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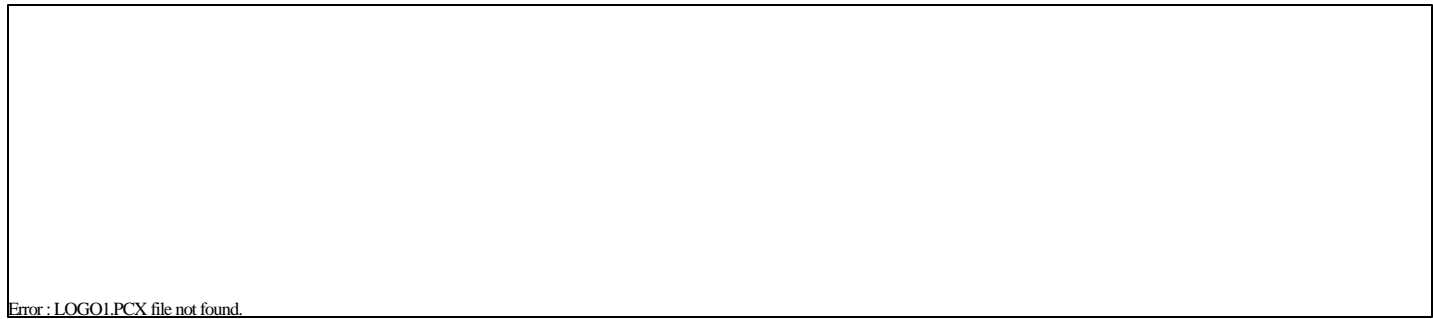
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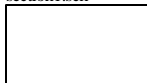
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TheraMini VII Stimulator

Section I. PROCESSOR & USER INTERFACE
Section II. WAVEFORM GENERATION
Section III. POWER SUPPLY

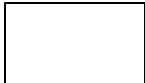
SECTION I
section1.sch



SECTION II
section2.sch



SECTION III
section3.sch



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Size: A	Number: 00000000	Rev: C	Sheet 1 of 15
Date: 11-Jan-2002		Drawn by: Bill Reddy	
File: X:\Rich-Mar\TM-I-II\Schem\Rev_C\TMINI.DDB - Documents\TMINI.PRJ			

**RICH-MAR
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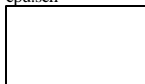
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Section I. Processor & User Interface



- CPU and Memory (HC11/PSD312)
 - CPU Support, Serial I/O, Audible Output
- Front Panel I/O
 - Membrane Buttons, Encoder Input
 - Character & Graphic LCDs

