

REV	Description	Date	Approved
A	Initial schematic ready for layout.	2003-8-19	Mark Qian

Notes, Unless Otherwise Specified:

1. Resistance Values are in Ohms.
2. Capacitance Values are in Microfarads.
3. Inductance Values are in Microhenries.
4. Highest Reference Designator used:
 - A. IC's U35
 - B. Resistors R109
 - C. Capacitors C149
 - D. Electrolytical Capacitors CT26
 - E. Indectors L7
 - F. Transistors Q1
 - G. DIODE&LED D7
 - H. Crystals Y1
 - I. Connectors/Headers J15
 - J. Switches SW2
 - K. Test Points TP15
 - L. EMIFILTER E1
 - M. Jump JP7
 - N. Resistor Arrays RN13
5. The following is the list of uninstalled parts:
6. All 0.1uF and 0.01uF caps are decoupling caps unless otherwise noted. They are shown on the page with ICs they should be placed near.
7. Board Properties:
 - A. Route to within 10% MANHATTAN Distance
 - B. 50 +/-5 Ohm Matched Impedance
 - C. Outer Layers 0.5 OZ Cu /W 0.5 OZ Au Plating
 - D. Inner Layer 1.0 OZ Cu
 - E. FR4 Board Material
 - F. Minimum Trace Width/Spacing 8 Mils
 - G. Minimum Via Size 12/24 Mils
 - H. Approximate Board Size 16 x 10 cm^2
 - I. Layer Stackup:
 1. Top - Signal Routing
 2. Ground Plane - Split Plane: GND For Digital, AGND For Analog
 3. Inner 3 - Signal Routing
 4. Power Plane :DVDD+3.3V For DSP I/O
 5. Power Plane :CVDD+1.26V For DSP Core
 6. Inner 6 - Signal Routing
 7. Ground Plane - Split Plane: GND For Digital, AGND For Analog
 8. Bottom - Signal Routing

Schematic Index:

1. SEED-DEC6713 Notes and Contens
2. C6713 CLOCK JTAG RESET & DECOUPLING
3. C6713 EMIF & MEMORY
4. C6713 McASP MbASP & HPI
5. C6713 & CODEC INTERFACE
6. C6713 & USB INTERFACE
7. C6713 & UART INTERFACE
8. McASP MbASP & HPI EXTERNAL
9. EMIF EXTERNAL BUS
10. INPUT POWER

