

- 2. CPU
- 3. Memory
- 4. Misc I/O
- 5. Data Conversion
- 6. FRONT PANEL
- 7. Graphic LCD
- 8. STIM WAVEFORM DSP
- 9. Boot Load & Clocks
- 10. DACs
- 11. Filters
- 12. Output Amps
- 13. Output Isolation & Monitoring
- 14. ULTRASOUND FREQUENCY SYNTH
- 15. RF Deck I/O
- 16. POWER SUPPLY

THE RAMINI

3C3P

REV. E
(SYN09E)

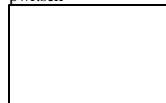
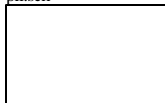
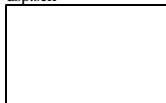
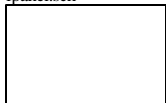
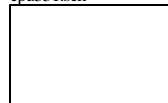
CPU
cpu331.sch

FRONT PANEL I/O
fpanel.sch

DSP
dsp.sch

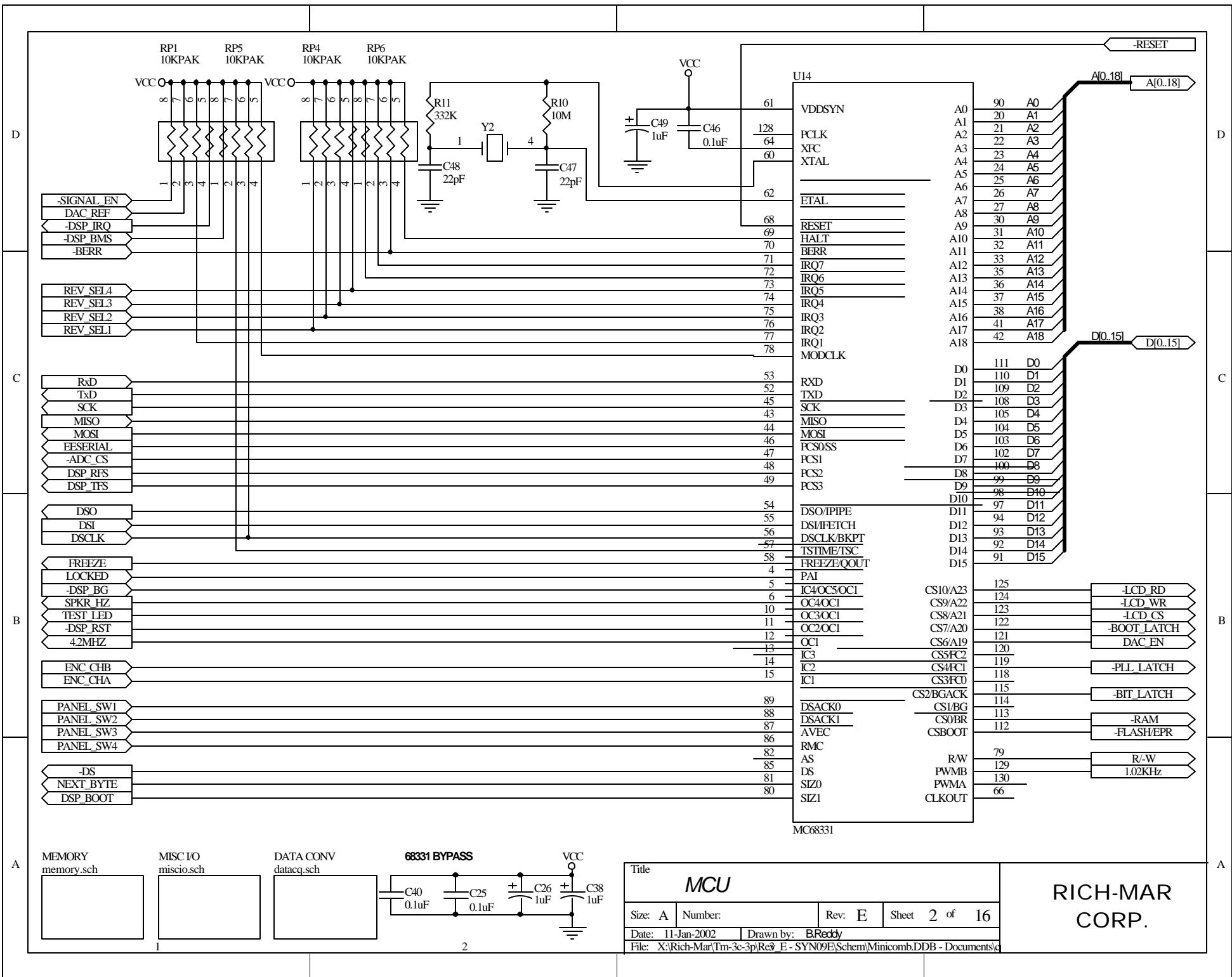
FREQ SYNTH
pll.sch

POWER SUPPLY
pwr.sch



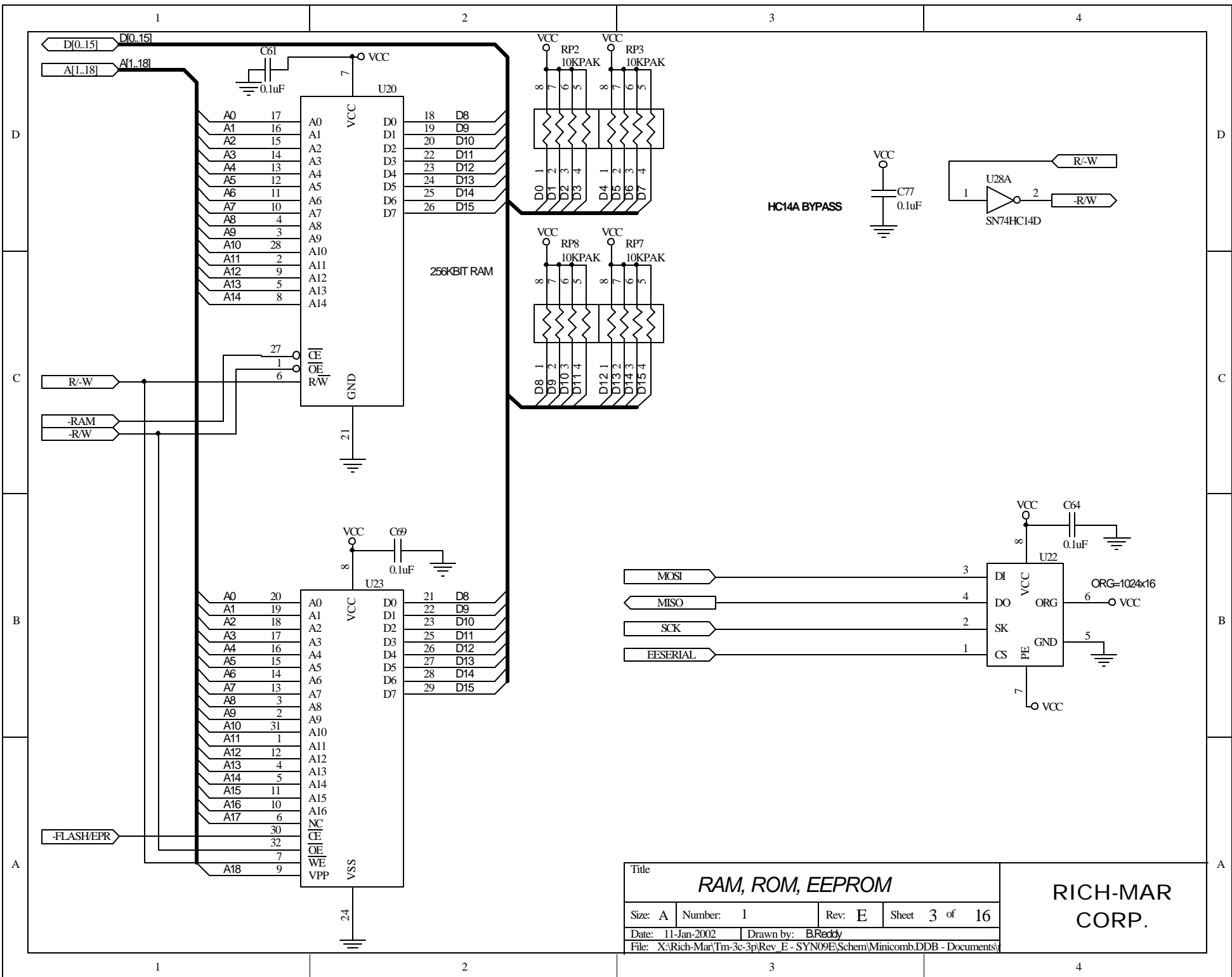
Title STIM & ULTRASOUND COMBO			
Size: A	Number:	Rev: E	Sheet 1 of 16
Date: 11-Jan-2002	Drawn by: B.Reddy		
File: X:\Rich-Mar\Tm-3c-3p\Rev_E-SYN09E\Schem\Mimicomb.DDB - Documents\N			

