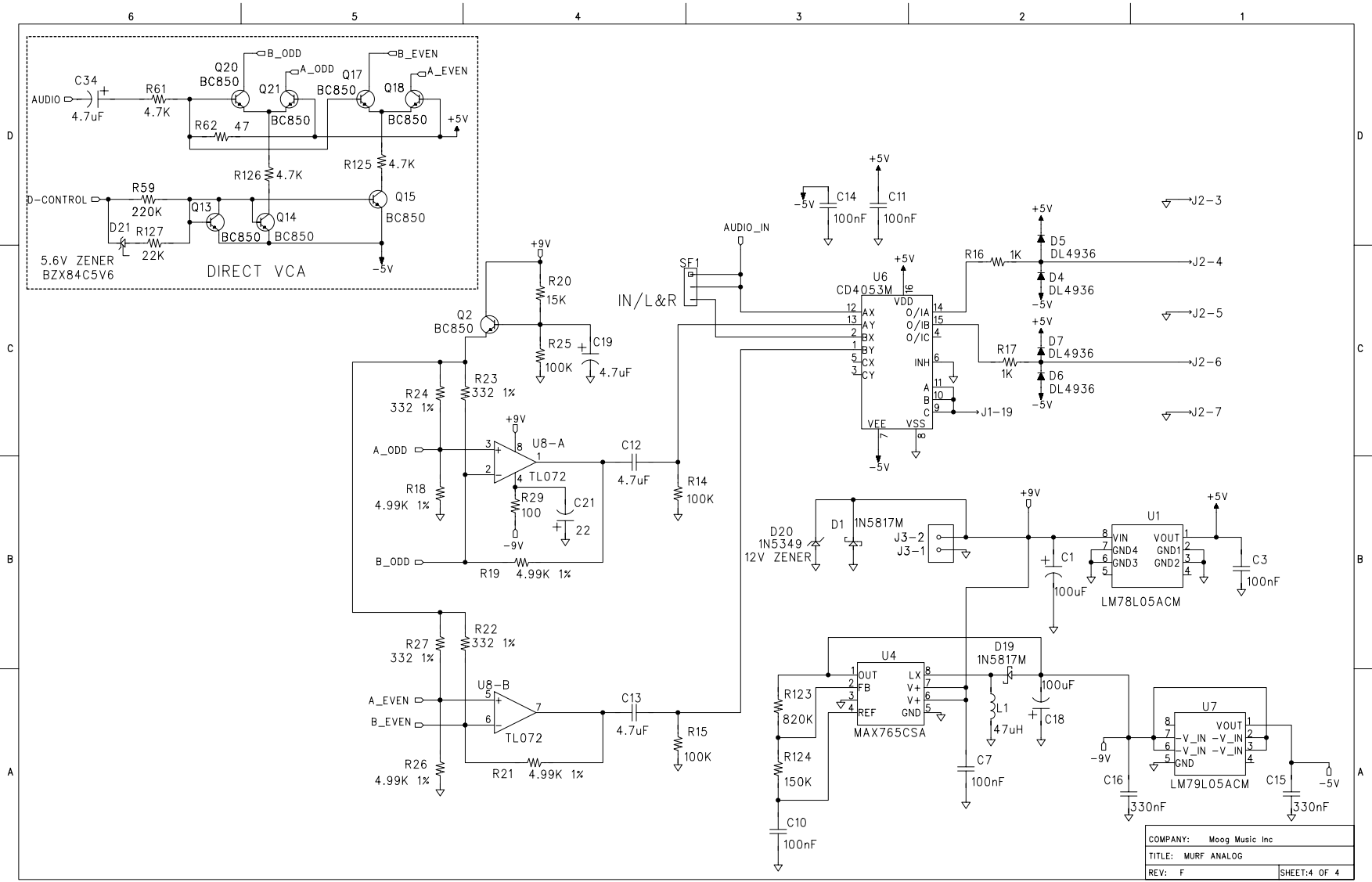
NOTE: REV H, CHANGE U3 to LF412

No-pop D8-13,  
D15, D16

COMPANY:	Moog Music Inc
TITLE:	MURF ANALOG
REV:	G
SHEET:	1 OF 4







COMPANY:	Moog Music Inc
TITLE:	MURF ANALOG
REV:	F
	SHEET:4 OF 4

6

5

4

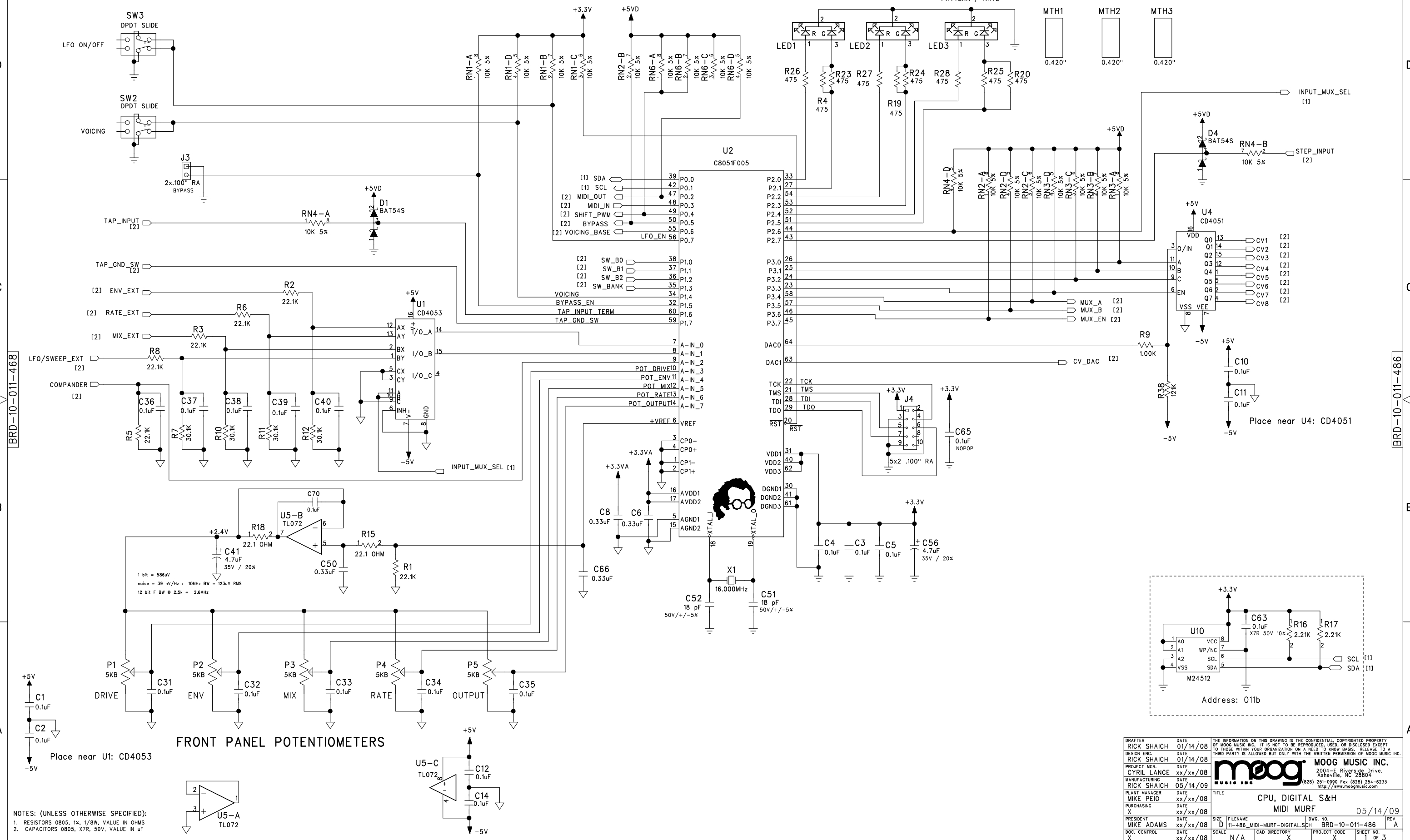
3

2

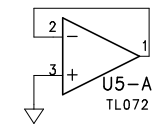
1

REVISIONS			
REV.	DESCRIPTION	CHANGE BY	DATE
A1	Prototype	RSS	01/14/09
A	RELEASE	RSS	05/14/09
B		xx	xx/xx/08