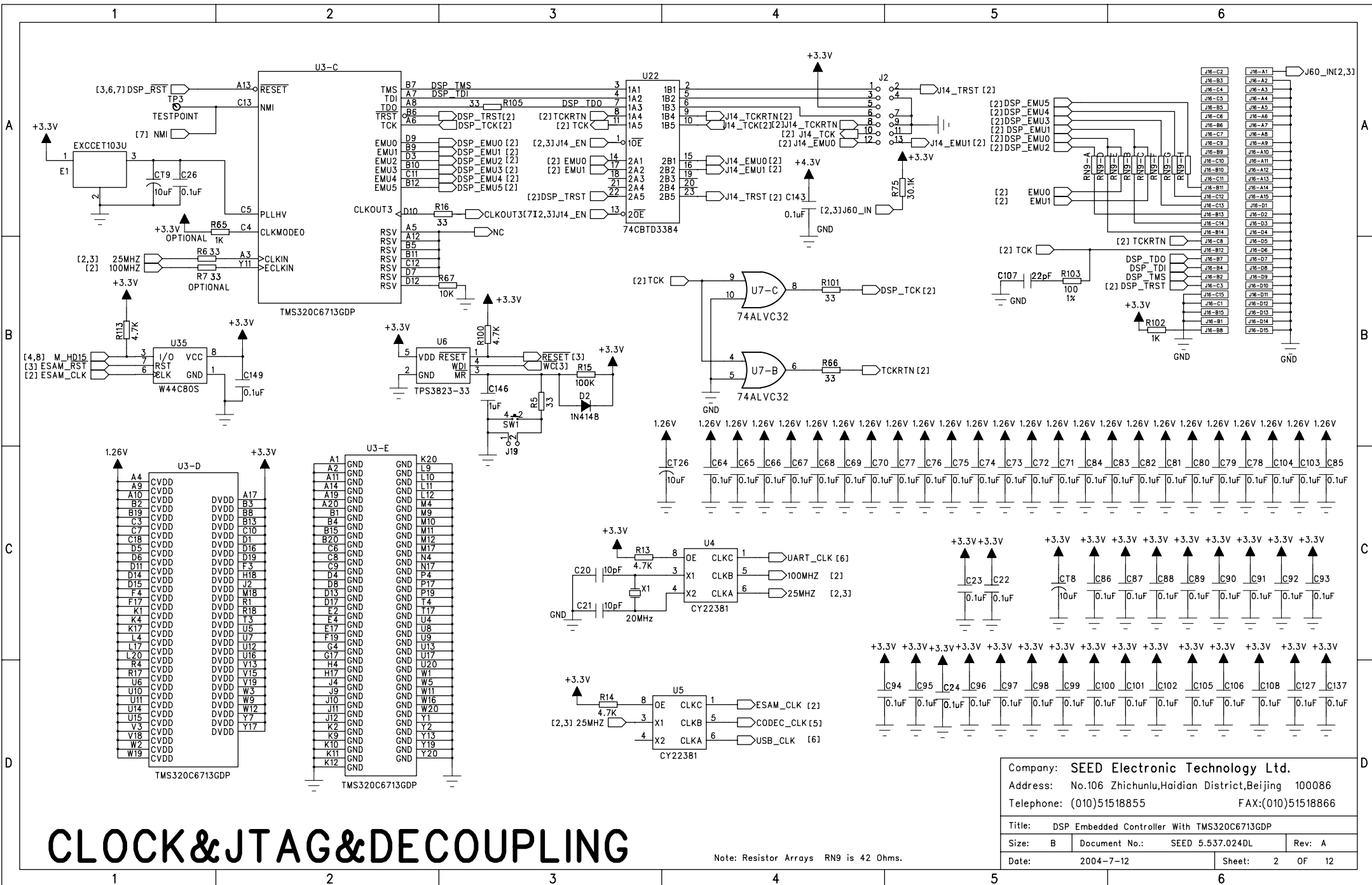
Revision Status of Sheets

REV	1	2	3	4	5	6	7
SH							
REV							
SH							
REV							
SH	8	9	10	11	12	13	14
REV							
SH	1	2	3	4	5	6	7

DWN:	Hongshuai Li	Date:	2004-7-12
CHK:		Date:	
ENGR:		Date:	
MGR:		Date:	
QA:		Date:	
MFG:		Date:	
RLSE:		Date:	

Application

Company: SEED Electronic Technology Ltd.			
Address: No.106 Zhichunlu,Haidian District,Beijing 100086			
Telephone: (010)51518855		FAX:(010)51518866	
Title: DSP Embedded Controller With TMS320C6713GDP			
Size: B	Document No.:	SEED 5.537.024DL	Rev: A
Date:	2004-7-12	Sheet:	1 OF 12



CLOCK & JTAG & DECOUPLING

Note: Resistor Arrays RN9 is 42 Ohms.