**RICH-MAR
CORP.**



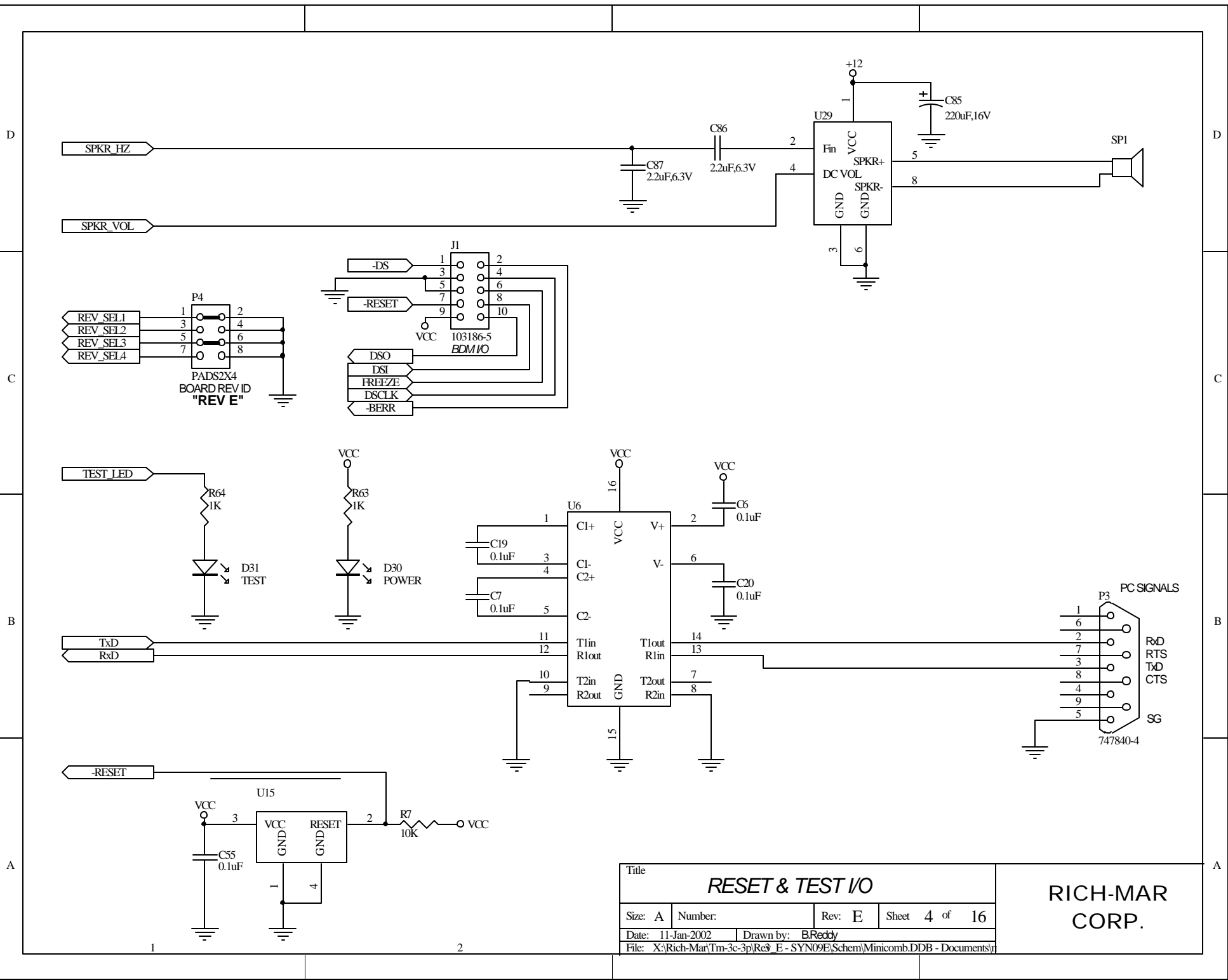
Title MCU			
Size: A	Number:	Rev: E	Sheet 2 of 16
Date: 11-Jan-2002	Drawn by: B.Reddy		
File: X:\Rich-Mar\Tm-3c-3p\Re9 E-SYN09E\Schem\Minicomb.DDB - Documents\q			

**RICH-MAR
CORP.**



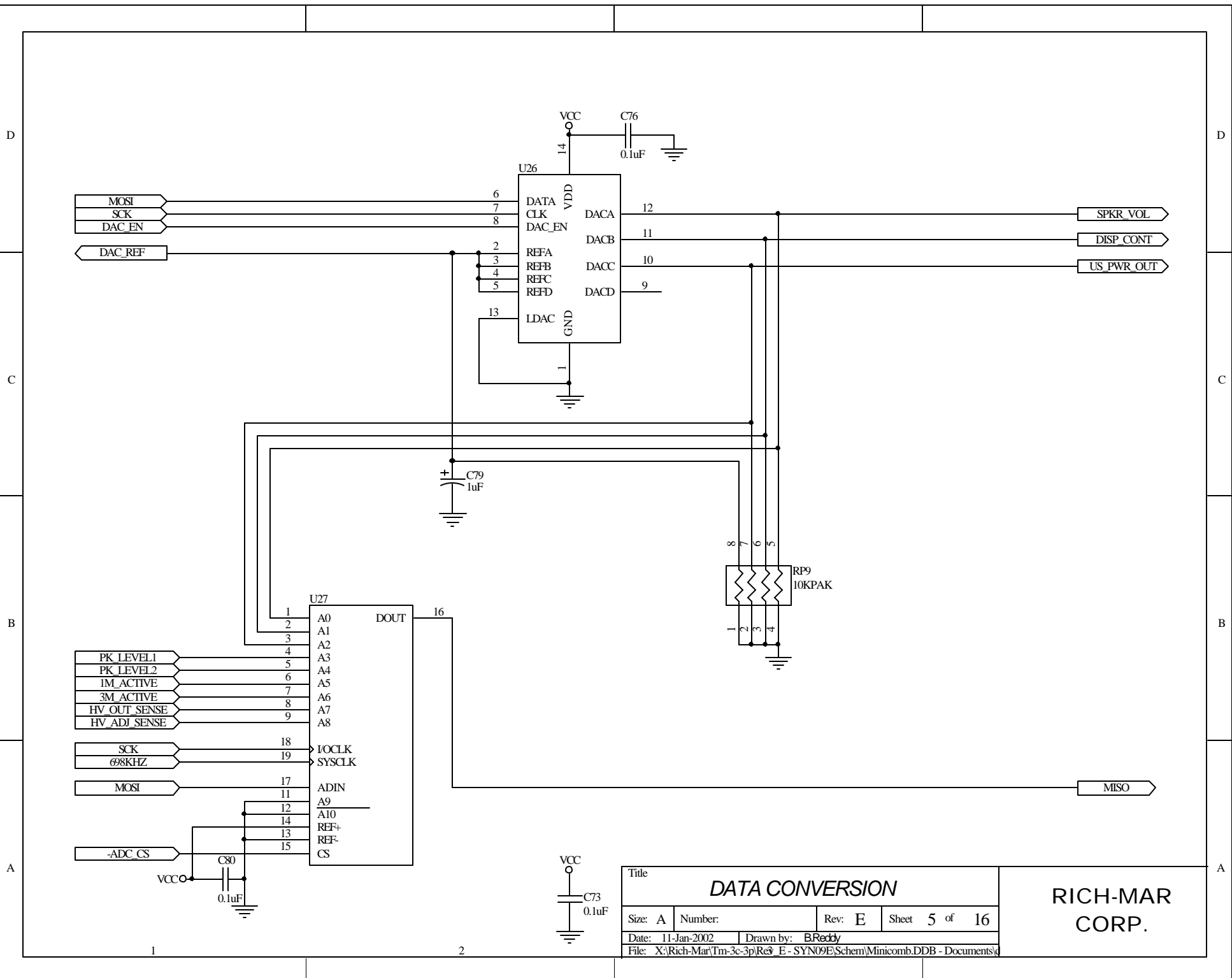
Title			
RAM, ROM, EEPROM			
Size: A	Number: 1	Rev: E	Sheet 3 of 16
Date: 11-Jan-2002	Drawn by: B.Reddy		
File: X:\Rich-Mar\Tm-3c-3p\Rev_E - SYN09E\Schem\Minicomb.DDB - Documents\			