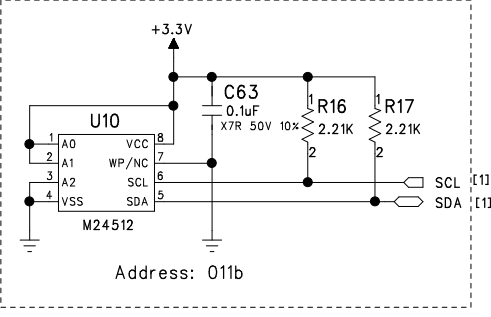
1.8V Orange-Red, 2.1V Green @10mA



FRONT PANEL POTENTIOMETERS

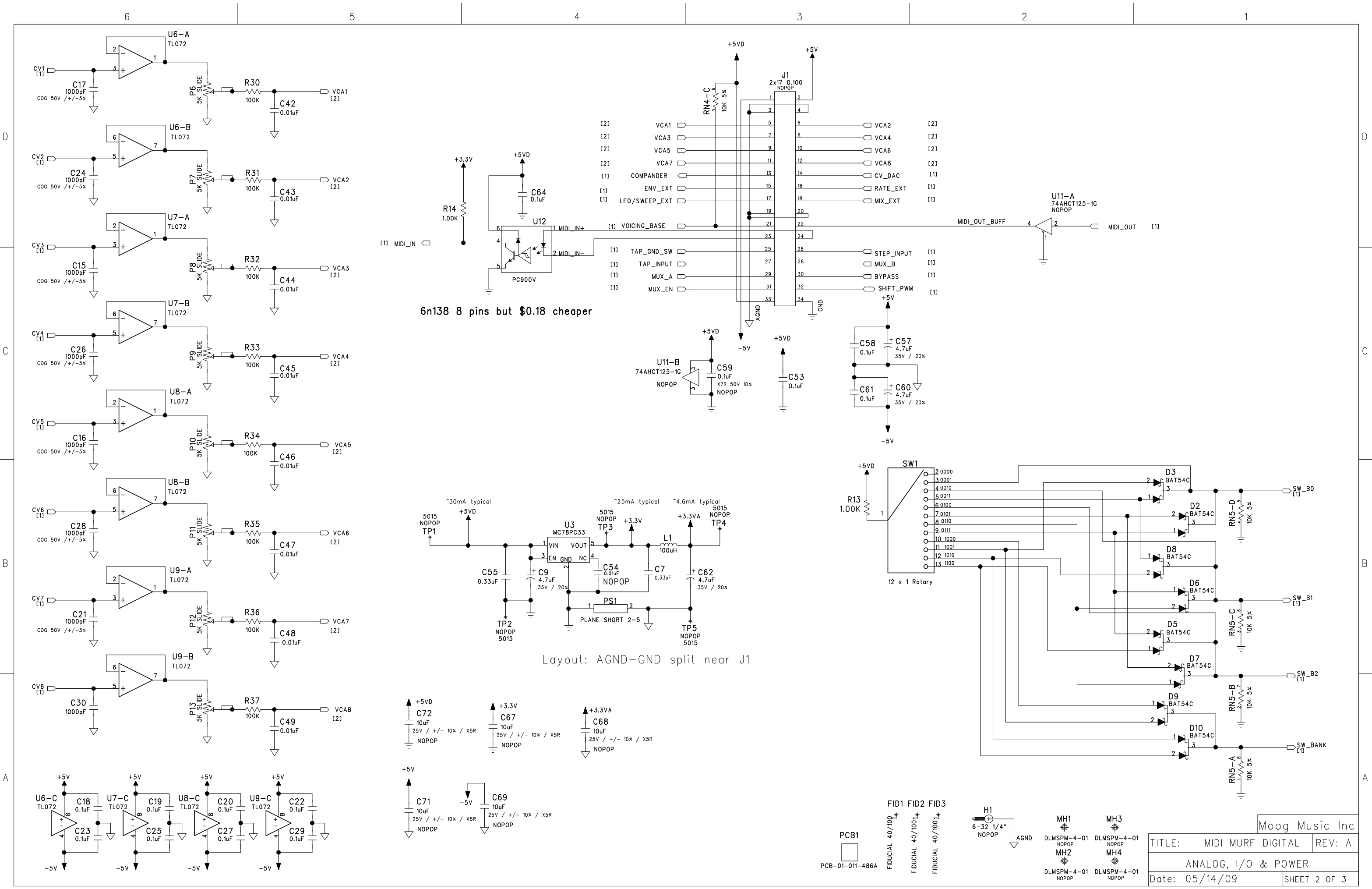


Place near U1: CD4053



NOTES: (UNLESS OTHERWISE SPECIFIED):  
 1. RESISTORS 0805, 1x, 1/8W, VALUE IN OHMS  
 2. CAPACITORS 0805, X7R, 50V, VALUE IN uF

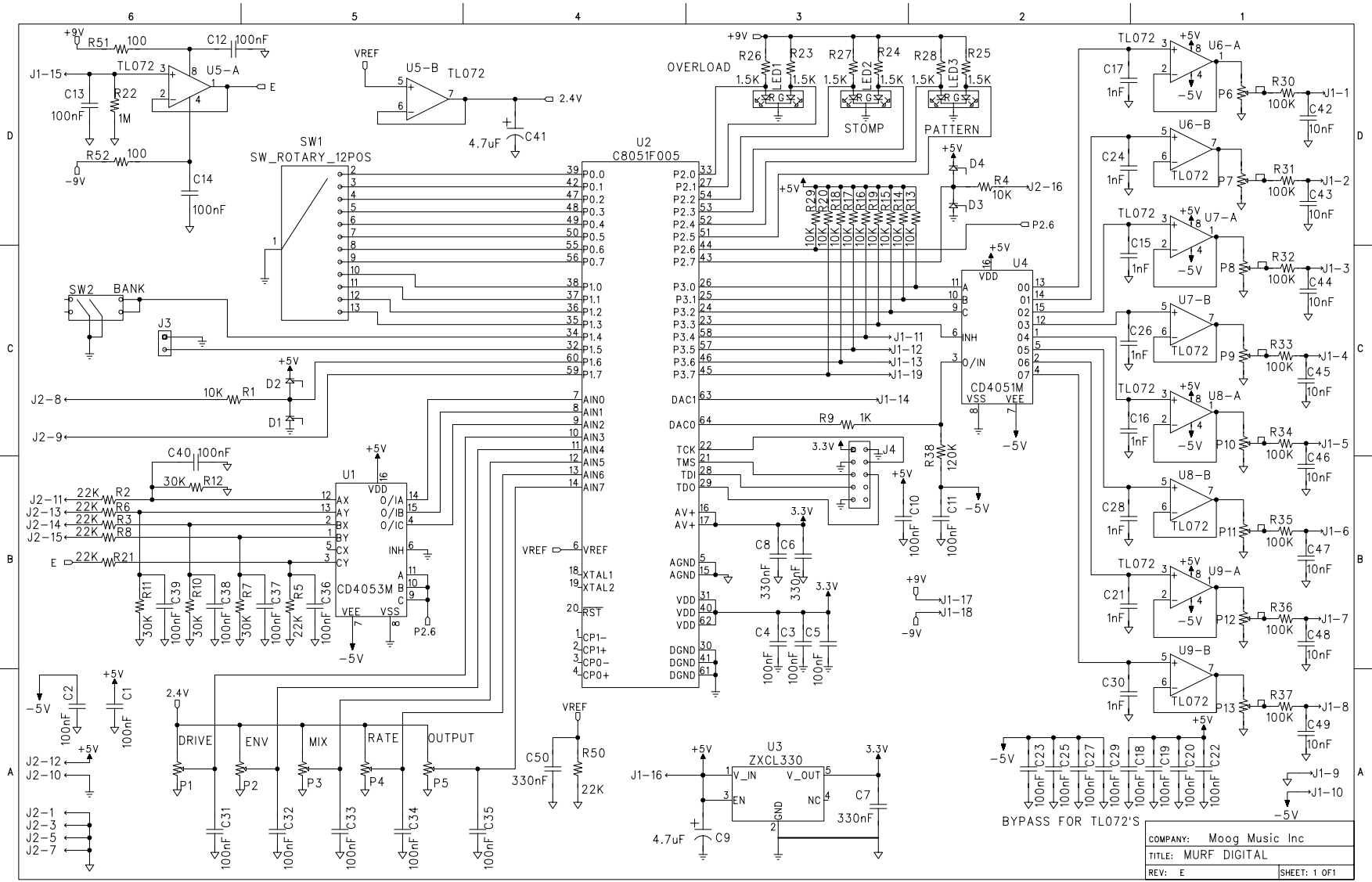
DRAFTER RICK SHAIKH	DATE 01/14/08	THE INFORMATION ON THIS DRAWING IS THE CONFIDENTIAL, COPYRIGHTED PROPERTY OF MOOG MUSIC INC. IT IS NOT TO BE REPRODUCED, USED, OR DISCLOSED EXCEPT TO THOSE WITHIN YOUR ORGANIZATION ON A NEED TO KNOW BASIS. RELEASE TO A THIRD PARTY IS ALLOWED BUT ONLY WITH THE WRITTEN PERMISSION OF MOOG MUSIC INC.	
DESIGN ENGR. RICK SHAIKH	DATE 01/14/08		
PROJECT MGR. CYRIL LANCE	DATE xx/xx/08		
MANUFACTURING RICK SHAIKH	DATE 05/14/09	2004-E Riverside Drive, Asheville, NC 28804 (828) 251-0090 Fax (828) 254-8233 <a href="http://www.moogmusic.com">http://www.moogmusic.com</a>	
PLANT MANAGER MIKE PEIO	DATE xx/xx/08	TITLE CPU, DIGITAL S&H	
PURCHASING MIKE ADAMS	DATE xx/xx/08	MIDI MURF 05/14/09	
PRESIDENT MIKE ADAMS	DATE xx/xx/08	SIZE D	FILENAME 11-486_MIDI-MURF-DIGITAL.SCH
DOC. CONTROL MIKE ADAMS	DATE xx/xx/08	SCALE N/A	CAD DIRECTORY X
		PROJECT CODE X	SHEET NO. 1 OF 3