A

B

A

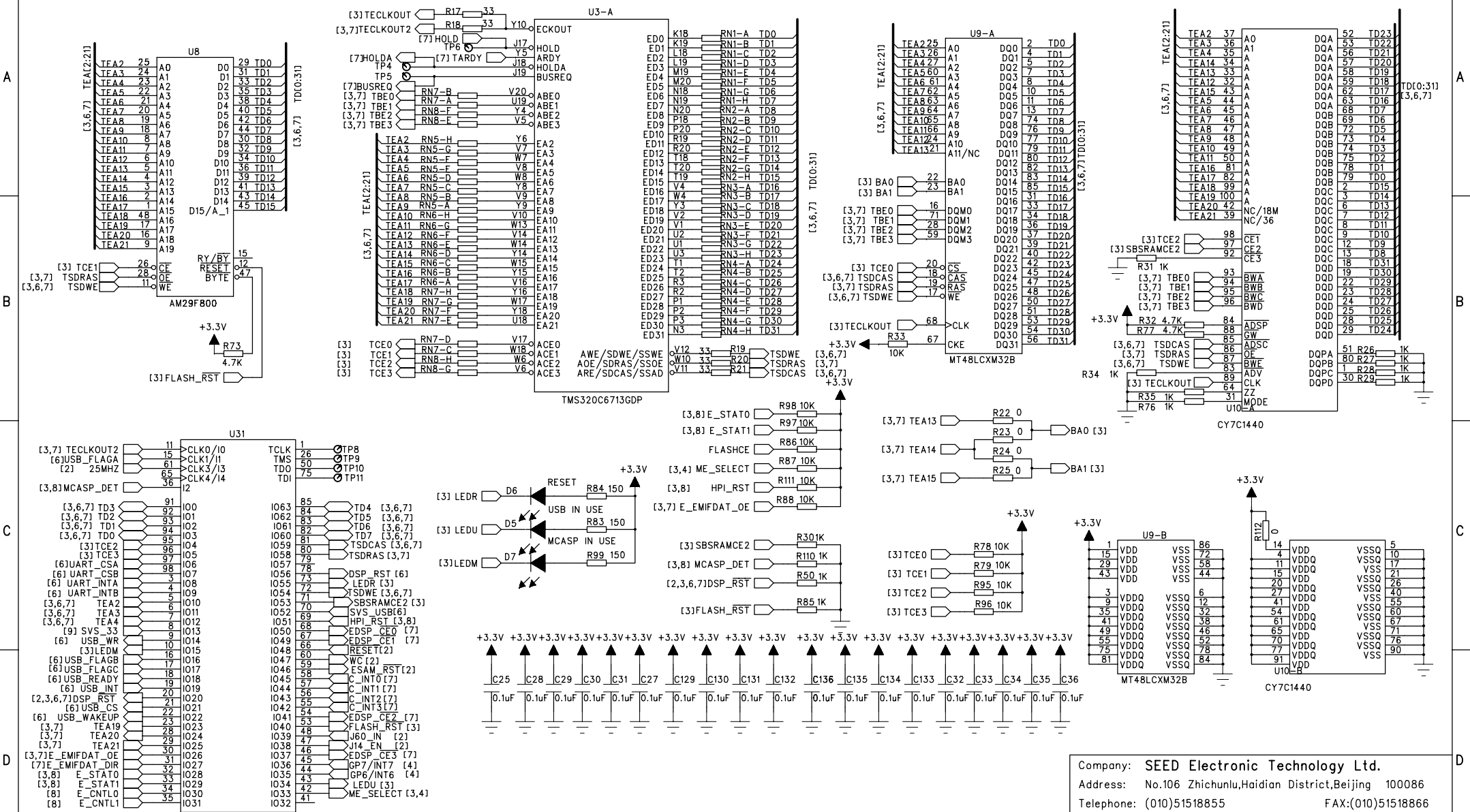
B

C

D

C

D

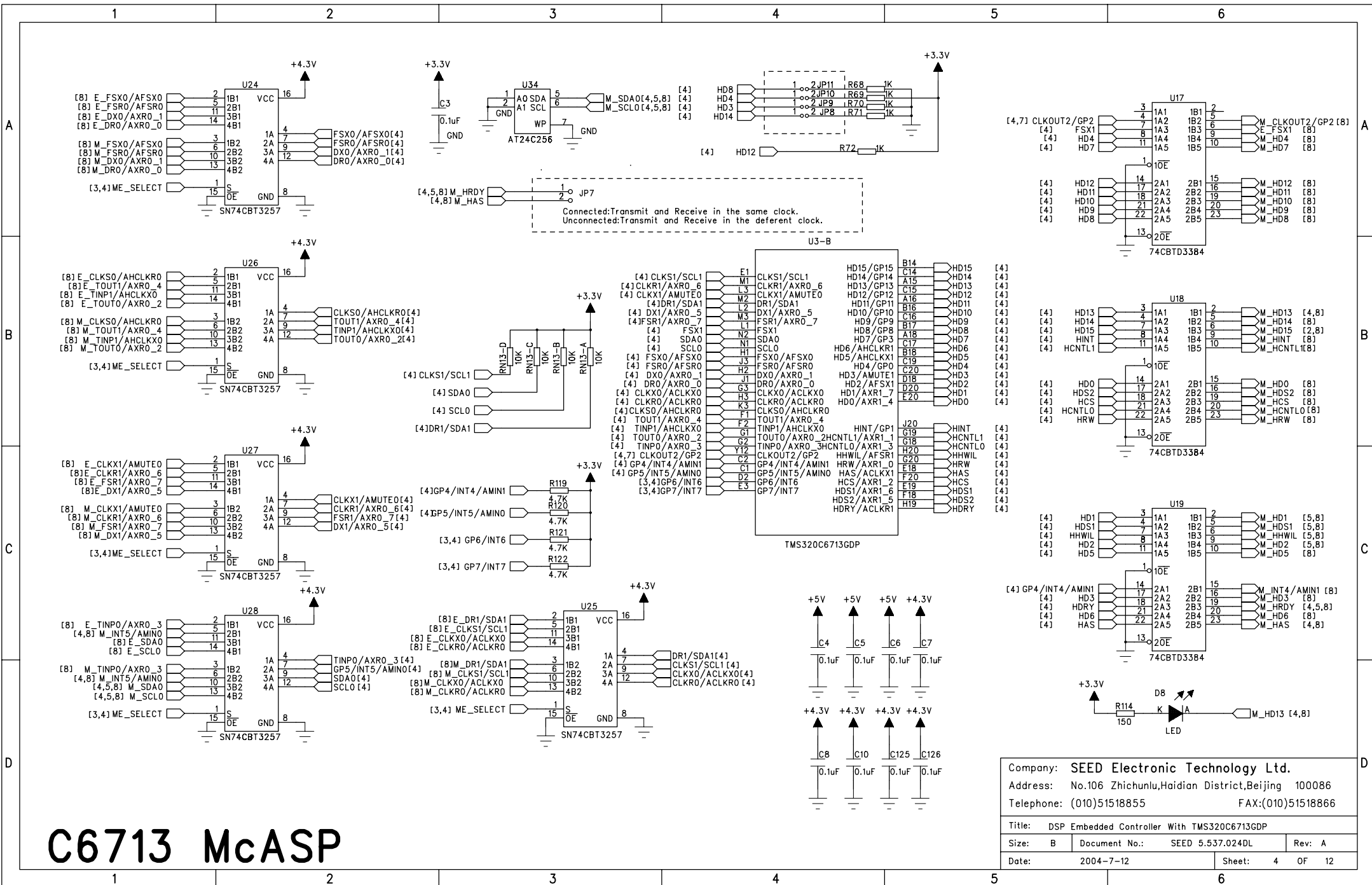


Company: SEED Electronic Technology Ltd.
 Address: No.106 Zhichunlu, Haidian District, Beijing 100086
 Telephone: (010)51518855 FAX: (010)51518866

Title: DSP Embedded Controller With TMS320C6713GDP
 Size: B Document No.: SEED 5.537.024DL Rev: A
 Date: 2004-7-12 Sheet: 3 OF 12