CPU
cpu.sch



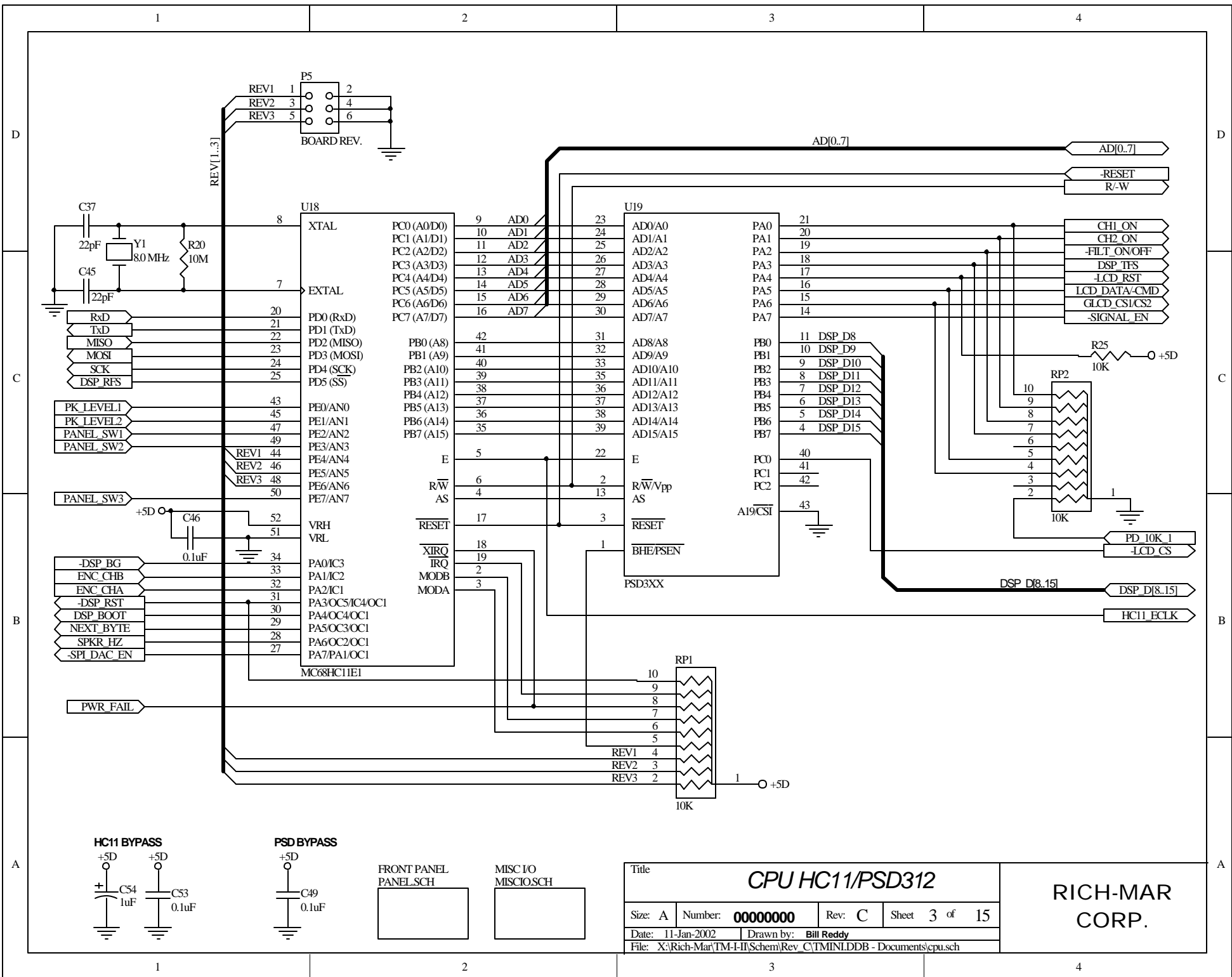
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Date: 11-Jan-2002	Drawn by: Bill Reddy						
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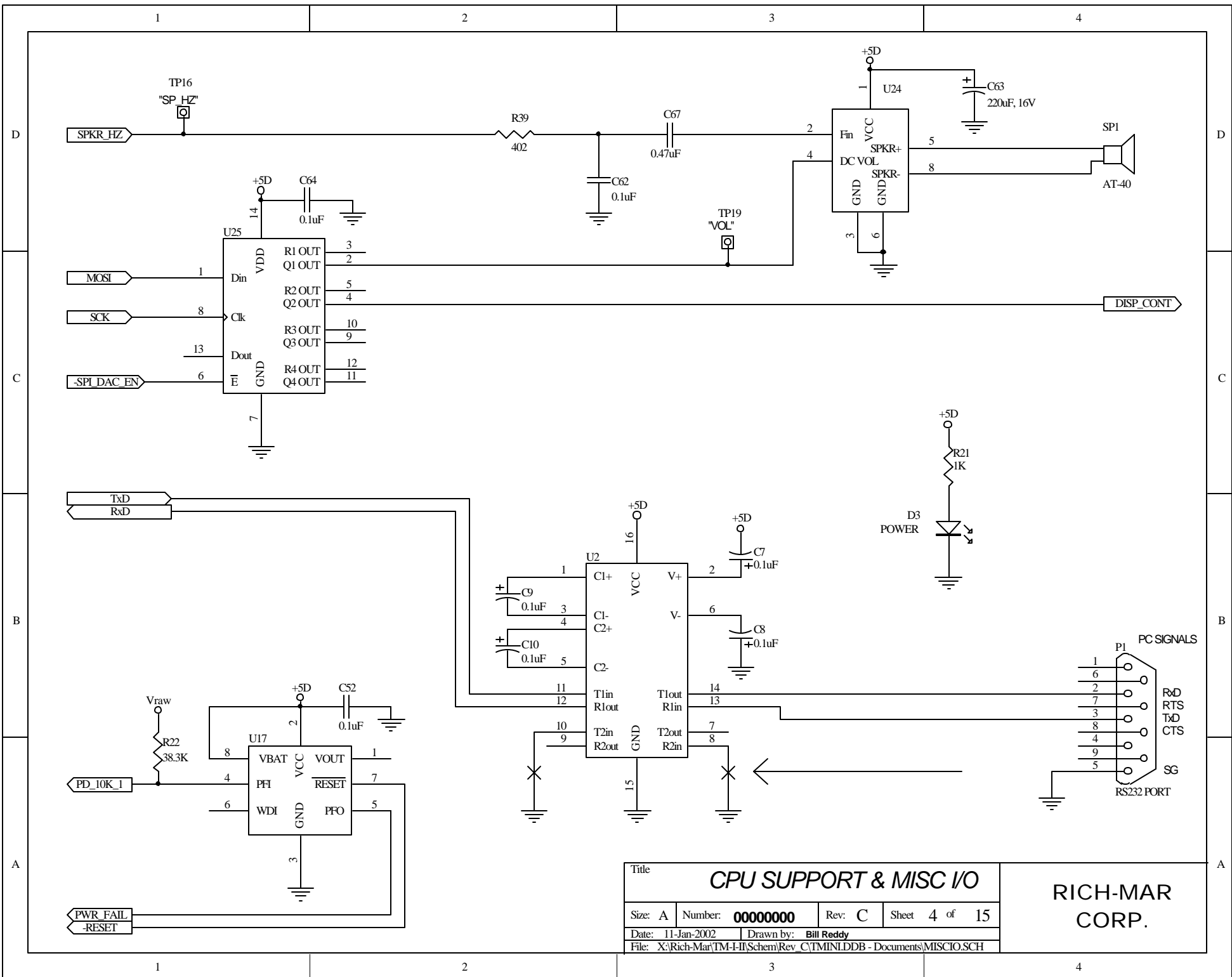
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CPU HC11/PSD312			
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Date: 11-Jan-2002	Drawn by: Bill Reddy		
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Title			
CPU SUPPORT & MISC I/O			
Size: A	Number: 00000000	Rev: C	Sheet 4 of 15
Date: 11-Jan-2002	Drawn by: Bill Reddy		
File: X:\Rich-Mar\TM-I-II\Schem\Rev_C\TMINLDDDB - Documents\MISCIO.SCH			