6n138 8 pins but \$0.18 cheaper

Layout: AGND-GND split near J1

Moog Music Inc	
TITLE: MIDI MURF DIGITAL	REV: A
ANALOG, I/O & POWER	
Date: 05/14/09	SHEET 2 OF 3

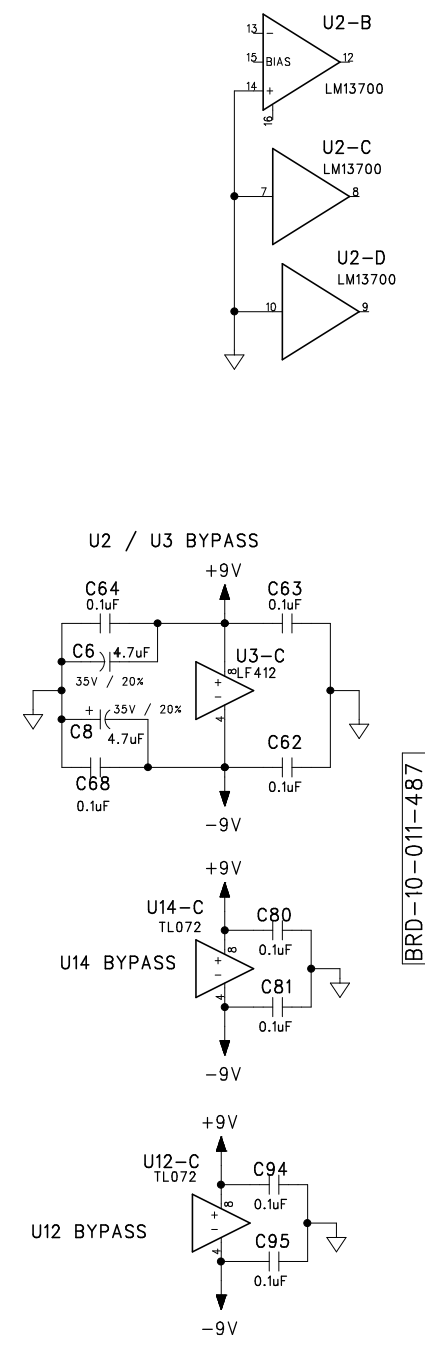
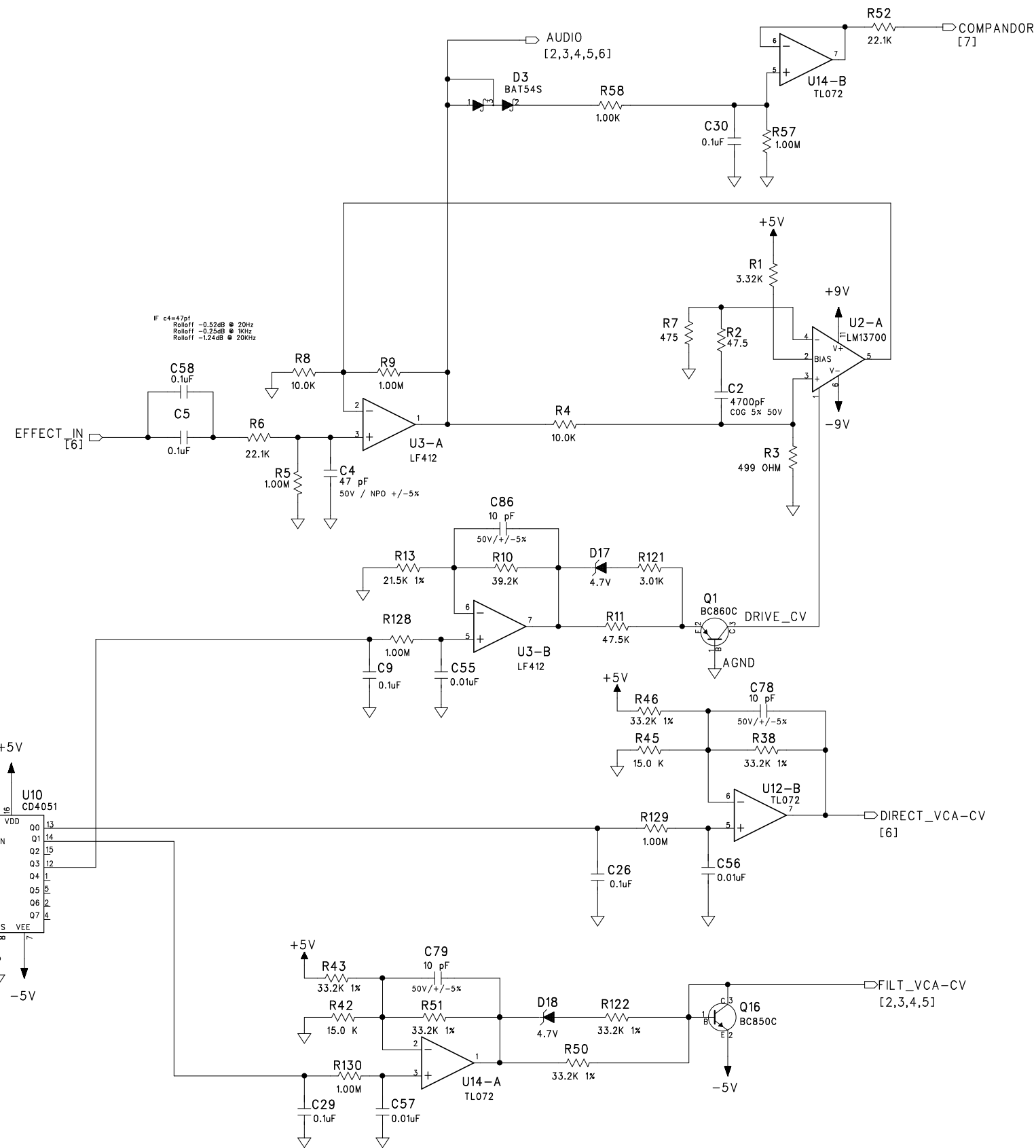


COMPANY:	Moog Music Inc
TITLE:	MURF DIGITAL
REV:	E
	SHEET: 1 OF 1

REVISIONS			
REV.	DESCRIPTION	CHANGE BY	DATE
A1	Prototype	RSS	01/14/09
A	RELEASE	RSS	05/14/09
B		xx	xx/xx/08