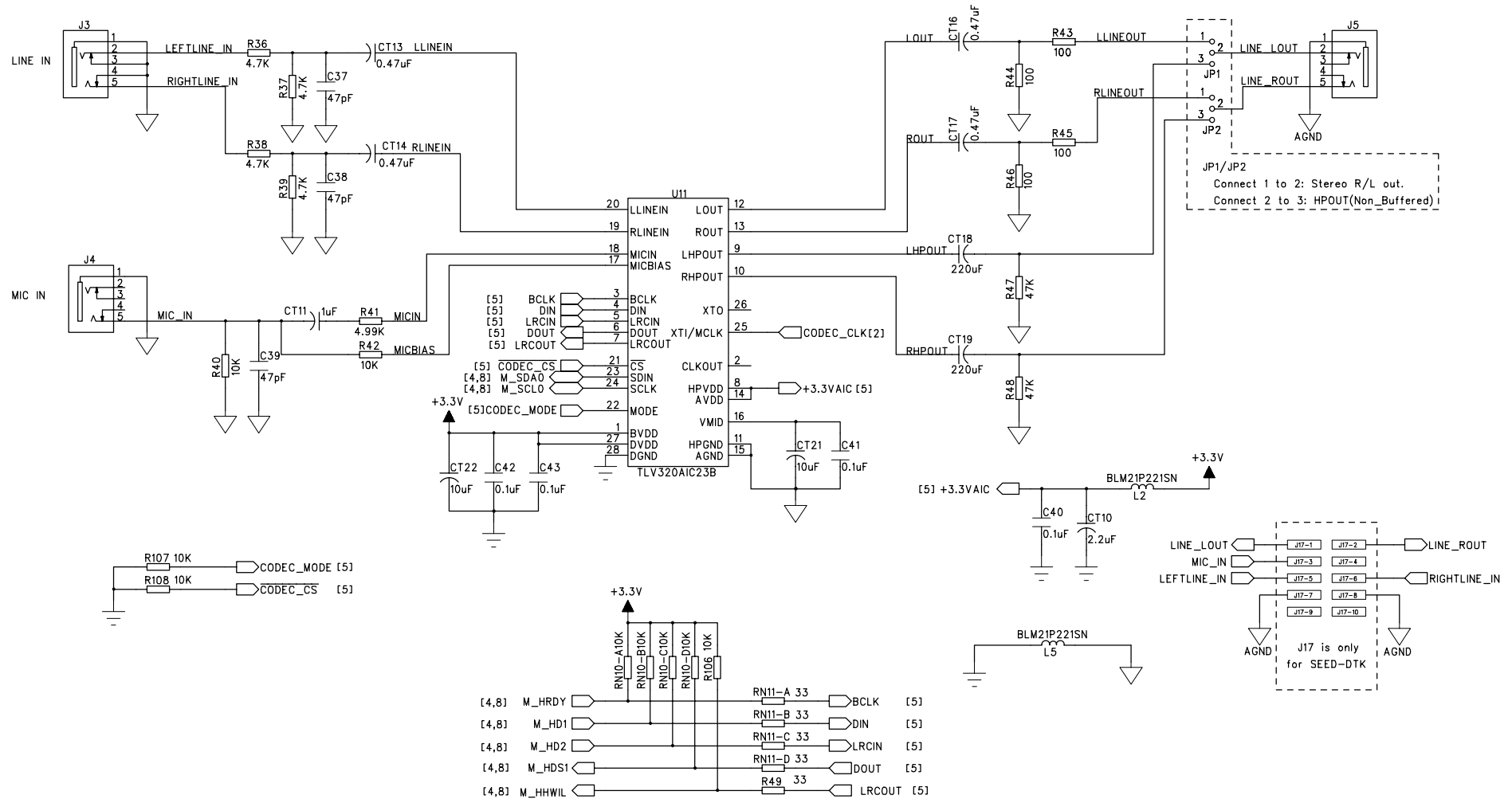
C6713 EMIF & CPLD

Note: Resistor Arrays from RN1 to RN8 are 33 Ohms.
 R112 Not populate when SBSRAM is CY7CXX.



