



Contents	
5	OPTIONAL ELEVATOR CONN

Revisions			
Rev	Description	Date	Approved
A	Prototype Release	07-Sep-10	Jun Qiao
B	Pilot Release	07-Dec-10	Jun Qiao

# TWR-ADCDAC-LTC

		<b>Microcontroller Solutions Group</b>	
		6501 William Cannon Drive West Austin, TX 78735-8598	
This document contains information proprietary to Freescale Semiconductor and shall not be used for engineering design, procurement or manufacture in whole or in part without the express written permission of Freescale Semiconductor.			
Designer:		Drawing Title: <b>TWR-ADCDAC-LTC</b>	
Drawn by: Rick		Page Title: <b>TITLE PAGE</b>	
Approved: Jun Qiao		Size: C	Document Number: SCH-26656 PDF: SPF-26656
Date: Tuesday, December 07, 2010		Sheet: 1	Rev: B
		of 5	



- X2 Page03 add power input connector J33  
J25 used 211-78844 replaced  
Page03 add ADC&DAC connectors J34 J35 J36 J37  
Page05 J26 used 211-78844 replaced  
Rename drwaing title XTWR-ADCDAC-LTC  
update J18 J20 J27 J19 SCH symbol  
Change C23 to 1uF  
Change JUMPERS to TH package
- X3 Page 03 Removed +/-5 regulator circuit and add +/- 15V switching regulator circuit  
Page 04 Removed U9  
Add 4 capacitors for U4 output ports  
Add optional 5V REF circuit using LTC6655
- X4 Page 04 Add ferrite beads for U4 U5 U6 U7 Power input port  
Remove JUMPER J31 J39 RES R22  
Change D4 6.8V to 5.1V  
Change U4 SPI\_CS\_DEC5 to SPI\_CS\_DEC4  
Change U5 SPI\_CS\_DEC4 to SPI\_CS\_DEC5

A

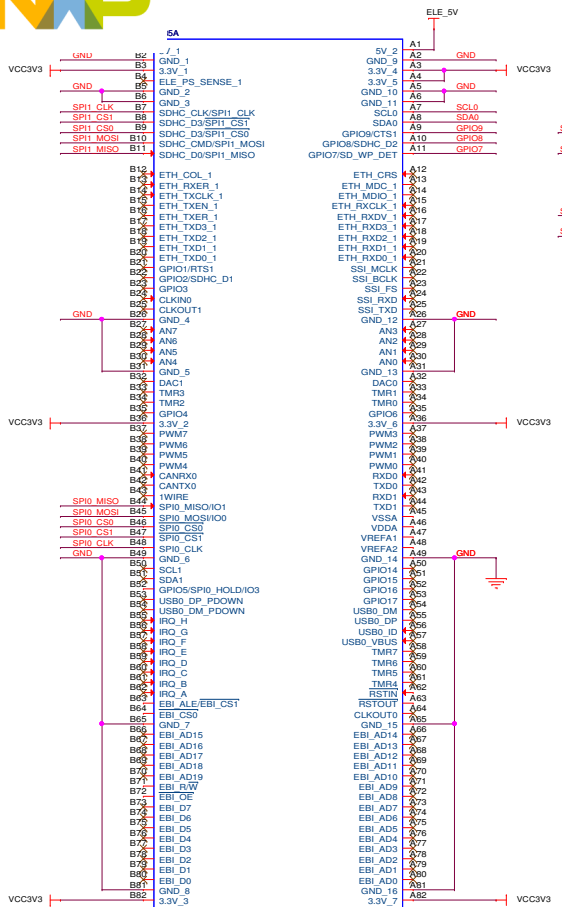
Part Ref.	LTC P/N	Replacement P/N
C1, C2, C3, C11, C12, C13 C14, C17, C23, C26, C33	C1608X7R1E104K	GRM188R71H104KA93D
C4, C26	GRM21BR71A106KE51L	12063D106KAT2A
C5, C41	04023A101KAT	C0402C101J5GAC
C6, C10	GRM31CR61E106KA12L	12063D106KAT2A
C7	06033D334KAT	C1608X5R1E334K
C9	16CE100LX	VE-101M1CTR-0605
C16, C18, C29	TMK212BJ475MG-T	0805X475K250SNT
C20, C24, C25, C30, C31, C37, C38, C40, C47, C48, C49, C50, C51, C52, C53, C54, C55,	06033C102KAT2A	C0603X7R500-102KNE
C21	C2012X7R1E105K	GRM21BR71E105KA99L
C22	06033C103KAT2A	CC0603KRX7R8BB103
C35, C36, C44, C46	TMK107BJ105KA-T	GRM21BR71E105KA99L
C39	C1005X5R1E104K	GRM188R71H104KA93D
C42	C1608X5R1E105K	GRM21BR71E105KA99L
D1	LN1351C-(TR)	BL-HGE36D-TRB
J33	440247-2	MUSB-05-F-B-SM-A
U9	MC74HCL138TTR	MC74HCL138ADTR2G
D2	MMSZ5V1ET1G	MMSZ4689-TP
D2	2308-2-00-80 -00-00-07-0	5020