D  
C  
B  
A

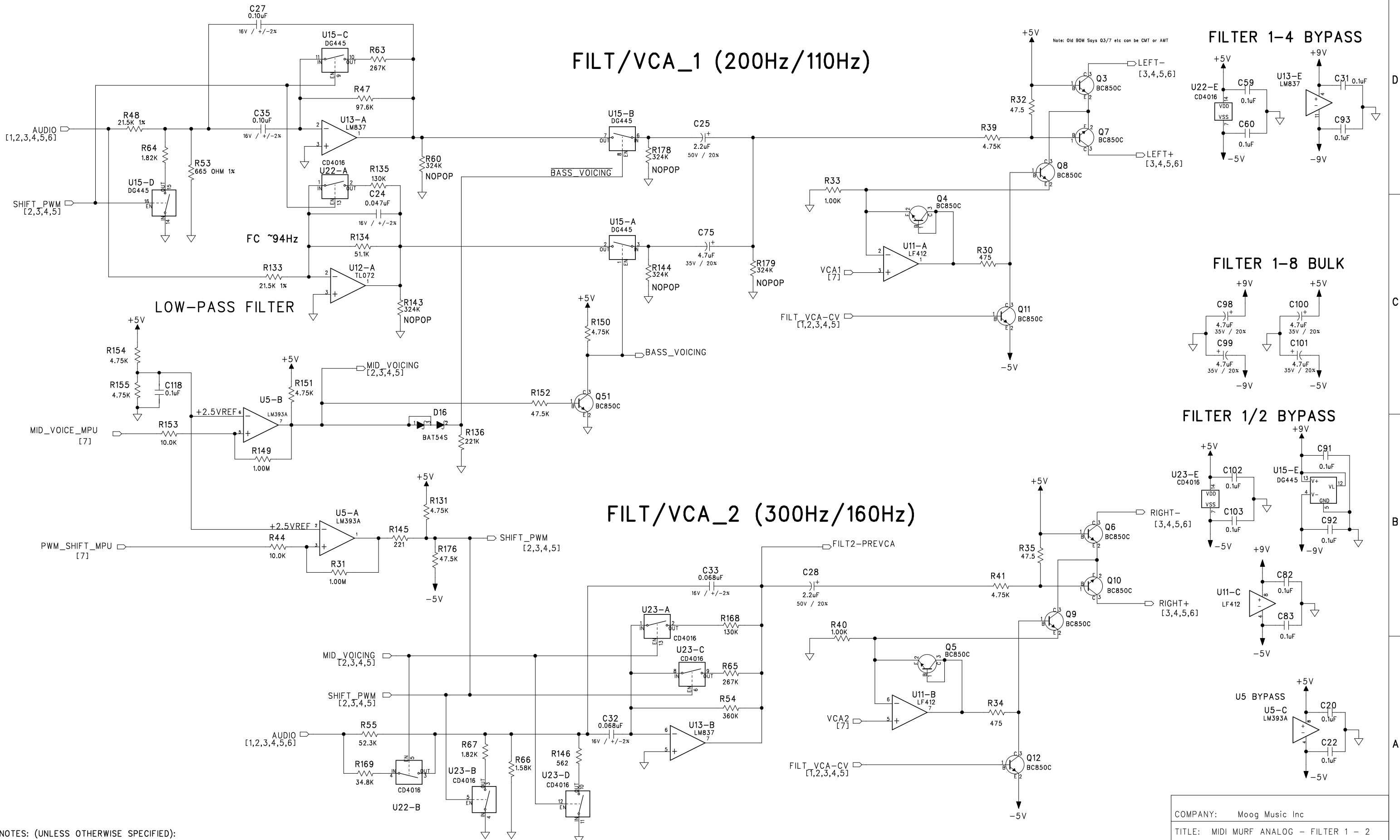
D  
C  
B  
A



NOTES: (UNLESS OTHERWISE SPECIFIED):  
 1. RESISTORS 0805, 1%, 1/8W, VALUE IN OHMS  
 2. CAPACITORS 0805, X7R, 50V, VALUE IN uF

DRAFTER R. SHAICH		DATE 01/14/09	THE INFORMATION ON THIS DRAWING IS THE CONFIDENTIAL, COPYRIGHTED PROPERTY OF MOOG MUSIC INC. IT IS NOT TO BE REPRODUCED, USED, OR DISCLOSED EXCEPT TO THOSE WITHIN YOUR ORGANIZATION ON A NEED TO KNOW BASIS. RELEASE TO A THIRD PARTY IS ALLOWED BUT ONLY WITH THE WRITTEN PERMISSION OF MOOG MUSIC INC.	
DESIGN ENG. BM, R. SHAICH		DATE 01/14/09		
PROJECT MGR. R. SHAICH		DATE 05/14/09		
MANUFACTURING RICK SHAICH		DATE 05/14/09	MOOG MUSIC INC. 2004-E Riverside Drive. Asheville, NC 28804 (828) 251-0090 Fax (828) 254-8233 <a href="http://www.moogmusic.com">http://www.moogmusic.com</a>	
PLANT MANAGER MIKE PEIO		DATE xx/xx/08	TITLE INPUT MUX, VCA & CVS	
PURCHASING X		DATE xx/xx/08	MIDI MURF ANALOG PCB 5/14/09	
PRESIDENT X		DATE xx/xx/08	SIZE D	FILENAME 11-487_MIDIMURF_ANA.SCH
DOC. CONTROL X		DATE xx/xx/08	SCALE N/A	CAD DIRECTORY X
			PROJECT CODE X	SHEET NO. 1 OF 7





### FILT/VCA\_1 (200Hz/110Hz)

### FILT/VCA\_2 (300Hz/160Hz)

#### FILTER 1-4 BYPASS

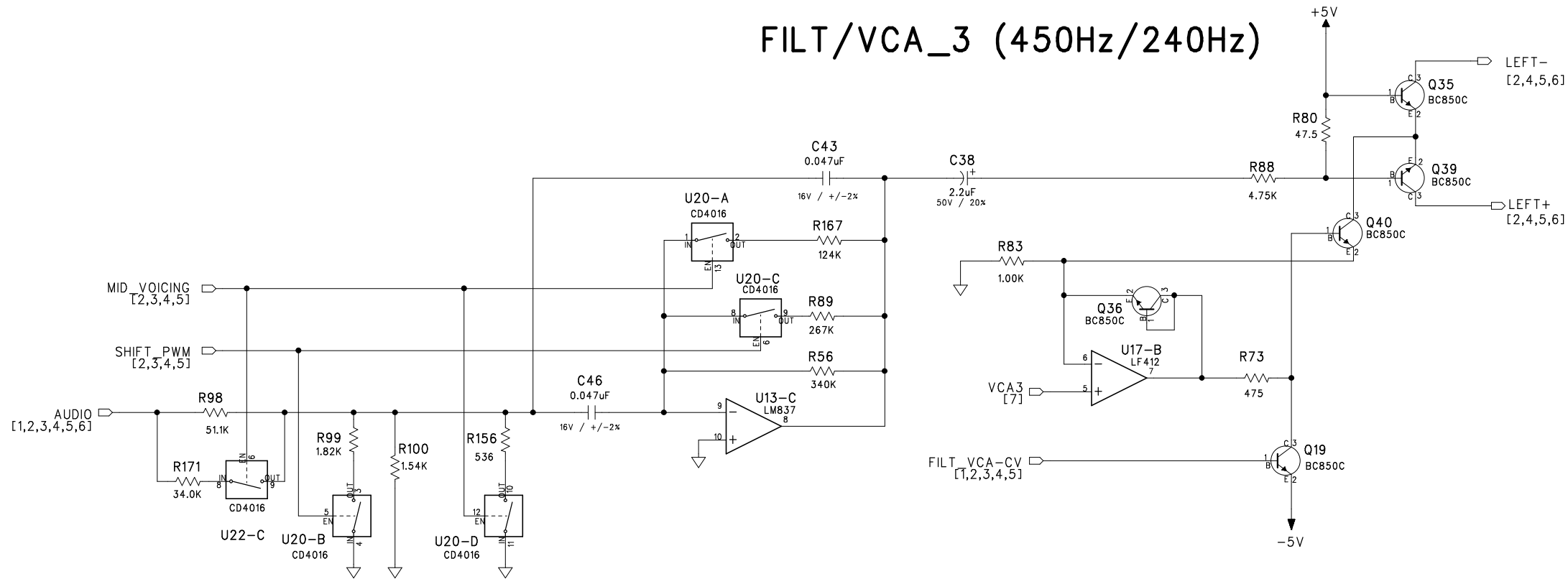
#### FILTER 1-8 BULK

#### FILTER 1/2 BYPASS

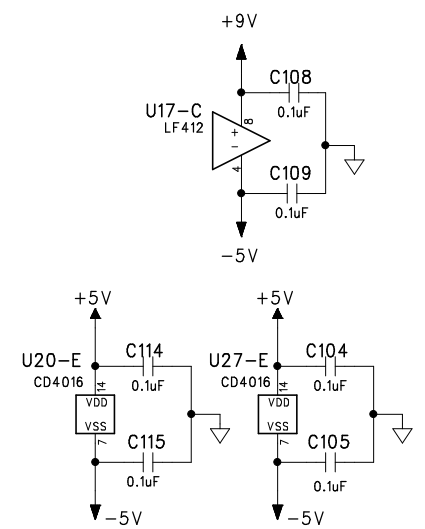
NOTES: (UNLESS OTHERWISE SPECIFIED):  
 1. RESISTORS 0805, 1%, 1/8W, VALUE IN OHMS  
 2. CAPACITORS 0805, X7R, 50V, VALUE IN uF