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Front Panel Inputs



- Encoder Knob with Push Buttton
- Membrane Switches

- Display Options:
 - 2 x 16 LCD Character Module
 - 128 x 64 Graphic LCD

MEMBRANE SWITCHES
BUTTONS.SCH



LCD DISPLAYS
DISPLAYS.SCH



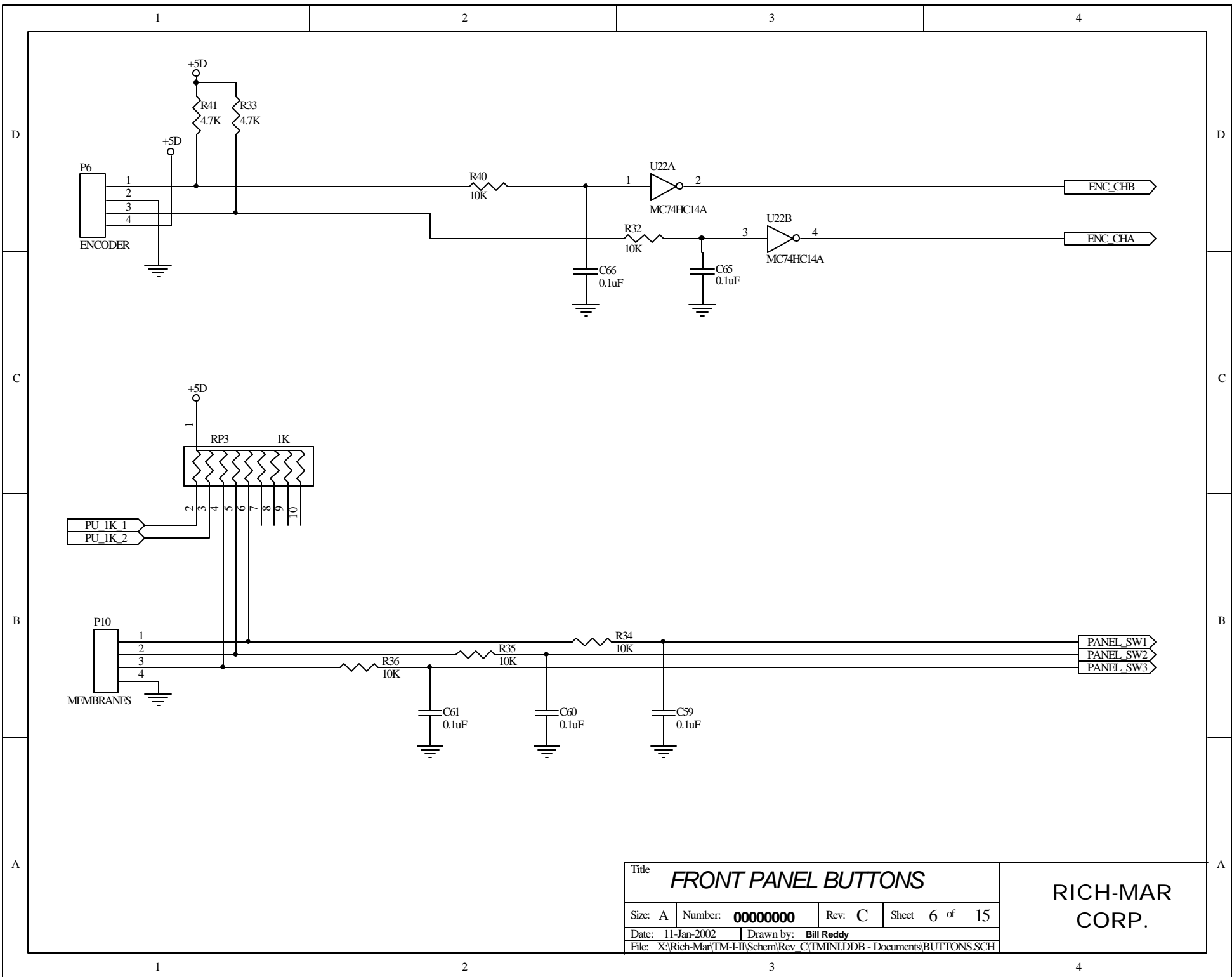
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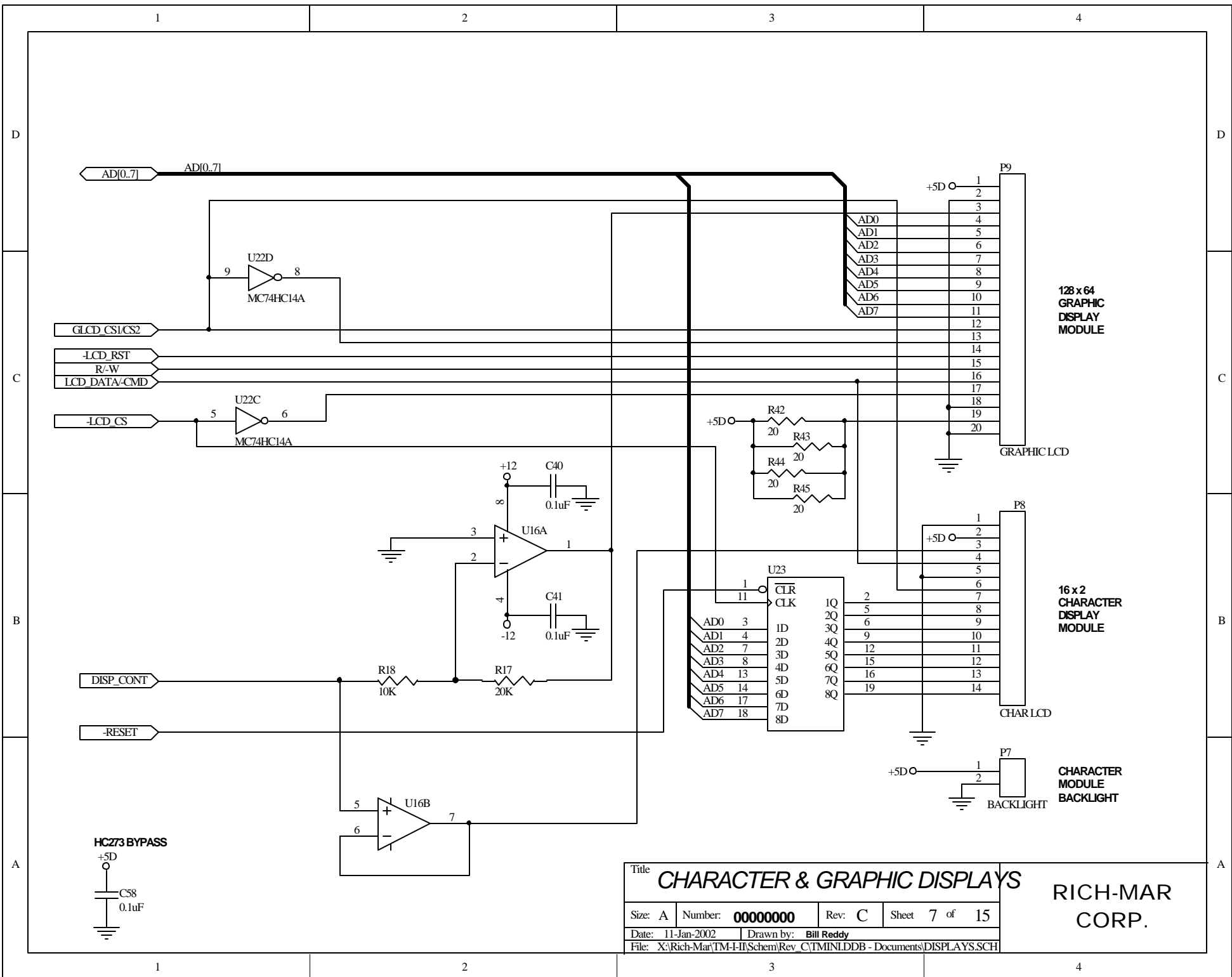
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**RICH-MAR
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Title **CHARACTER & GRAPHIC DISPLAYS**