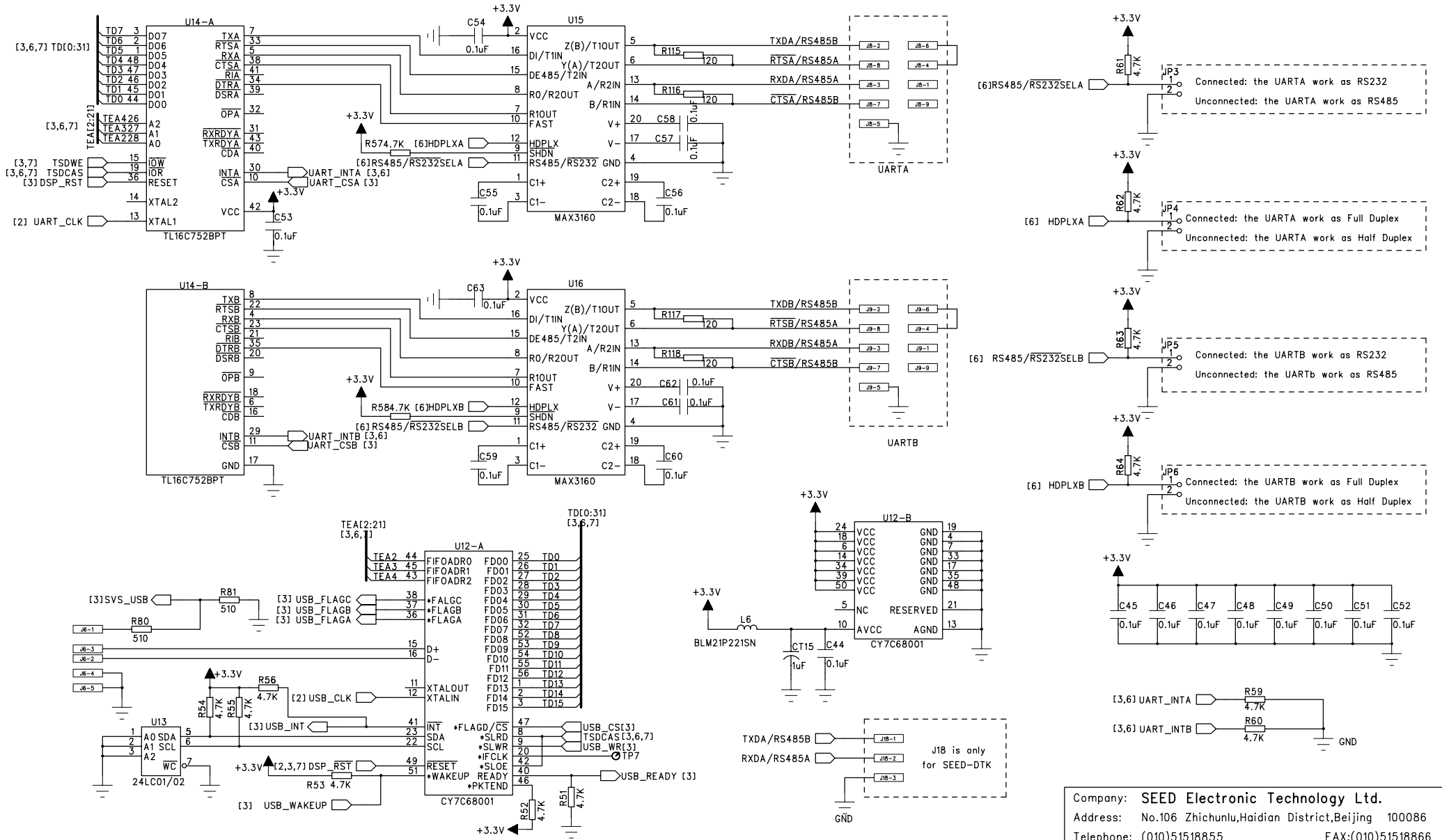
C6713 McASP

Company: SEED Electronic Technology Ltd.			
Address: No.106 Zhichunlu, Haidian District, Beijing 100086			
Telephone: (010)51518855		FAX: (010)51518866	
Title: DSP Embedded Controller With TMS320C6713GDP			
Size: B	Document No.: SEED.5.537.024DL	Rev: A	
Date: 2004-7-12	Sheet: 4		OF 12



Company: SEED Electronic Technology Ltd.		
Address: No.106 Zhichunlu, Haidian District, Beijing 100086		
Telephone: (010)51518855		FAX: (010)51518866
Title: DSP Embedded Controller With TMS320C6713GDP		
Size: B	Document No.: SEED 5.537.024DL	Rev: A
Date: 2004-7-12	Sheet: 5 OF 12	