**RICH-MAR
CORP.**



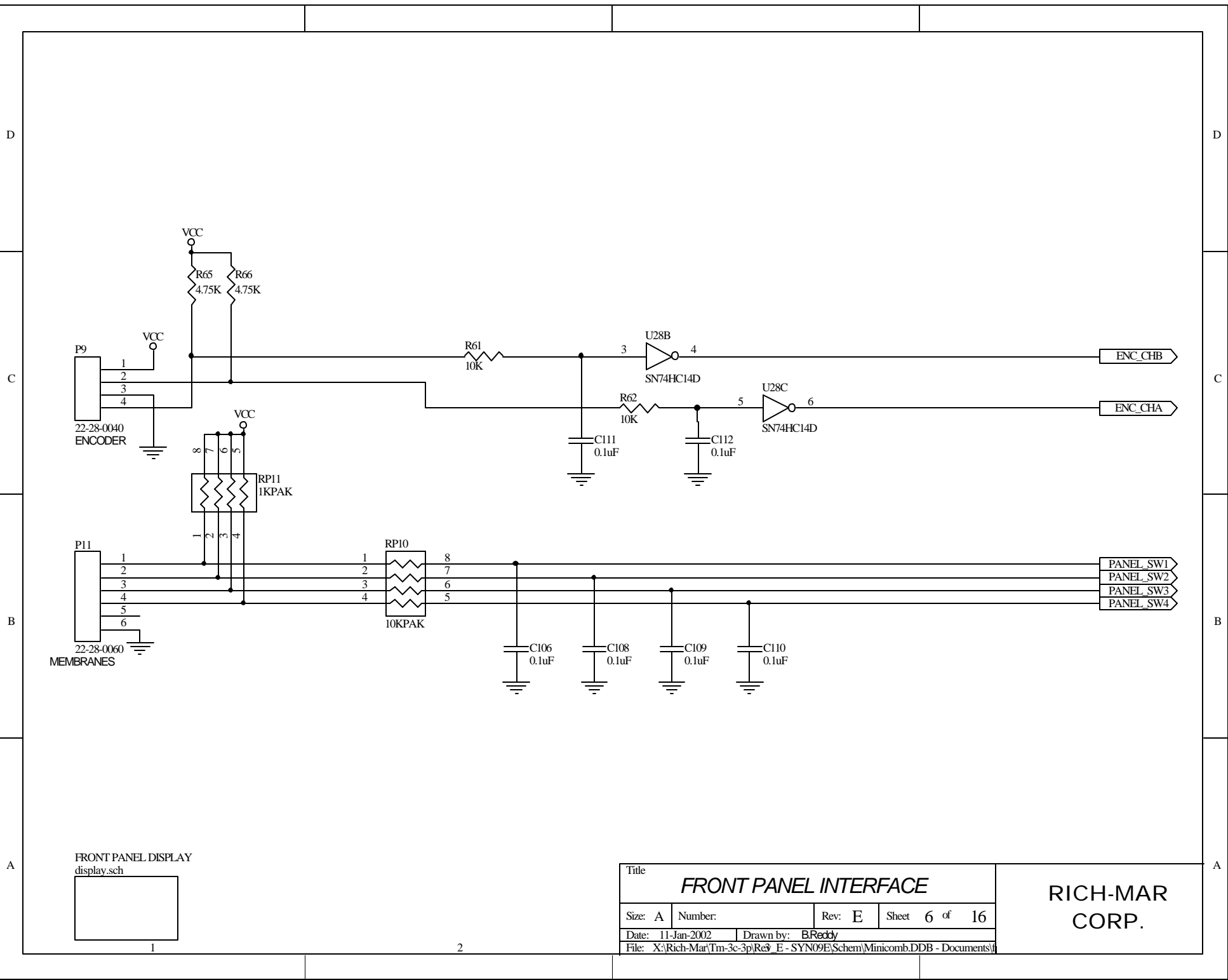
Title			
RESET & TEST I/O			
Size: A	Number:	Rev: E	Sheet 4 of 16
Date: 11-Jan-2002	Drawn by: B.Reddy		
File: X:\Rich-Mar\Tm-3c-3p\Rev_E - SYN09E\Schem\Minicomb.DDB - Documents\			

**RICH-MAR
CORP.**

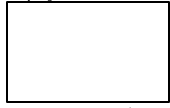


Title			
DATA CONVERSION			
Size: A	Number:	Rev: E	Sheet 5 of 16
Date: 11-Jan-2002	Drawn by: B.Reddy		
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**RICH-MAR
CORP.**