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Size: A	Number: 00000000	Rev: C	Sheet 7 of 15
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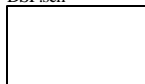
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Section II. Waveform Generation

- Digital Signal Processor (ADSP2105)
 - Digital-to-Analog Converters
 - Filters
 - Amplifiers
 - Isolation Transformers & Output Monitoring

DSP
DSP.sch



Title				<i>Section II. Waveform Generation</i>			
Size: A	Number: 00000000	Rev: C	Sheet 8 of 15				
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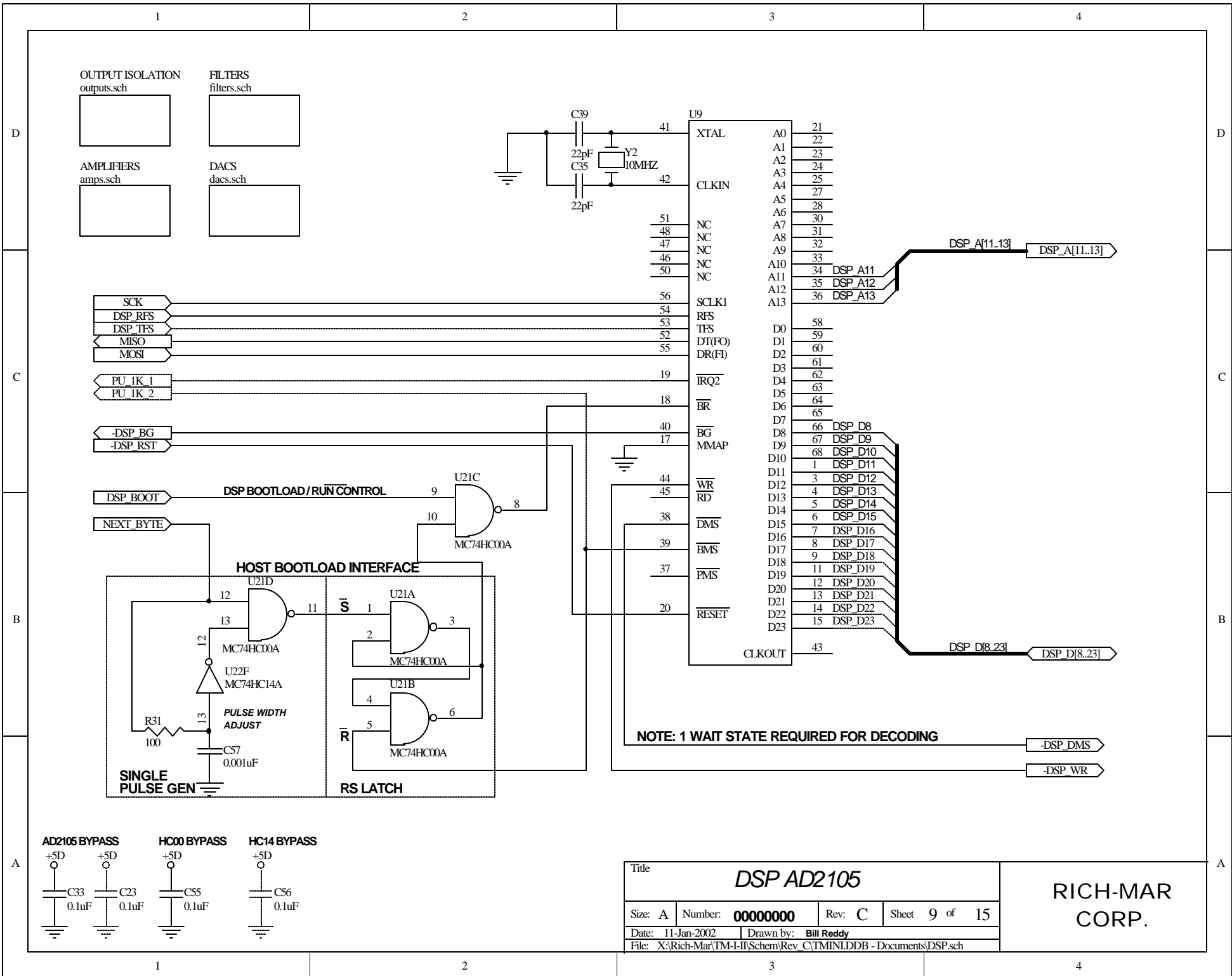
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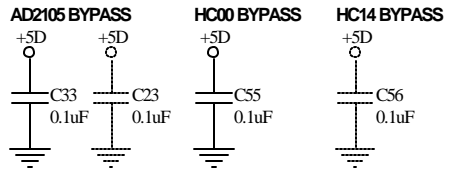
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NOTE: 1 WAIT STATE REQUIRED FOR DECODING