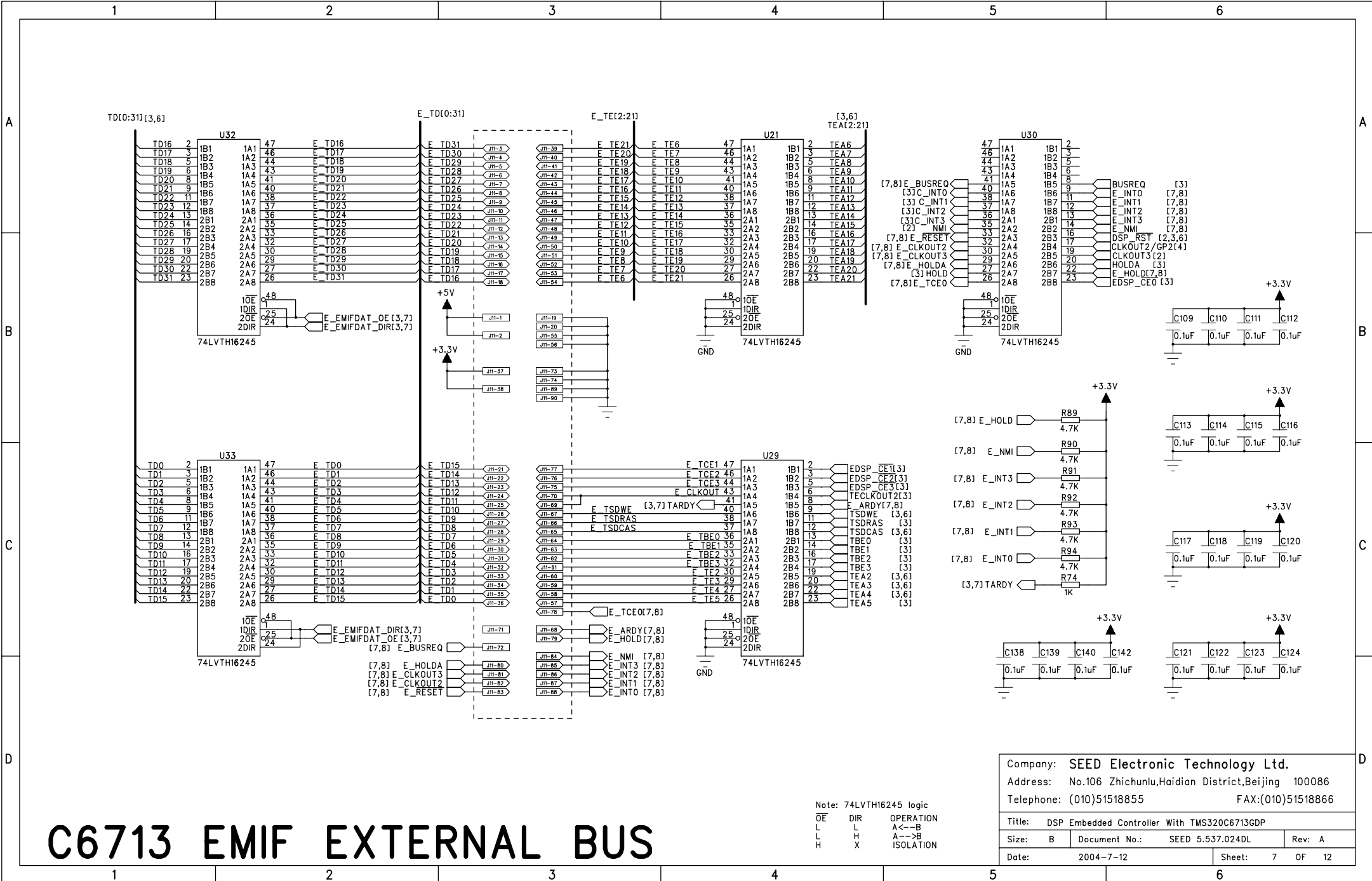
C6713 & AUDIO CODEC INTERFACE



C6713 & UART USB INTERFACE

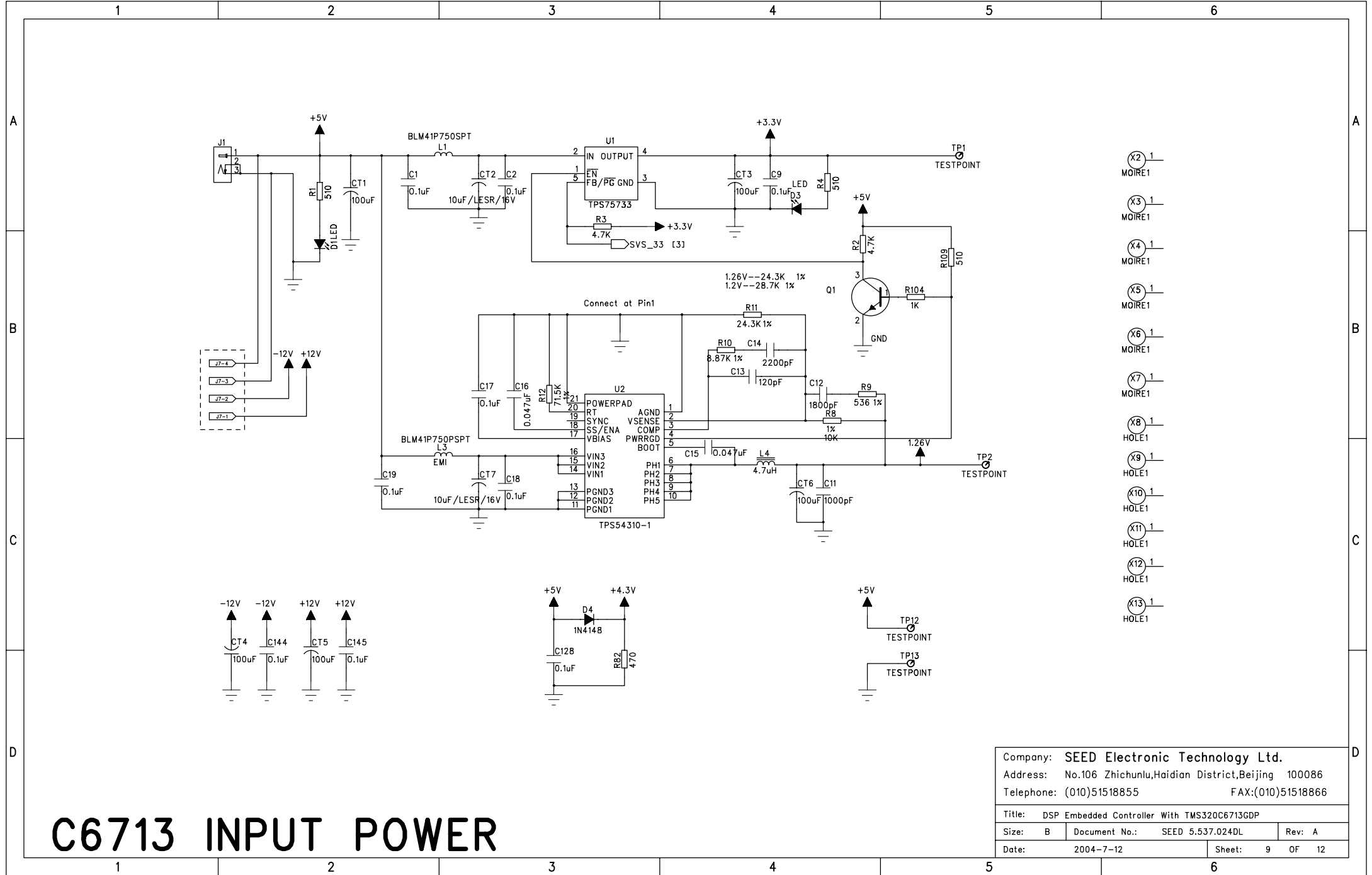
Company: SEED Electronic Technology Ltd.		
Address: No.106 Zhichunlu, Haidian District, Beijing 100086		
Telephone: (010)51518855		FAX: (010)51518866
Title: DSP Embedded Controller With TMS320C6713GDP		
Size: B	Document No.: SEED 5.537.024DL	Rev: A
Date: 2004-7-12	Sheet: 6 OF 12	

C6713 EMIF EXTERNAL BUS



Note: 74LVTH16245 logic
 OE DIR OPERATION
 L L A<-B
 L H A->B
 H X ISOLATION

Company: SEED Electronic Technology Ltd.			
Address: No.106 Zhichunlu, Haidian District, Beijing 100086			
Telephone: (010)51518855		FAX: (010)51518866	
Title: DSP Embedded Controller With TMS320C6713GDP			
Size: B	Document No.: SEED 5.537.024DL	Rev: A	
Date: 2004-7-12	Sheet: 7		OF 12



- X2 1 MOIRE1
- X3 1 MOIRE1
- X4 1 MOIRE1
- X5 1 MOIRE1
- X6 1 MOIRE1
- X7 1 MOIRE1
- X8 1 HOLE1
- X9 1 HOLE1
- X10 1 HOLE1
- X11 1 HOLE1
- X12 1 HOLE1
- X13 1 HOLE1

C6713 INPUT POWER

Company: SEED Electronic Technology Ltd.		
Address: No.106 Zhichunlu, Haidian District, Beijing 100086		
Telephone: (010)51518855		FAX: (010)51518866
Title: DSP Embedded Controller With TMS320C6713GDP		
Size: B	Document No.: SEED 5.537.024DL	Rev: A
Date: 2004-7-12	Sheet: 9 OF 12	