PAGE 03 Add C15(150PF) Parallel With R1

- Change U10.1 to R5.2
- Change U10.2 to U10.3

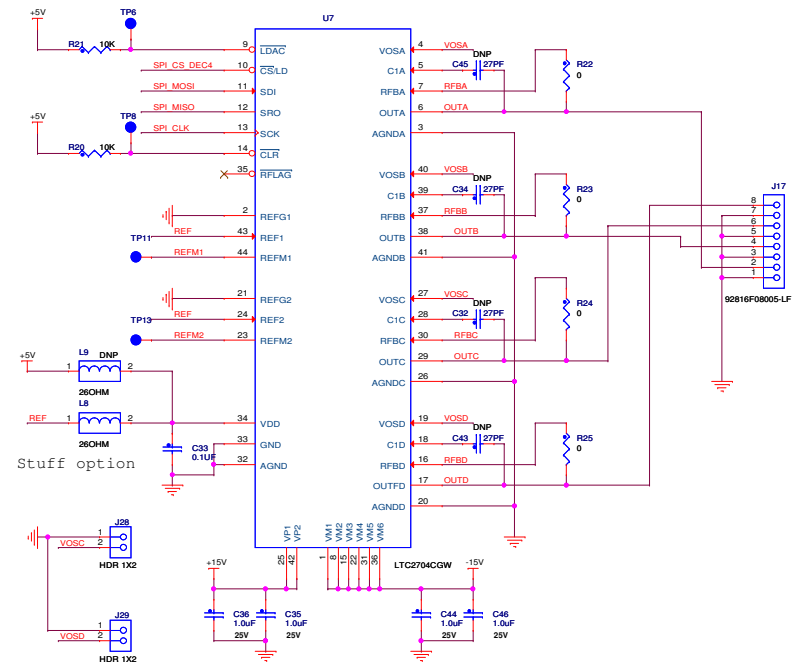
B Change Replace J17, J8, J26, J27 with anytronic parts

ICAP Classification: FCP: FLUQ: X PUB:			
Drawing Title: <b>XTWR-ADCDAC-LTC</b>			
Page Title: <b>NOTES</b>			
Size C	Document Number	SCH-26856 PDF: SPF-26856	Rev B
Date: Tuesday, November 30, 2010   Sheet 2 of 5			

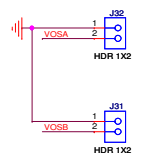




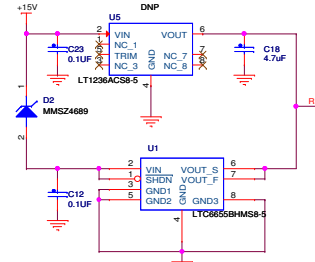
- DEC2
- Pg3| SPI\_CS\_DEC5
- Pg3| SPI\_CS\_DEC6
- Pg3| SPI\_CS\_DEC7
- Pg3| SPI\_CLK
- Pg3| SPI\_MOSI
- Pg3| SPI\_MISO