COMPANY:	Moog Music Inc
TITLE:	MIDI MURF ANALOG - FILTER 1 - 2
REV:	A 05/14/09 SHEET: 2 OF 7

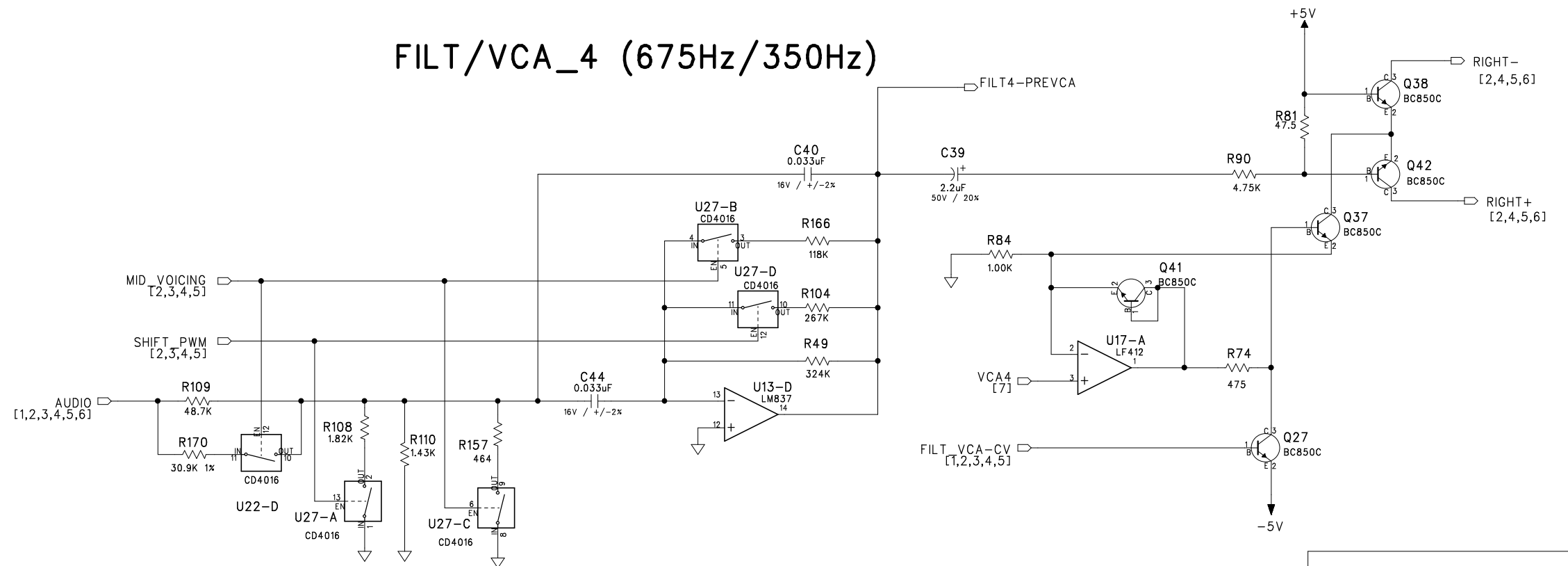
### FILT/VCA\_3 (450Hz/240Hz)



### FILTER 2/3 BYPASS



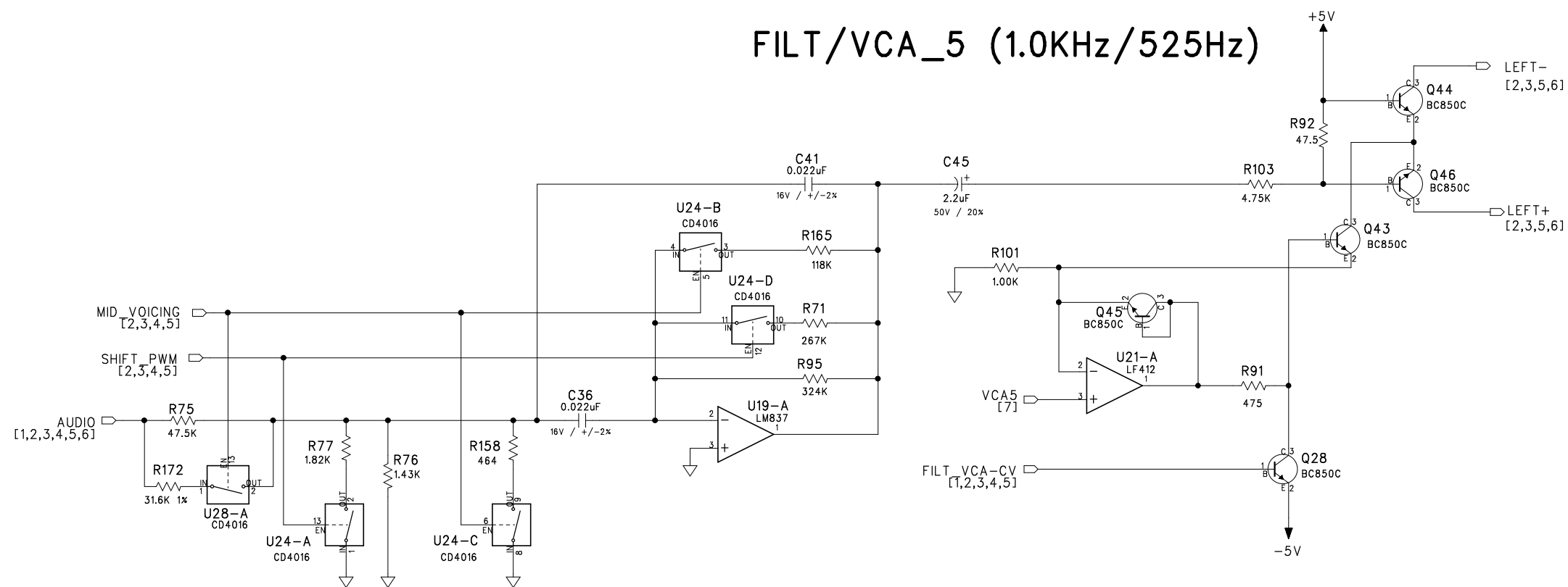
### FILT/VCA\_4 (675Hz/350Hz)



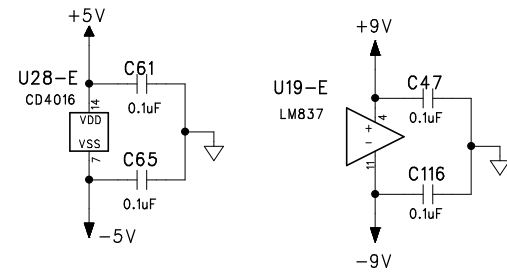
NOTES: (UNLESS OTHERWISE SPECIFIED):  
 1. RESISTORS 0805, 1x, 1/8W, VALUE IN OHMS  
 2. CAPACITORS 0805, X7R, 50V, VALUE IN uF

COMPANY:	Moog Music Inc
TITLE:	MIDIMURF ANALOG - FILTER 3 & 4
REV:	A 05/14/09 SHEET:3 OF 7

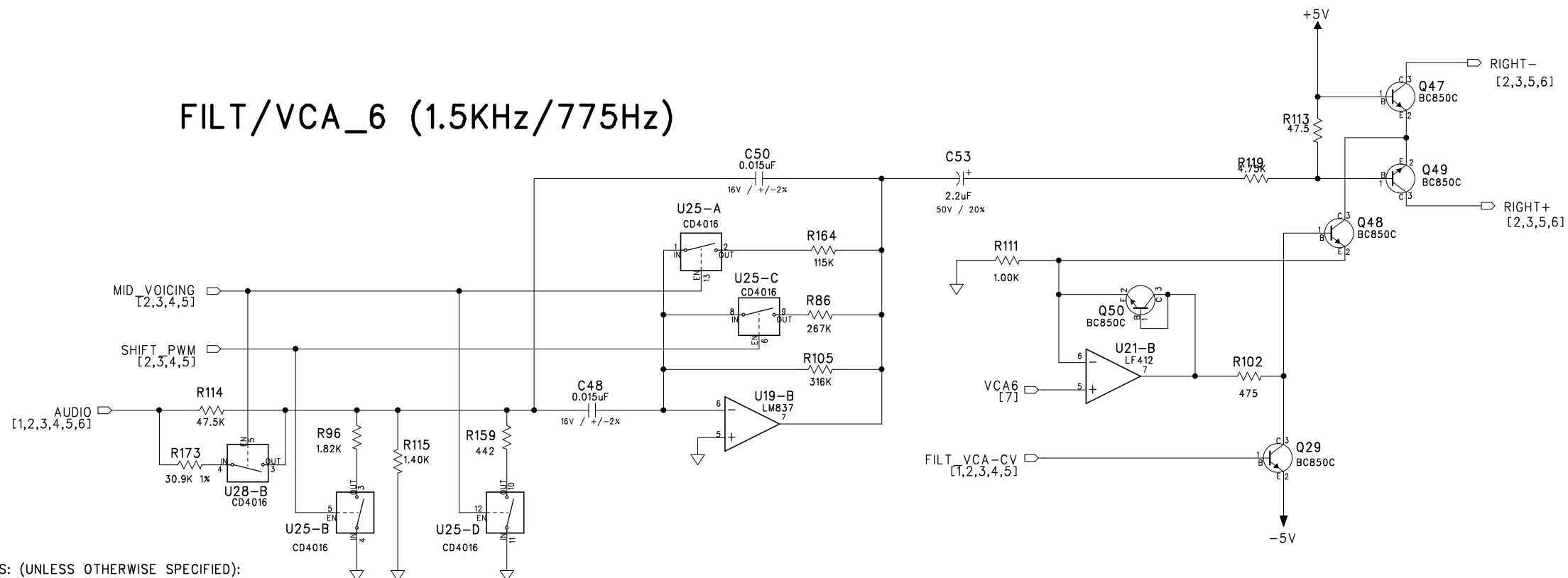
### FILT/VCA\_5 (1.0KHz/525Hz)