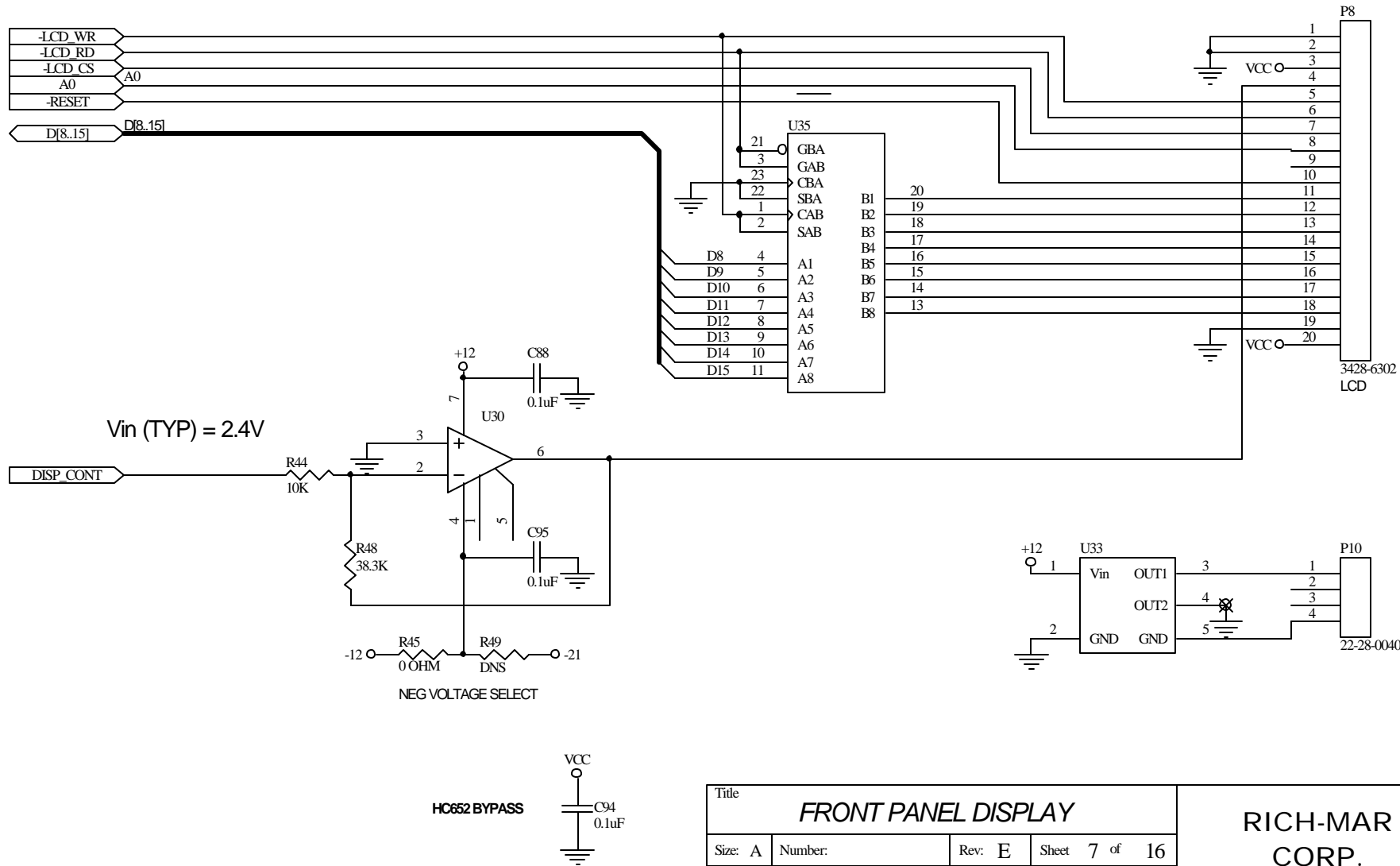


FRONT PANEL DISPLAY
display.sch



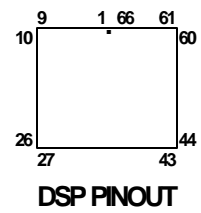
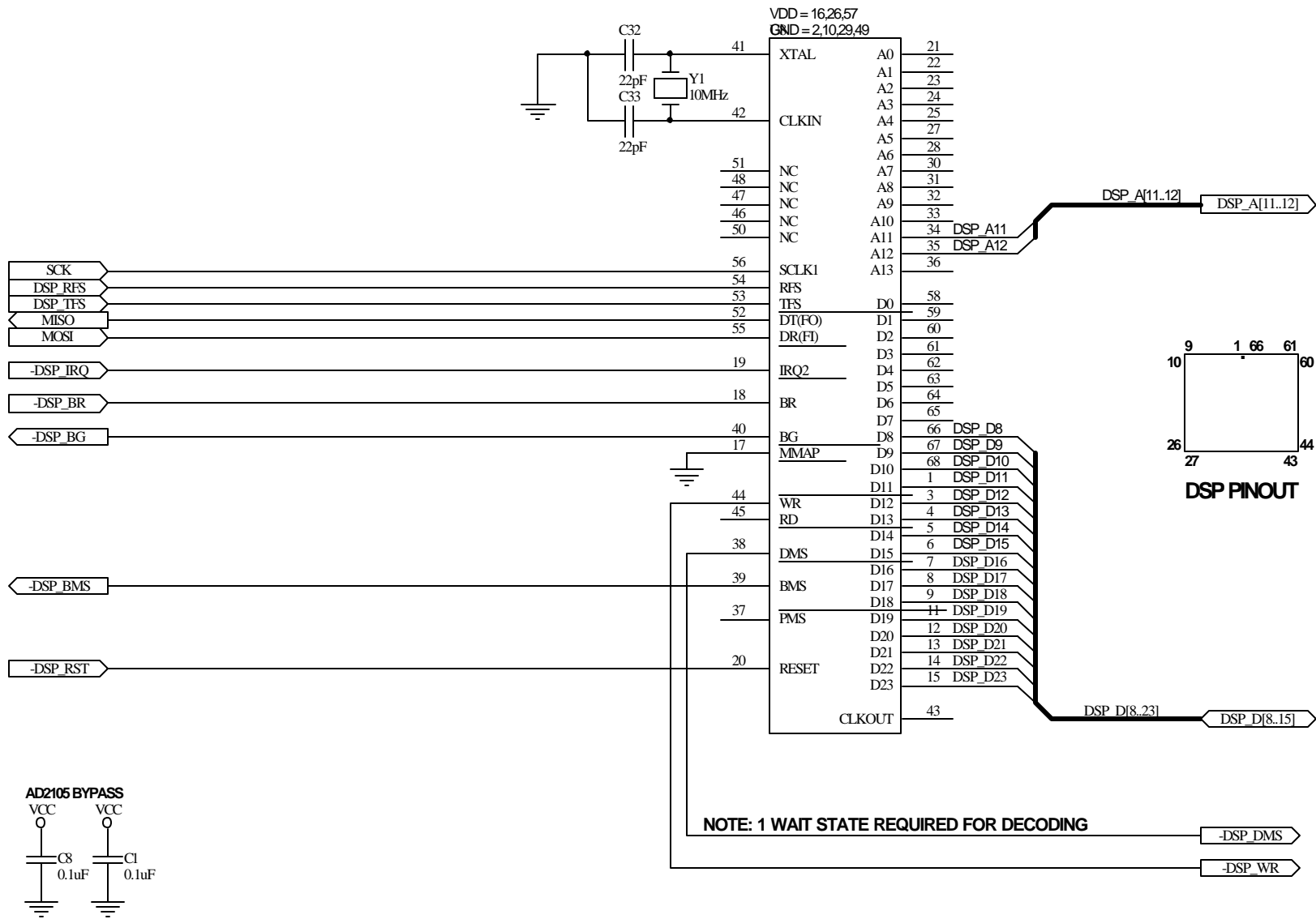
Title			
FRONT PANEL INTERFACE			
Size: A	Number:	Rev: E	Sheet 6 of 16
Date: 11-Jan-2002	Drawn by: B.Reddy		
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**RICH-MAR
CORP.**



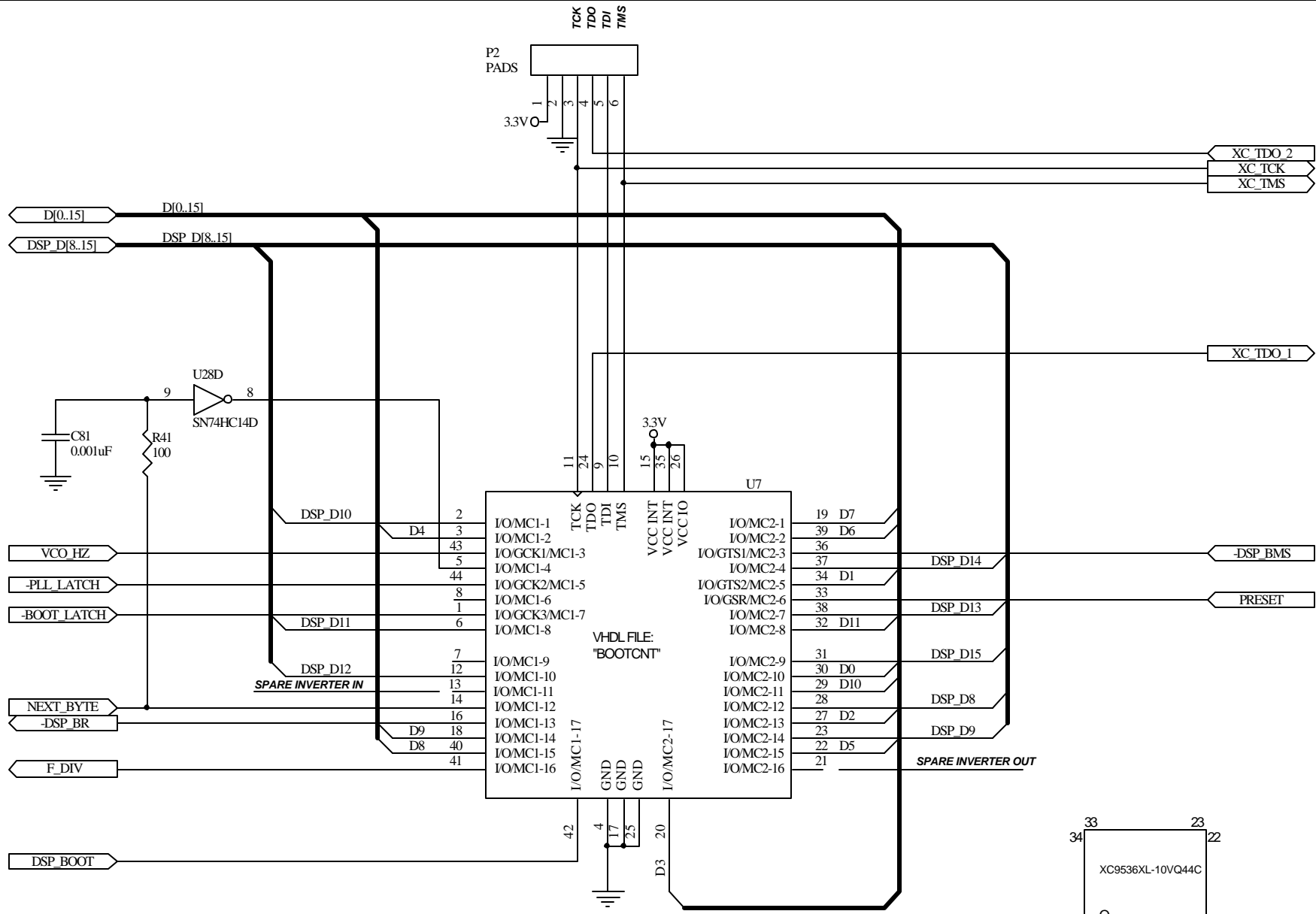
Title			
FRONT PANEL DISPLAY			
Size: A	Number:	Rev: E	Sheet 7 of 16
Date: 11-Jan-2002	Drawn by: B.Reddy		
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**RICH-MAR
CORP.**