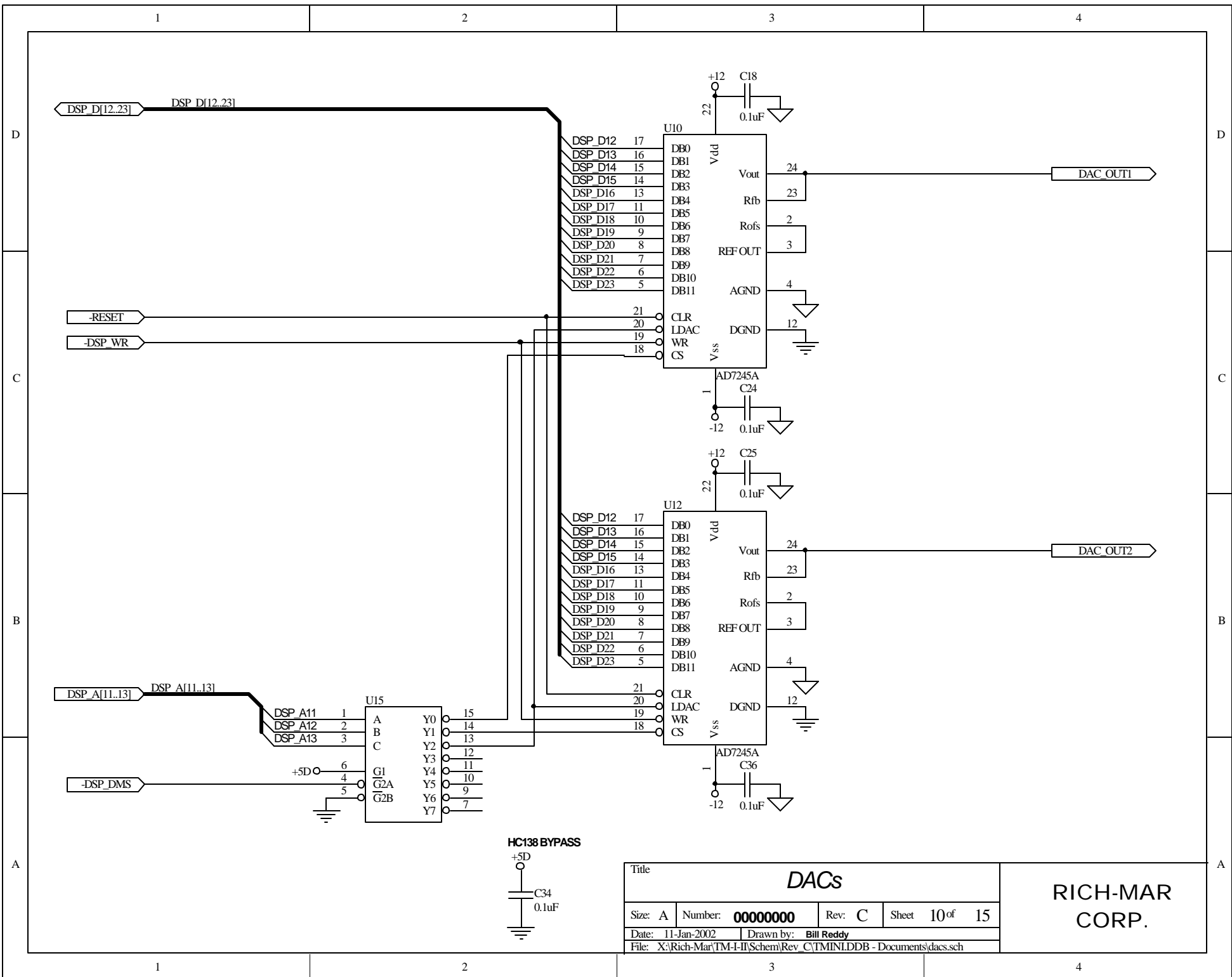
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-DSP_WR