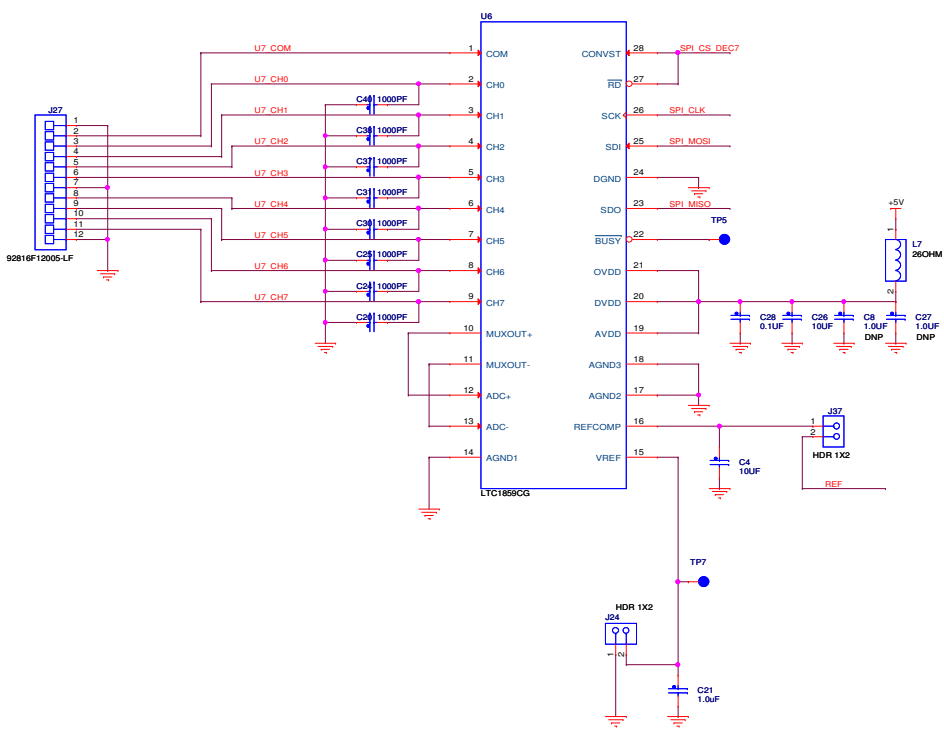
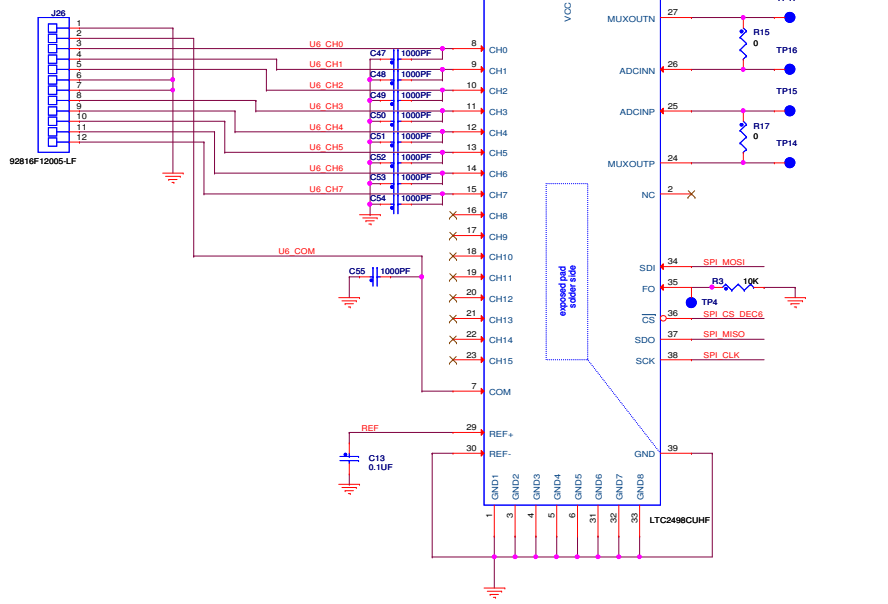
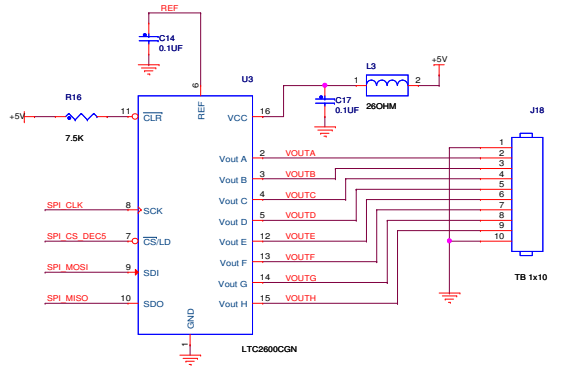
Stuff option



J28, J29, J31, J32: Default Mount



U5 U1 only one will be installed



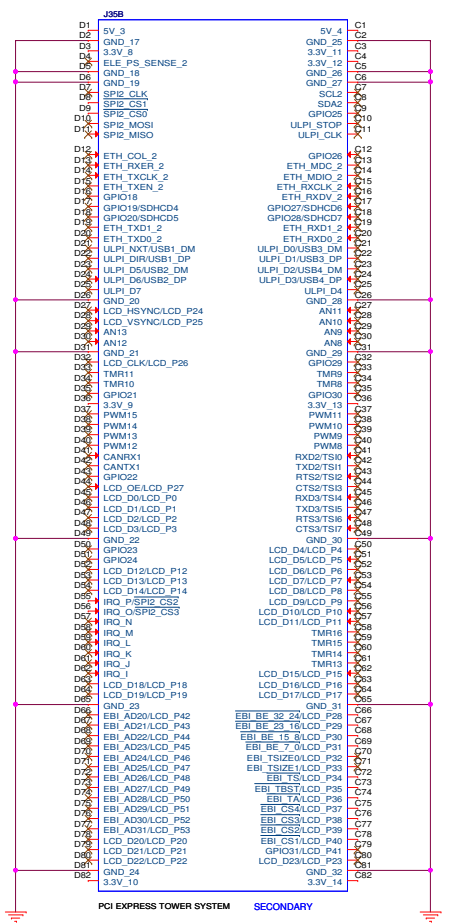
**freescale™**  
semiconductor

ICAP Classification: FCP: FLUQ: X PUBI:

Drawing Title: **XTWR-ADCDAC-LTC**

Page Title: **ADC & DAC**

Size C	Document Number	SCH-26856 PDF: SPF-26856	Rev B
Date:	Tuesday, December 07, 2010	Sheet 4 of 5	



PCI EXPRESS TOWER SYSTEM      SECONDARY

SECONDARY CONNECTOR

ICAP Classification: FCP:      FIUQ: X      PUBI:      **XTWR-ADC DAC-LTC**

Drawing Title:      **OPTIONAL ELEVATOR CONN**

Page Title:      **OPTIONAL ELEVATOR CONN**

Size C	Document Number SCH-26656 PDF: SPF-26656	Rev B
Date: Tuesday, November 30, 2010	Sheet 8 of 5	