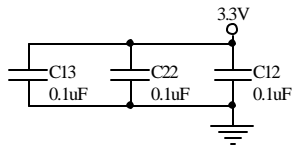


Title DSP			
Size: A	Number:	Rev: E	Sheet 8 of 16
Date: 11-Jan-2002	Drawn by: B.Reddy		
File: X:\Rich-Mar\Tm-3c-3p\Res_E - SYN09E\Schem\Minicomb.DDB - Documents\d			

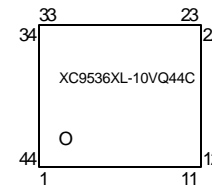
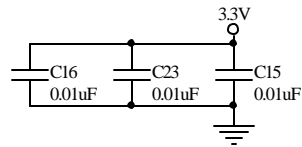
**RICH-MAR
CORP.**



APPLY AT EACH VCC PIN OF XC9536

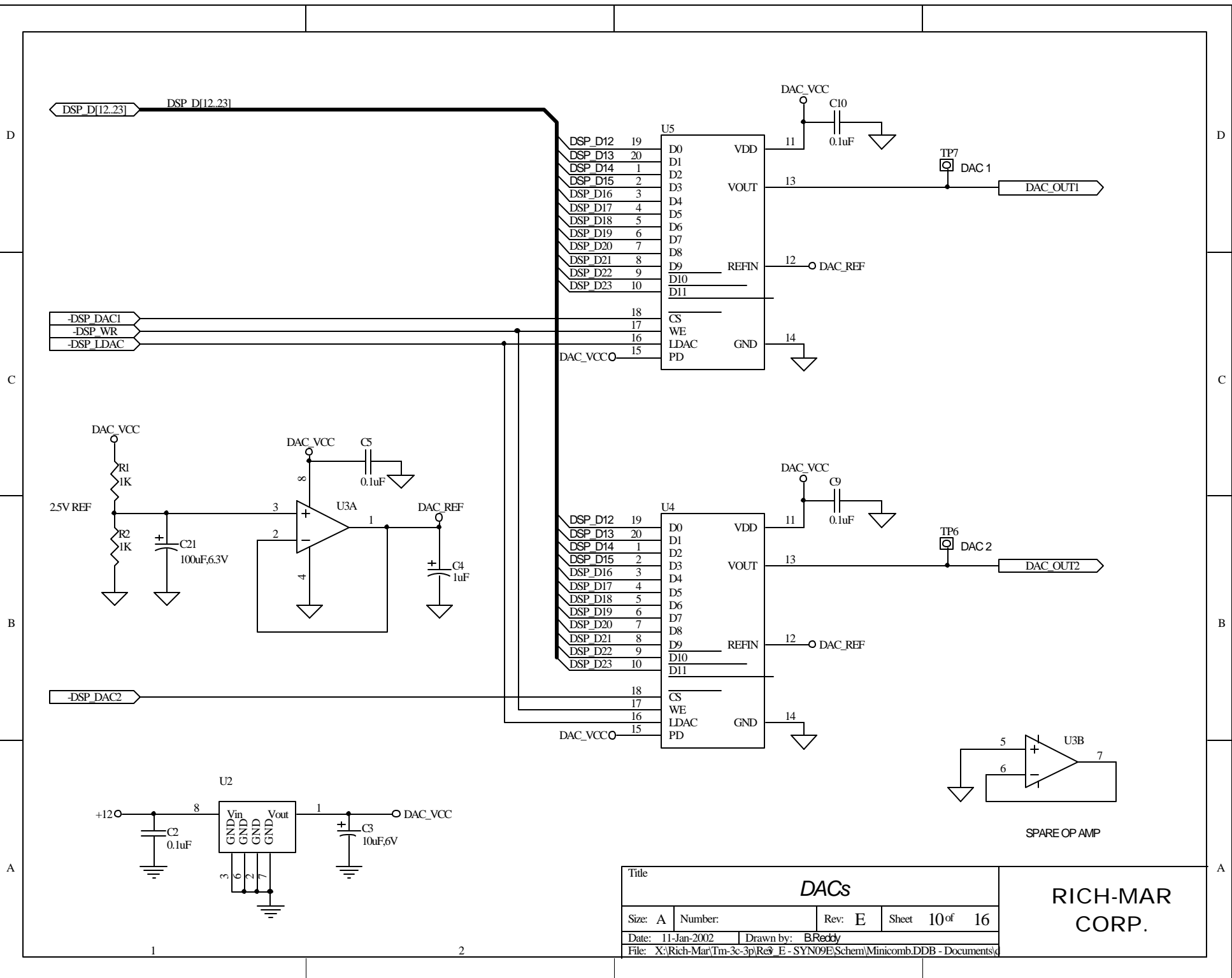


APPLY AT EACH VCC PIN OF XC9536