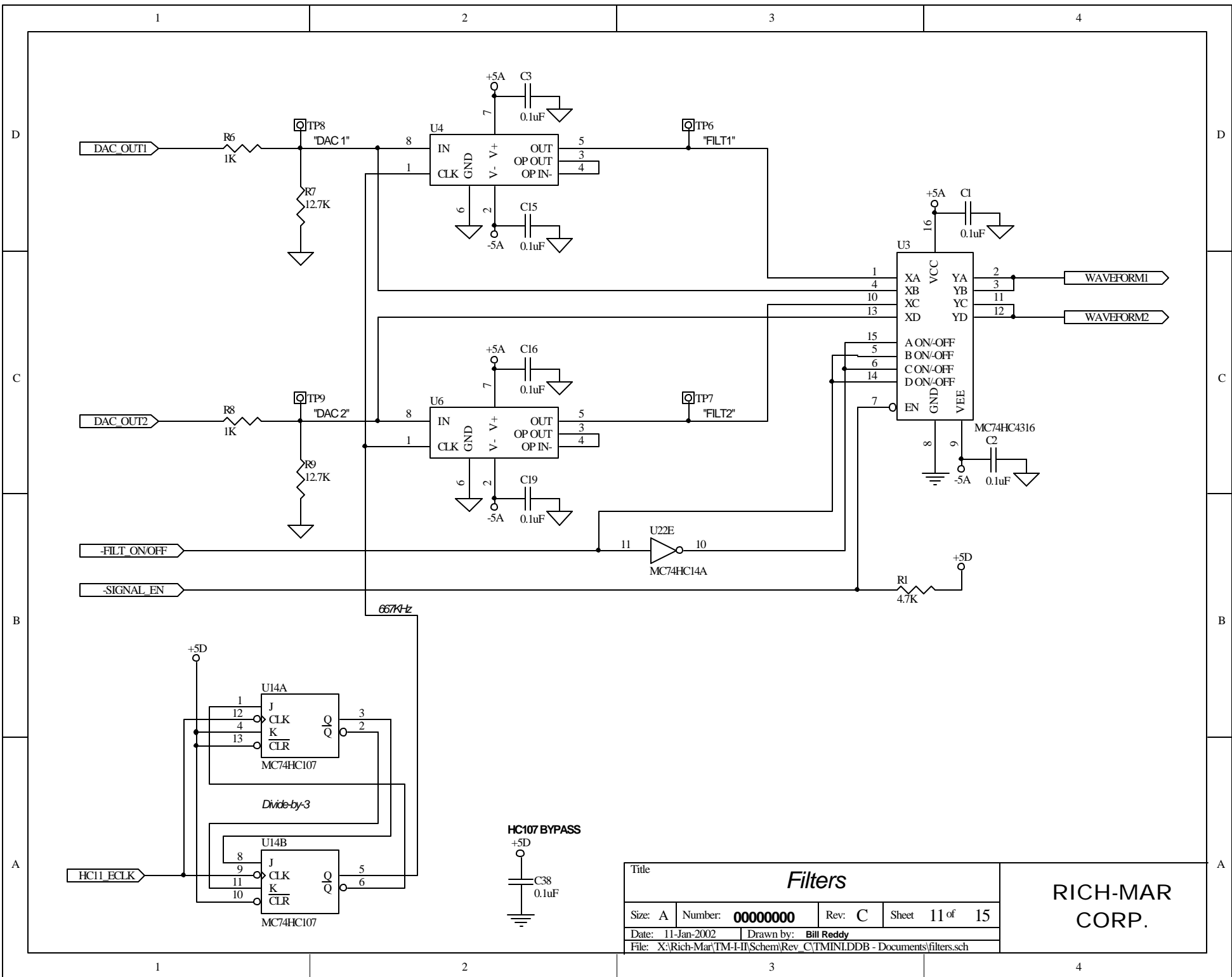
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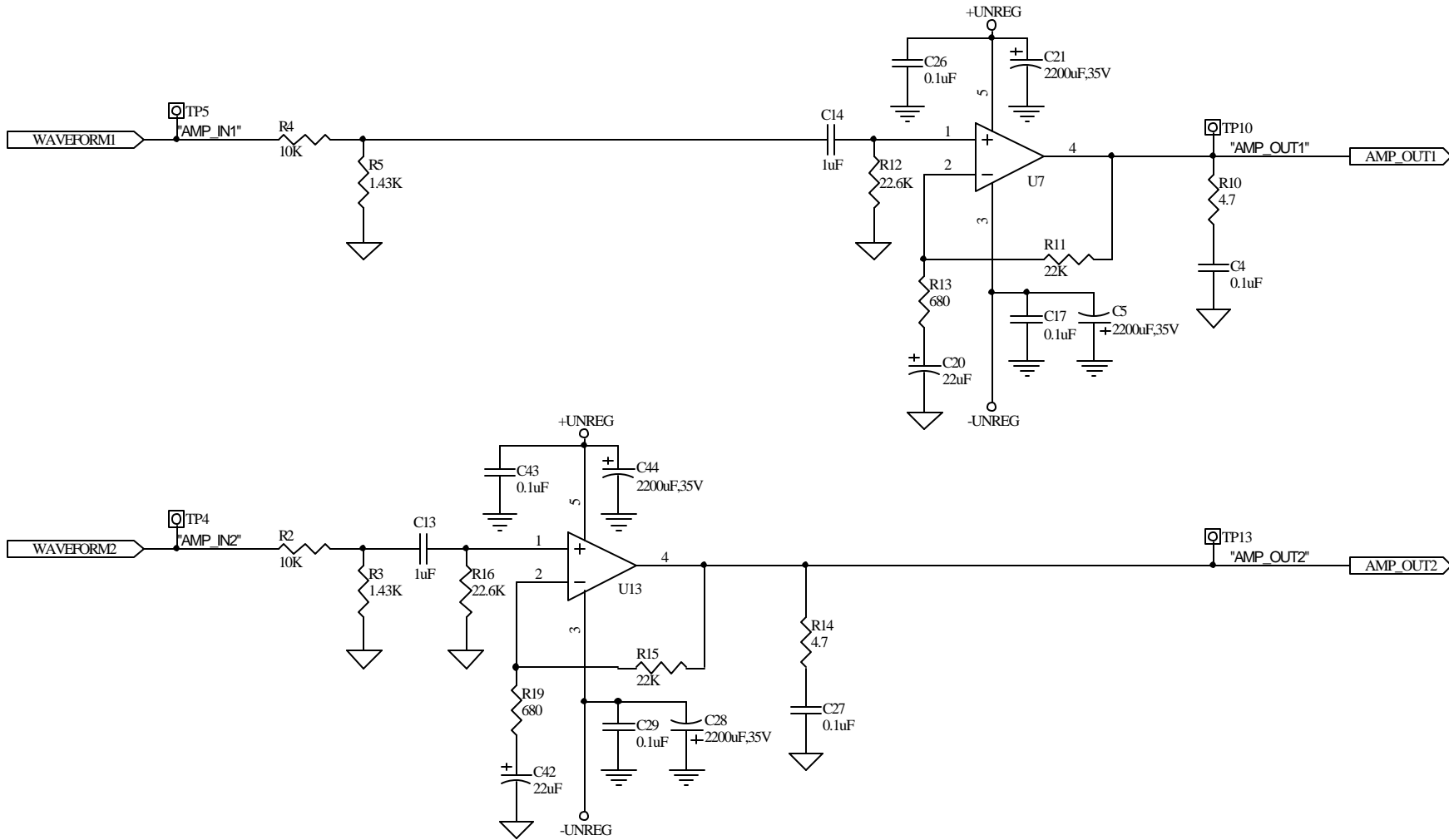