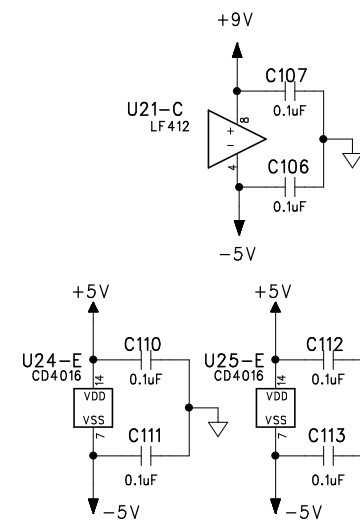
### FILTER 5-8 BYPASS



### FILT/VCA\_6 (1.5KHz/775Hz)

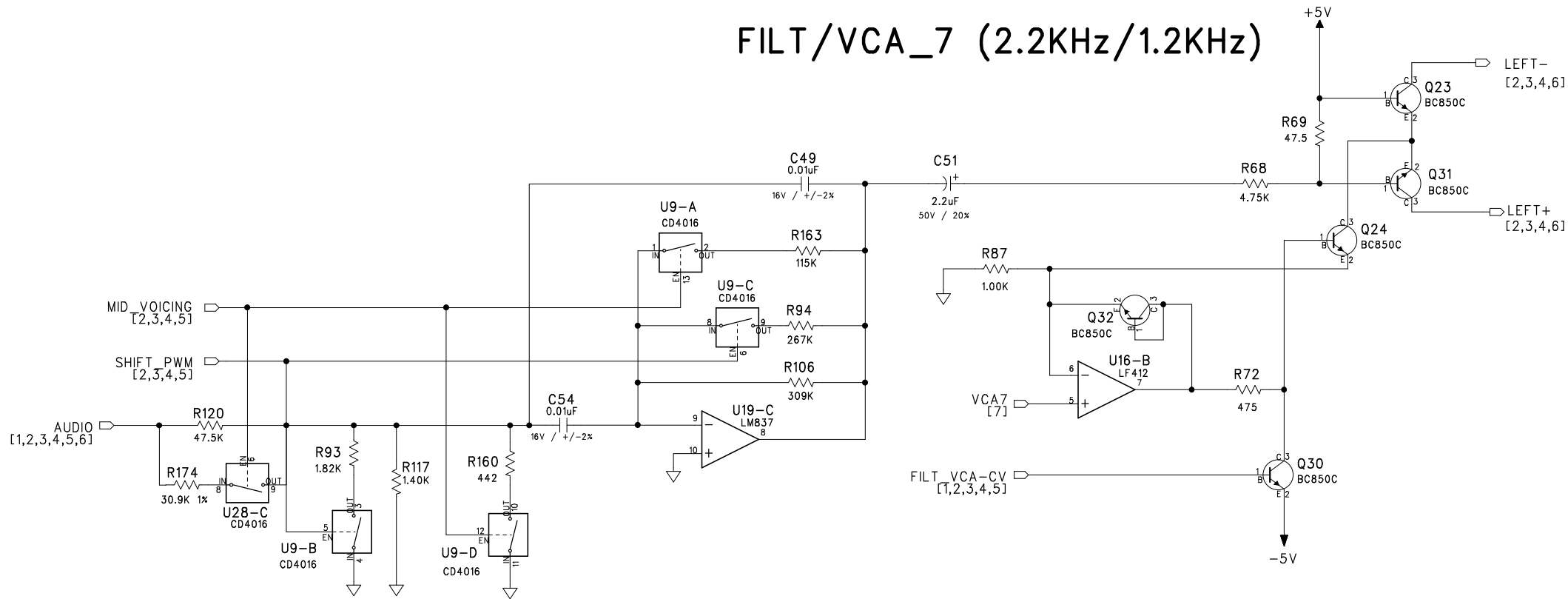


### FILTER 5/6 BYPASS

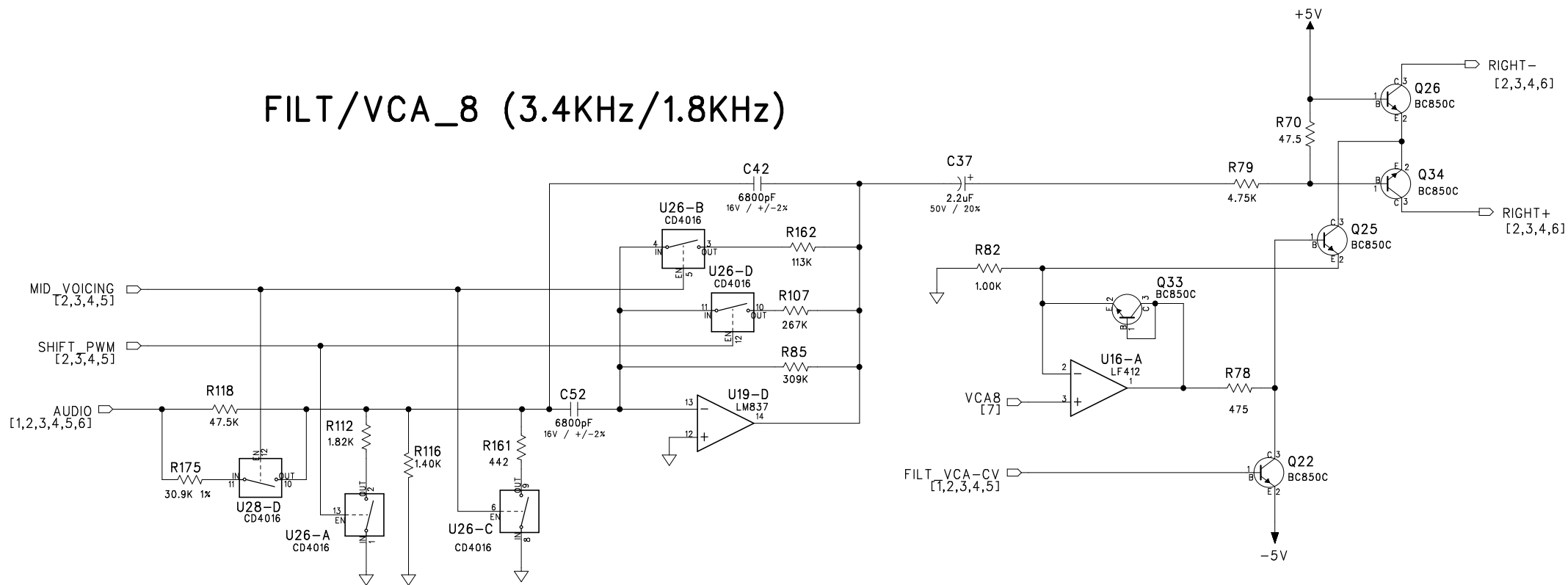


NOTES: (UNLESS OTHERWISE SPECIFIED):  
 1. RESISTORS 0805, 1%, 1/8W, VALUE IN OHMS  
 2. CAPACITORS 0805, X7R, 50V, VALUE IN uF

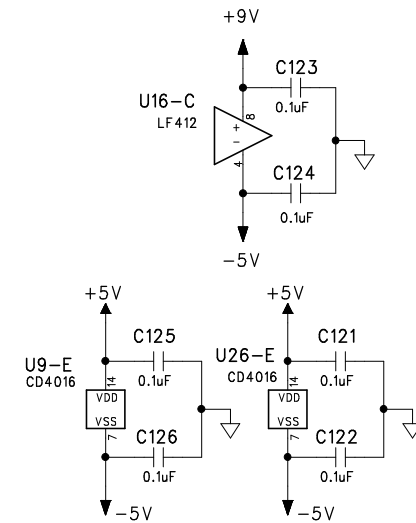
### FILT/VCA\_7 (2.2KHz/1.2KHz)