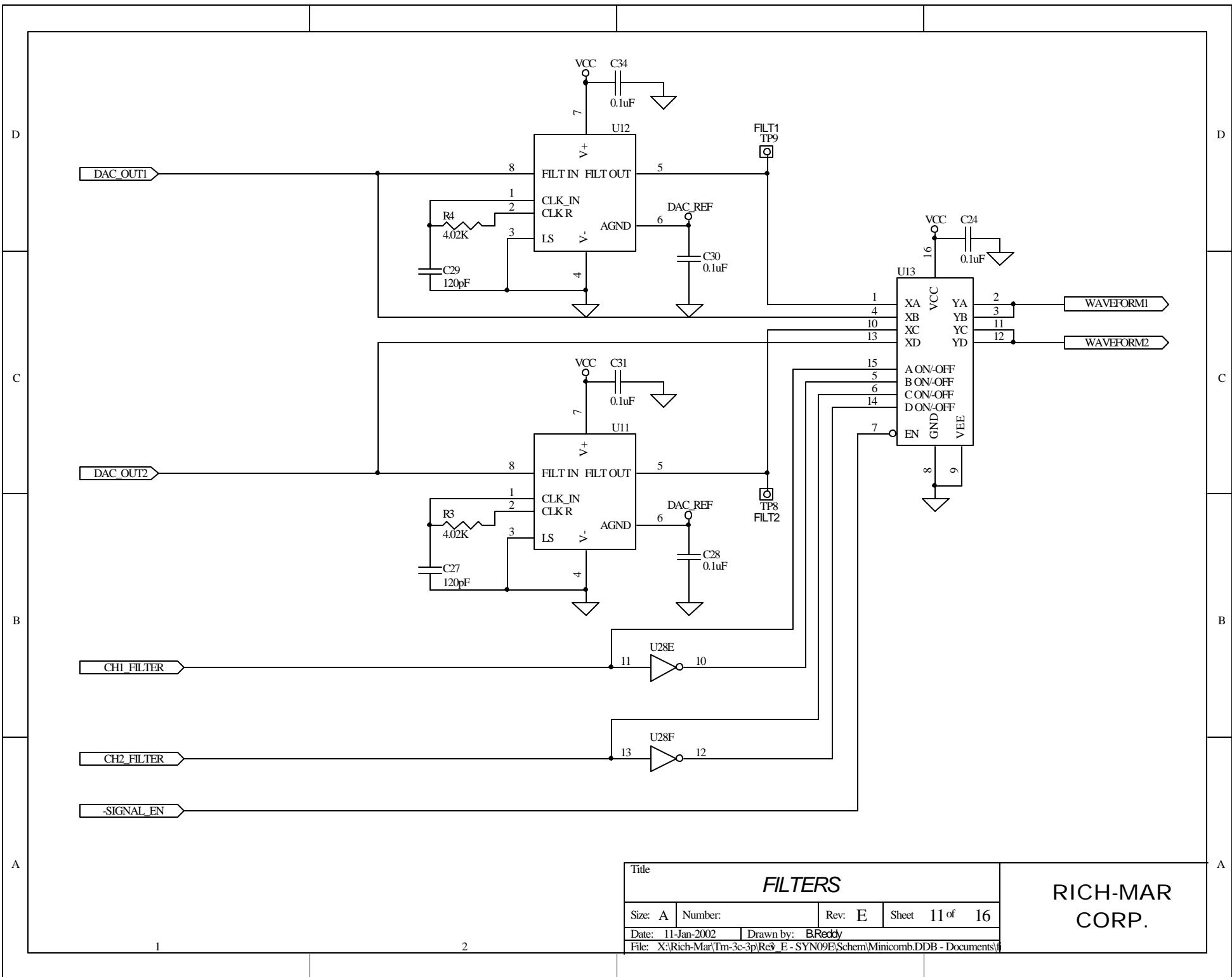
Title BOOTLOAD / FILTER CLK			
Size: A	Number:	Rev: E	Sheet 9 of 16
Date: 11-Jan-2002	Drawn by: B.Reddy		
File: X:\Rich-Mar\Tm-3c-3p\Res_E - SYN09E\Schem\Mimicomb.DDB - Documents\d			

**RICH-MAR
CORP.**



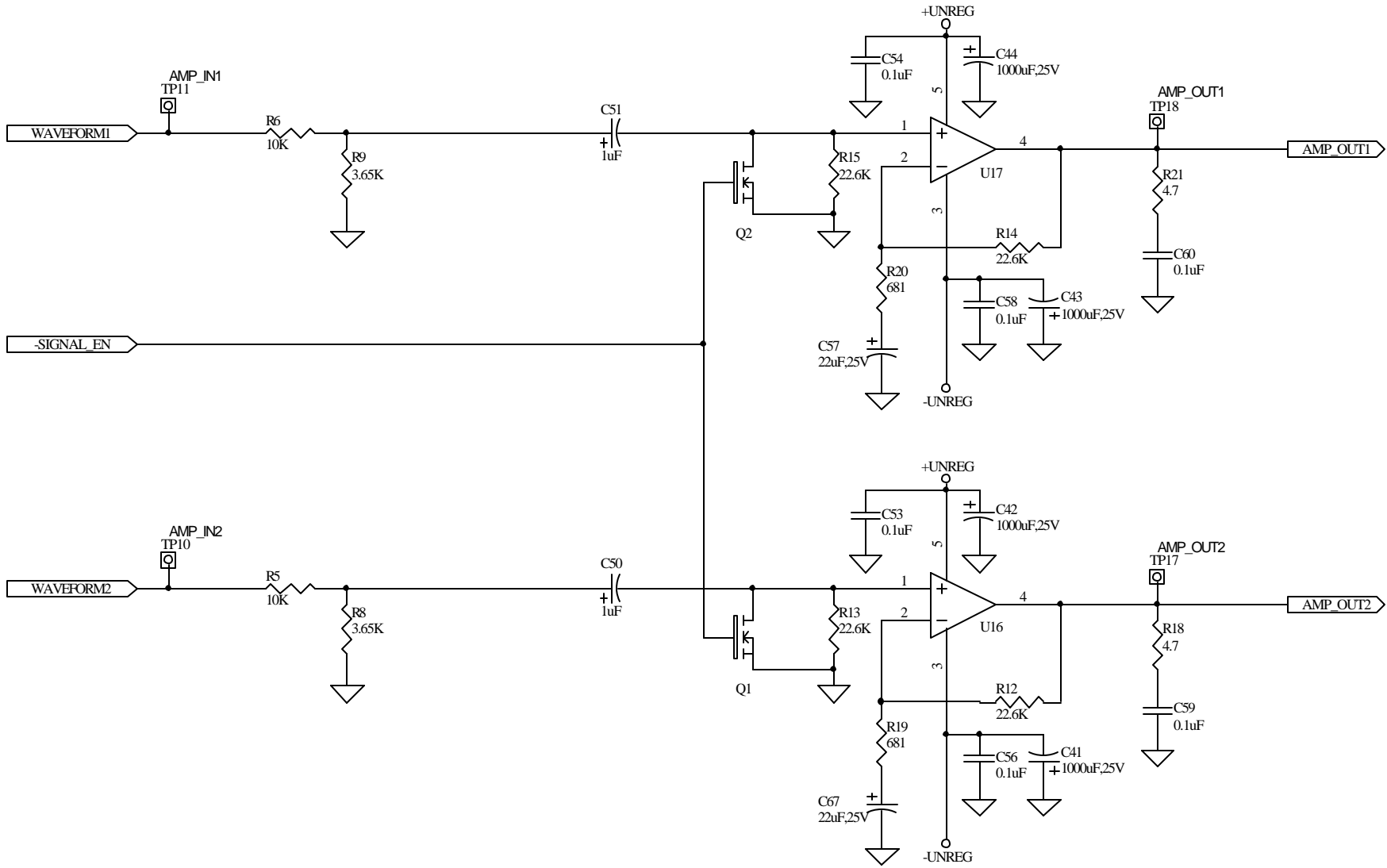
Title			
DACs			
Size: A	Number:	Rev: E	Sheet 10 of 16
Date: 11-Jan-2002	Drawn by: B.Reddy		
File: X:\Rich-Mar\Tm-3c-3p\Rev E - SYN09E\Schem\Minicomb.DDB - Documents\d			