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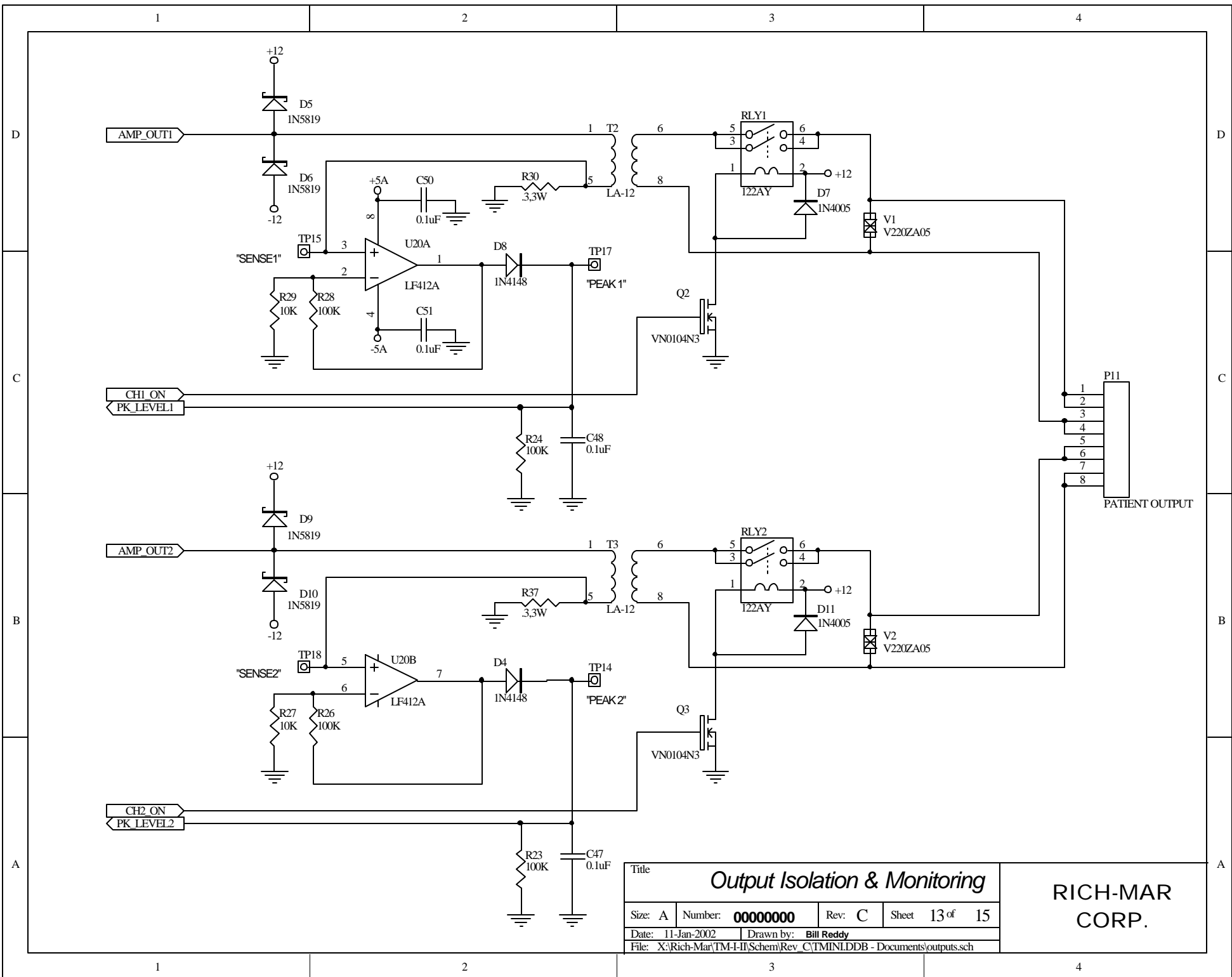