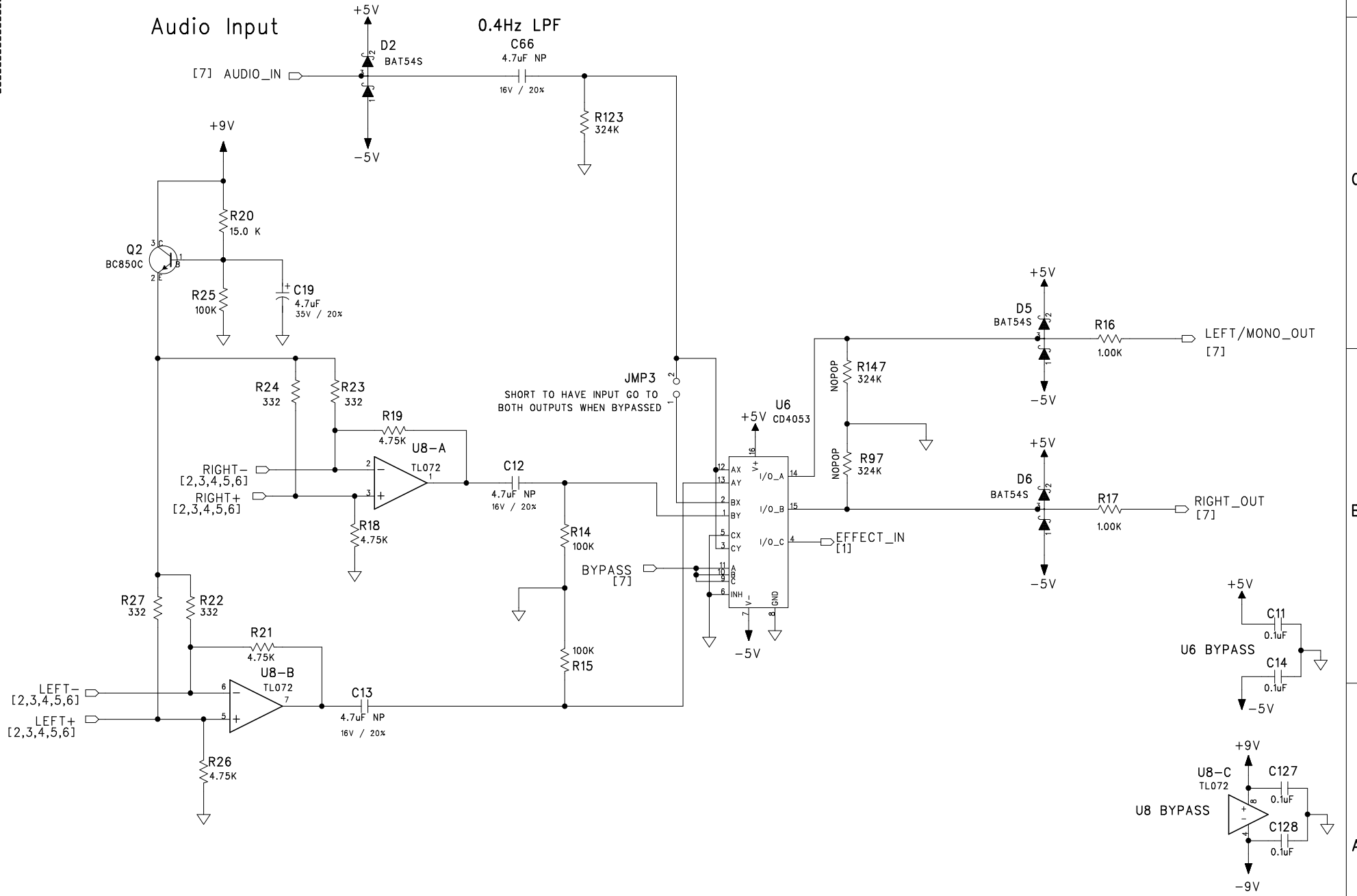
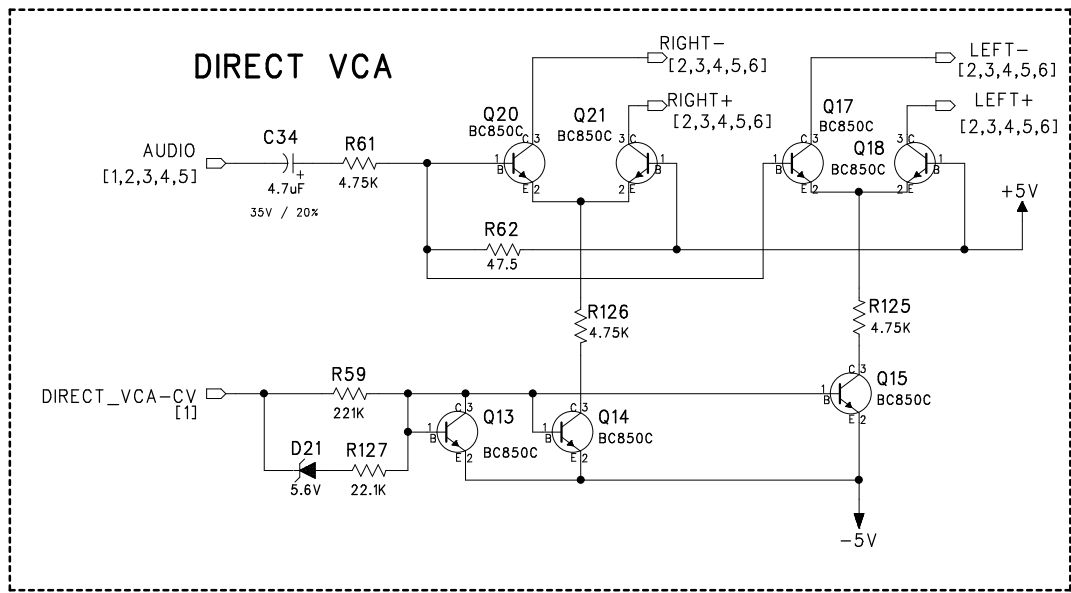
### FILT/VCA\_8 (3.4KHz/1.8KHz)