**RICH-MAR
CORP.**



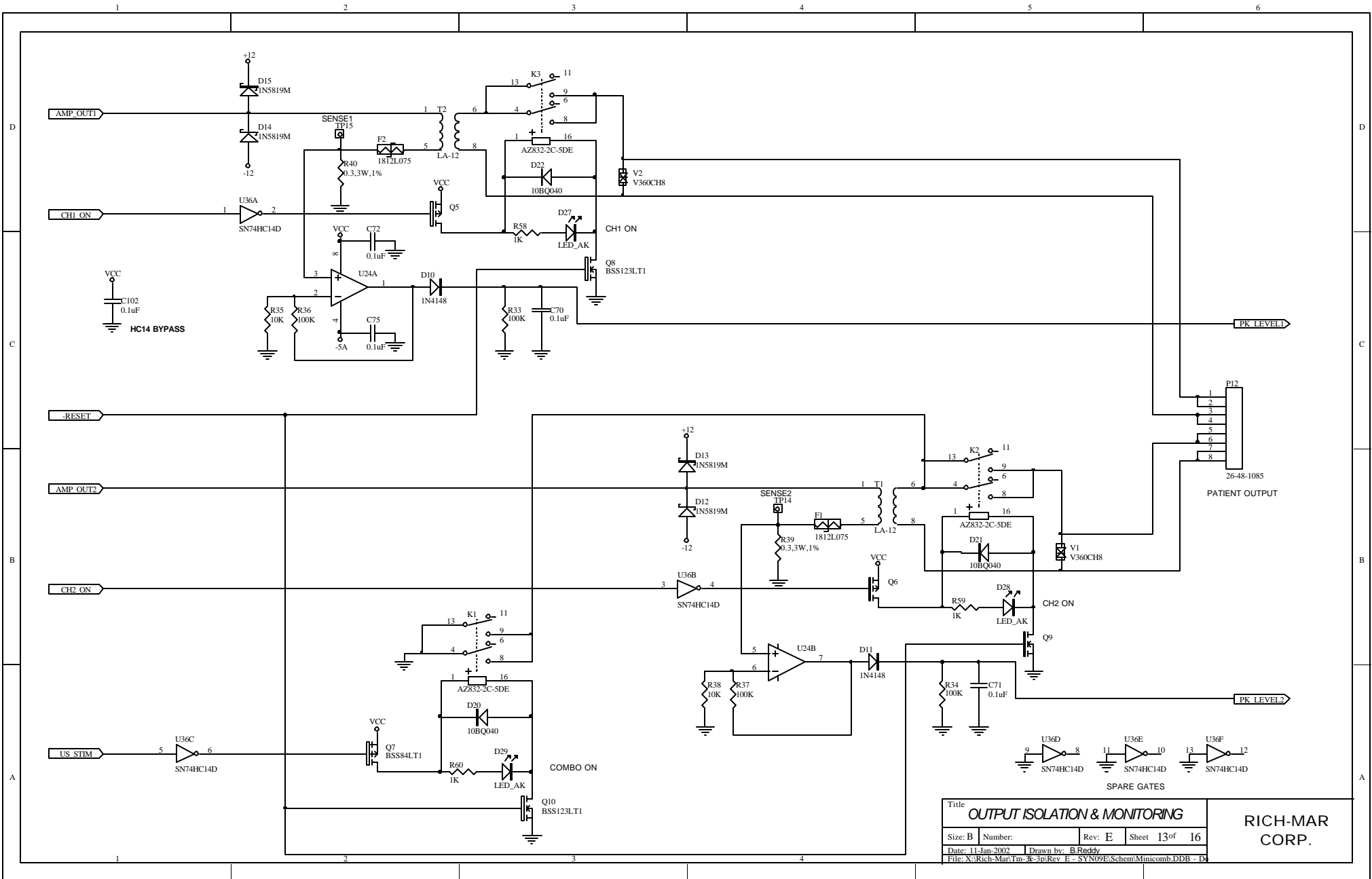
Title			
FILTERS			
Size: A	Number:	Rev: E	Sheet 11 of 16
Date: 11-Jan-2002	Drawn by: B.Reddy		
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**RICH-MAR
CORP.**



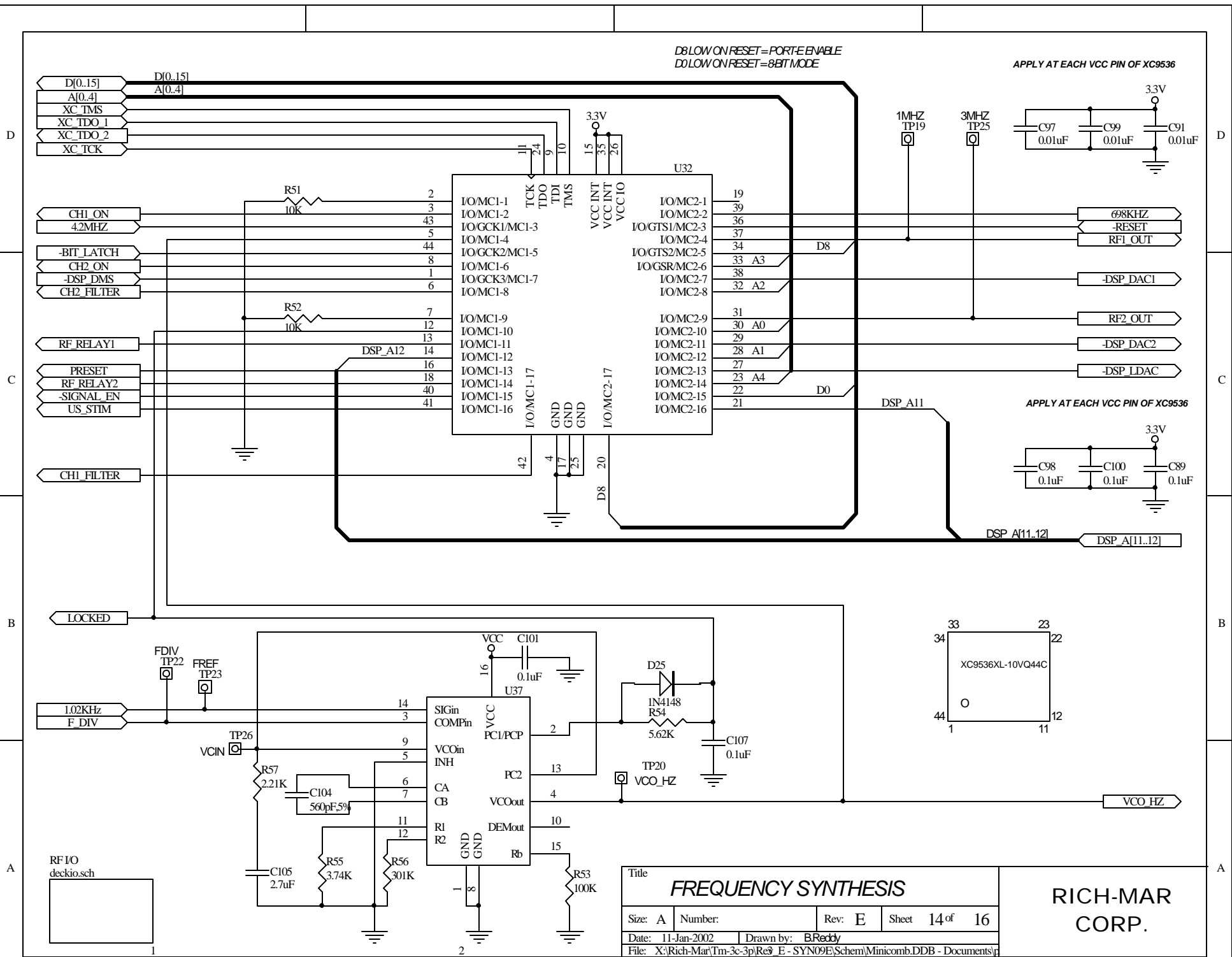
Title			
OUTPUT AMPS			
Size: A	Number:	Rev: E	Sheet 12 of 16
Date: 11-Jan-2002	Drawn by: B.Reddy		
File: X:\Rich-Mar\Tm-3c-3p\Rev_E - SYN09E\Schem\Minicomb.DDB - Documents\			

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CORP.**



Title OUTPUT ISOLATION & MONITORING			
Size: B	Number:	Rev: E	Sheet 13 of 16
Date: 11-Jan-2002		Drawn by: B.Reddy	
File: X:\Rich-Mar\Tm-8-3p\Rev. E - SY N09E\Schem\Minicomb.DDB - D			