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Title				Output Amplifiers		RICH-MAR CORP.	
Size: A	Number: 00000000	Rev: C	Sheet	12 of 15			
Date: 11-Jan-2002	Drawn by: Bill Reddy						
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Title			
Output Isolation & Monitoring			
Size: A	Number: 00000000	Rev: C	Sheet 13 of 15
Date: 11-Jan-2002	Drawn by: Bill Reddy		
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Section III. POWER



- Power Supply
- Raw and regulated voltages

POWER SUPPLY
POWER.sch



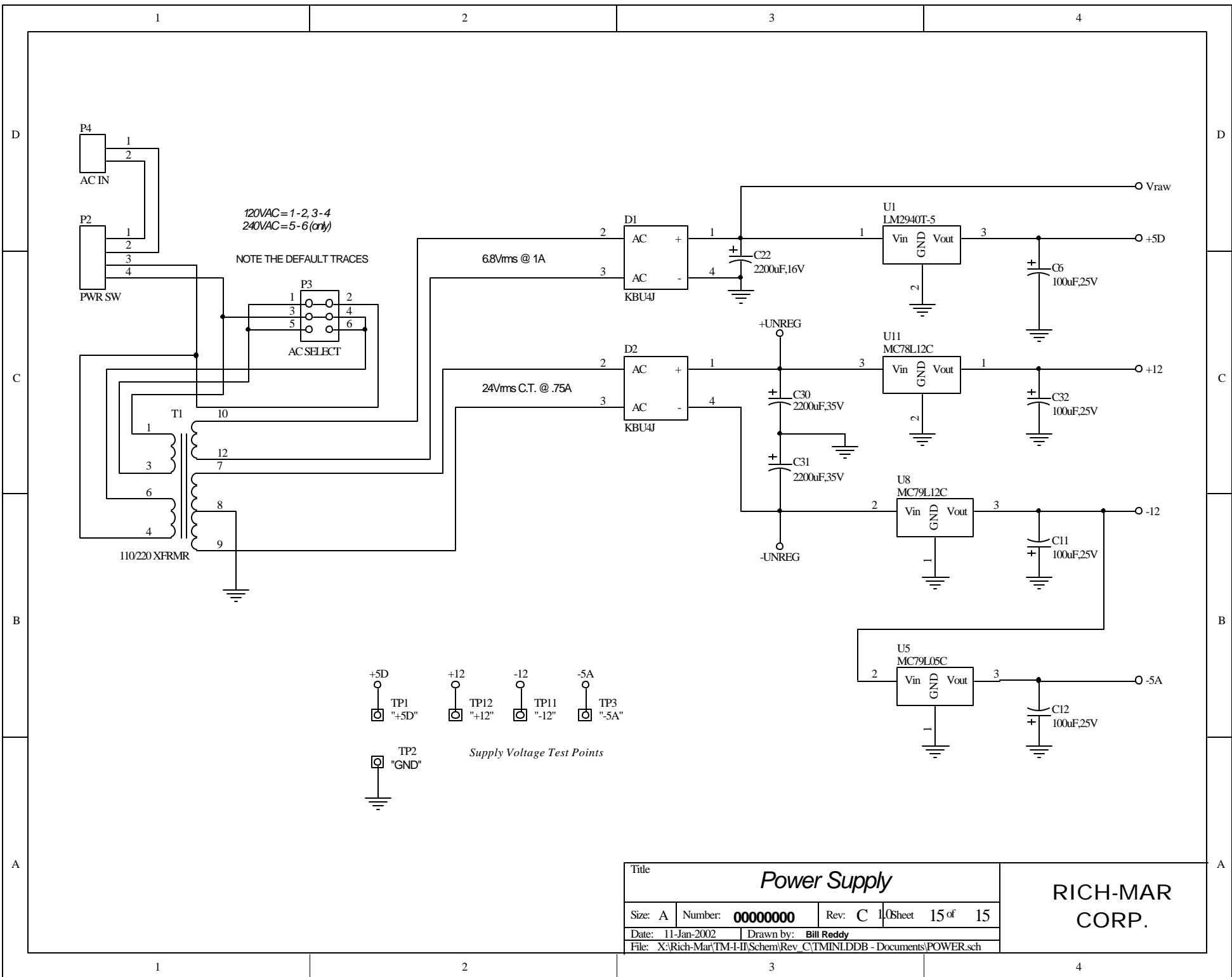
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Title				Power Supply	
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