### FILTER 7/8 BYPASS

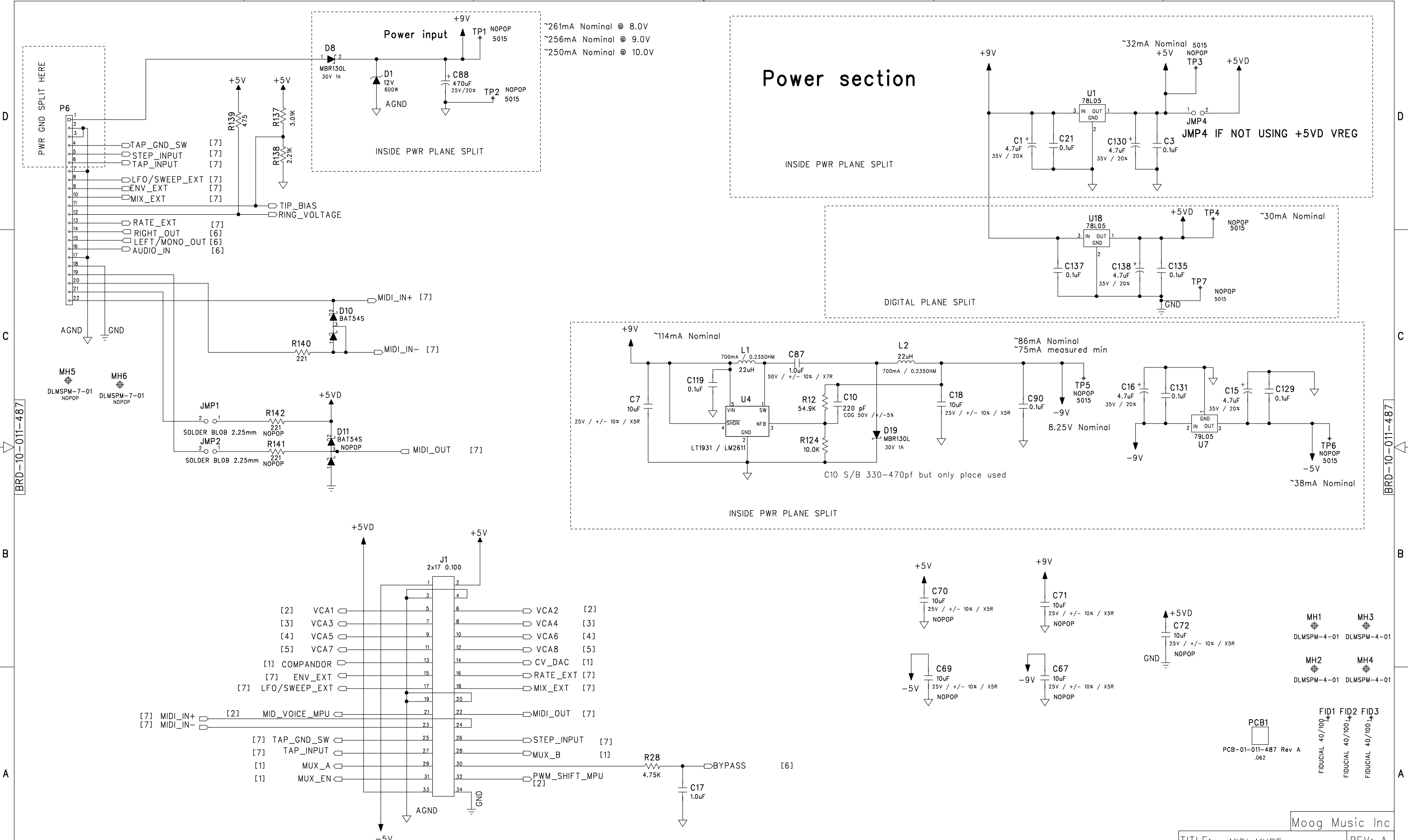


NOTES: (UNLESS OTHERWISE SPECIFIED):  
 1. RESISTORS 0805, 1%, 1/8W, VALUE IN OHMS  
 2. CAPACITORS 0805, X7R, 50V, VALUE IN uF

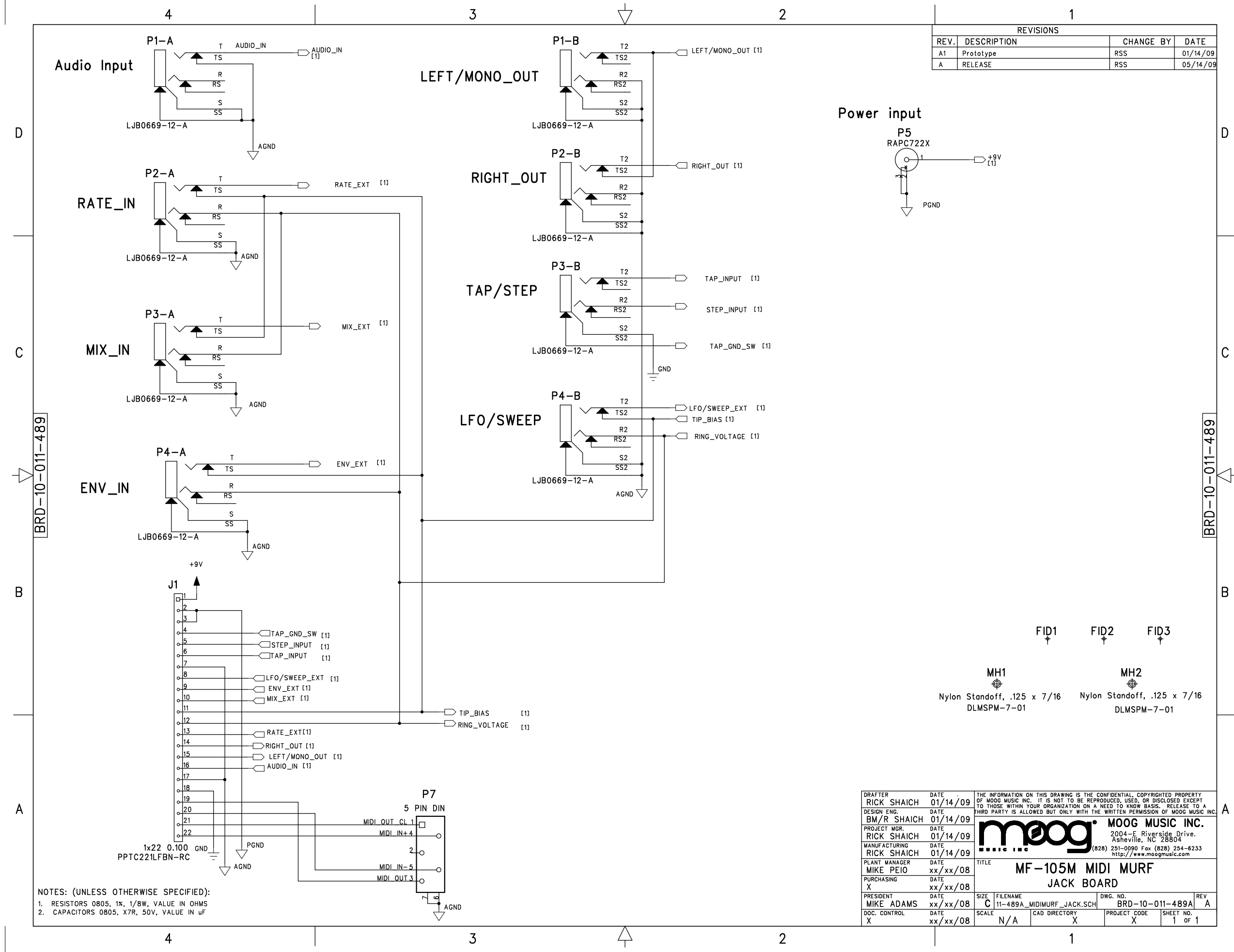


NOTES: (UNLESS OTHERWISE SPECIFIED):  
 1. RESISTORS 0805, 1%, 1/8W, VALUE IN OHMS  
 2. CAPACITORS 0805, X7R, 50V, VALUE IN uF

COMPANY:	Moog Music Inc
TITLE:	MIDIMURF - VCA AND MIX BUS
REV:	A 5/14/09 SHEET:6 OF 7



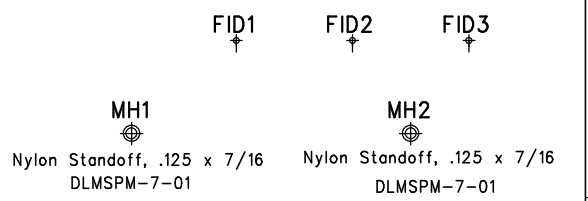
NOTES: (UNLESS OTHERWISE SPECIFIED):  
 1. RESISTORS 0805, 1%, 1/8W, VALUE IN OHMS  
 2. CAPACITORS 0805, X7R, 50V, VALUE IN uF



REVISIONS			
REV.	DESCRIPTION	CHANGE BY	DATE
A1	Prototype	RSS	01/14/09
A	RELEASE	RSS	05/14/09

BRD-10-011-489

BRD-10-011-489



NOTES: (UNLESS OTHERWISE SPECIFIED):  
 1. RESISTORS 0805, 1x, 1/8W, VALUE IN OHMS  
 2. CAPACITORS 0805, X7R, 50V, VALUE IN uF

DRAFTER RICK SHAIKH DATE 01/14/09		THE INFORMATION ON THIS DRAWING IS THE CONFIDENTIAL, COPYRIGHTED PROPERTY OF MOOG MUSIC INC. IT IS NOT TO BE REPRODUCED, USED, OR DISCLOSED EXCEPT TO THOSE WITHIN YOUR ORGANIZATION ON A NEED TO KNOW BASIS. RELEASE TO A THIRD PARTY IS ALLOWED BUT ONLY WITH THE WRITTEN PERMISSION OF MOOG MUSIC INC.	
DESIGN ENG. BM/R SHAIKH DATE 01/14/09		<b>MOOG MUSIC INC.</b> 2004-E Riverside Drive, Asheville, NC 28804 (828) 251-0090 Fax (828) 254-6233 <a href="http://www.moogmusic.com">http://www.moogmusic.com</a>	
PROJECT MGR. RICK SHAIKH DATE 01/14/09			
MANUFACTURING RICK SHAIKH DATE 01/14/09		TITLE <b>MF-105M MIDI MURF JACK BOARD</b>	
PLANT MANAGER MIKE PEIO DATE xx/xx/08		DWG. NO. BRD-10-011-489A	
PURCHASING X DATE xx/xx/08		REV A	
PRESIDENT MIKE ADAMS DATE xx/xx/08		SCALE N/A	
DOC. CONTROL X DATE xx/xx/08		CAD DIRECTORY X	
		PROJECT CODE X	
		SHEET NO. 1 of 1	