**RICH-MAR
CORP.**



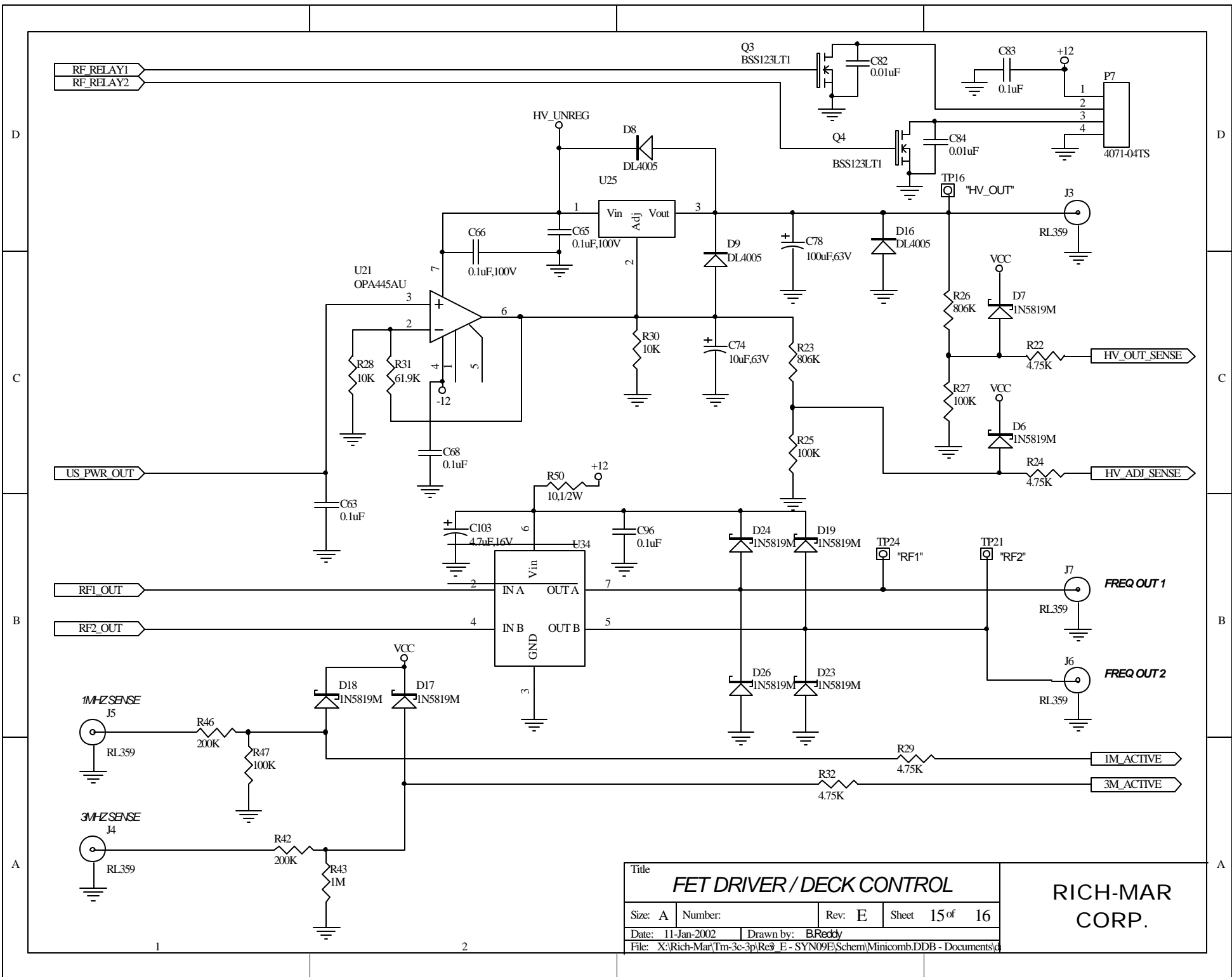
D8 LOW ON RESET = PORTE ENABLE
D0 LOW ON RESET = 8BIT MODE

APPLY AT EACH VCC PIN OF XC9536

APPLY AT EACH VCC PIN OF XC9536

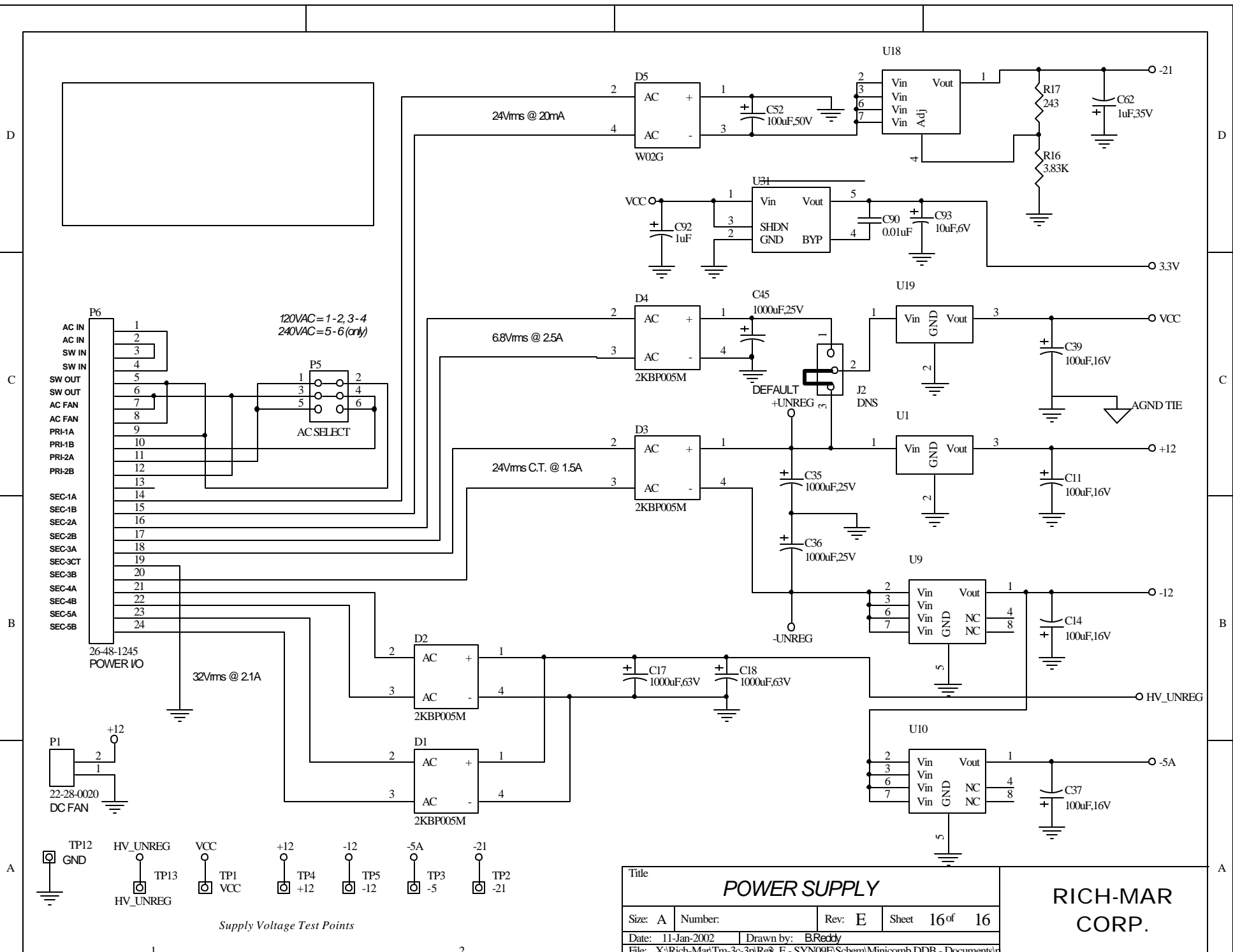
Title			
FREQUENCY SYNTHESIS			
Size: A	Number:	Rev: E	Sheet 14 of 16
Date: 11-Jan-2002	Drawn by: B.Reddy		
File: X:\Rich-Mar\Tm-3c-3p\Re9_E - SYN09E\Schem\Minicomb.DDB - Documents\			

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Title			
FET DRIVER / DECK CONTROL			
Size: A	Number:	Rev: E	Sheet 15 of 16
Date: 11-Jan-2002	Drawn by: B.Reddy		
File: X:\Rich-Mar\Tm-3c-3p\Res_E-SYN09E\Schem\Mimicomb.DDB - Documents\d			

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CORP.**



Title			
POWER SUPPLY			
Size: A	Number:	Rev: E	Sheet 16 of 16
Date: 11-Jan-2002	Drawn by: B.Reddy		
File: X:\Rich-Mar\Tm-3c-3p\Rev_E - SYN09E\Schem\Minicomb.DDB - Documents\			

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CORP.**