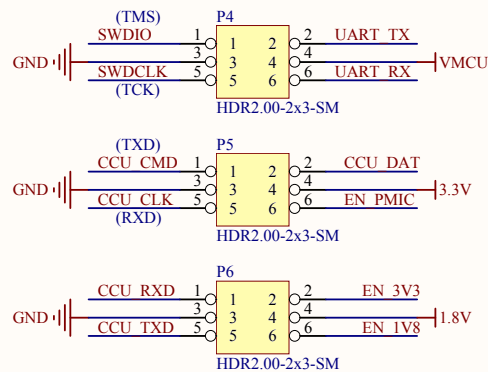
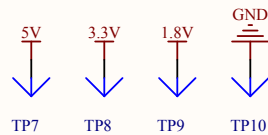
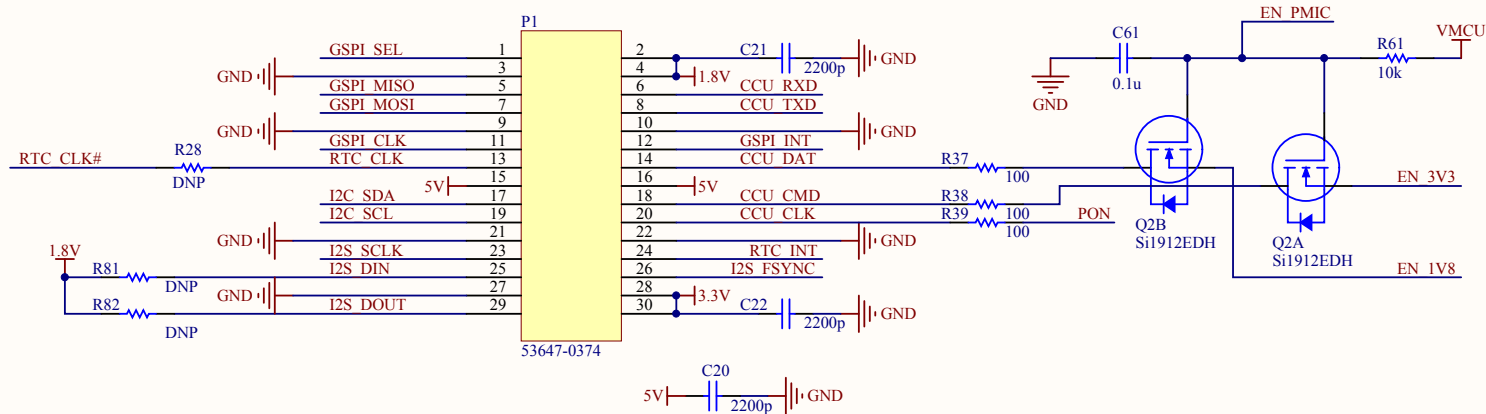


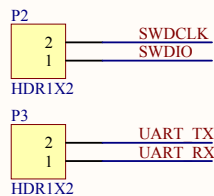
Mounting holes



To the middle board

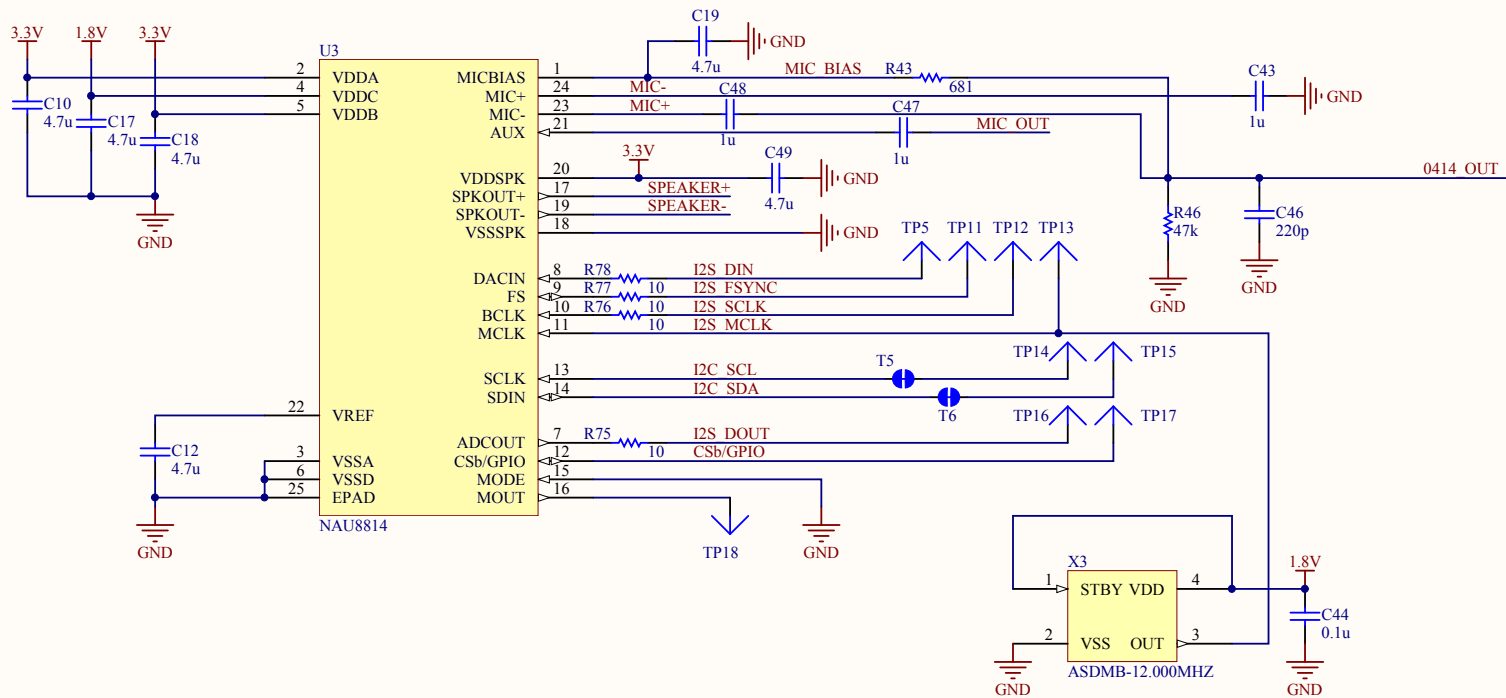


programming / debugging connectors

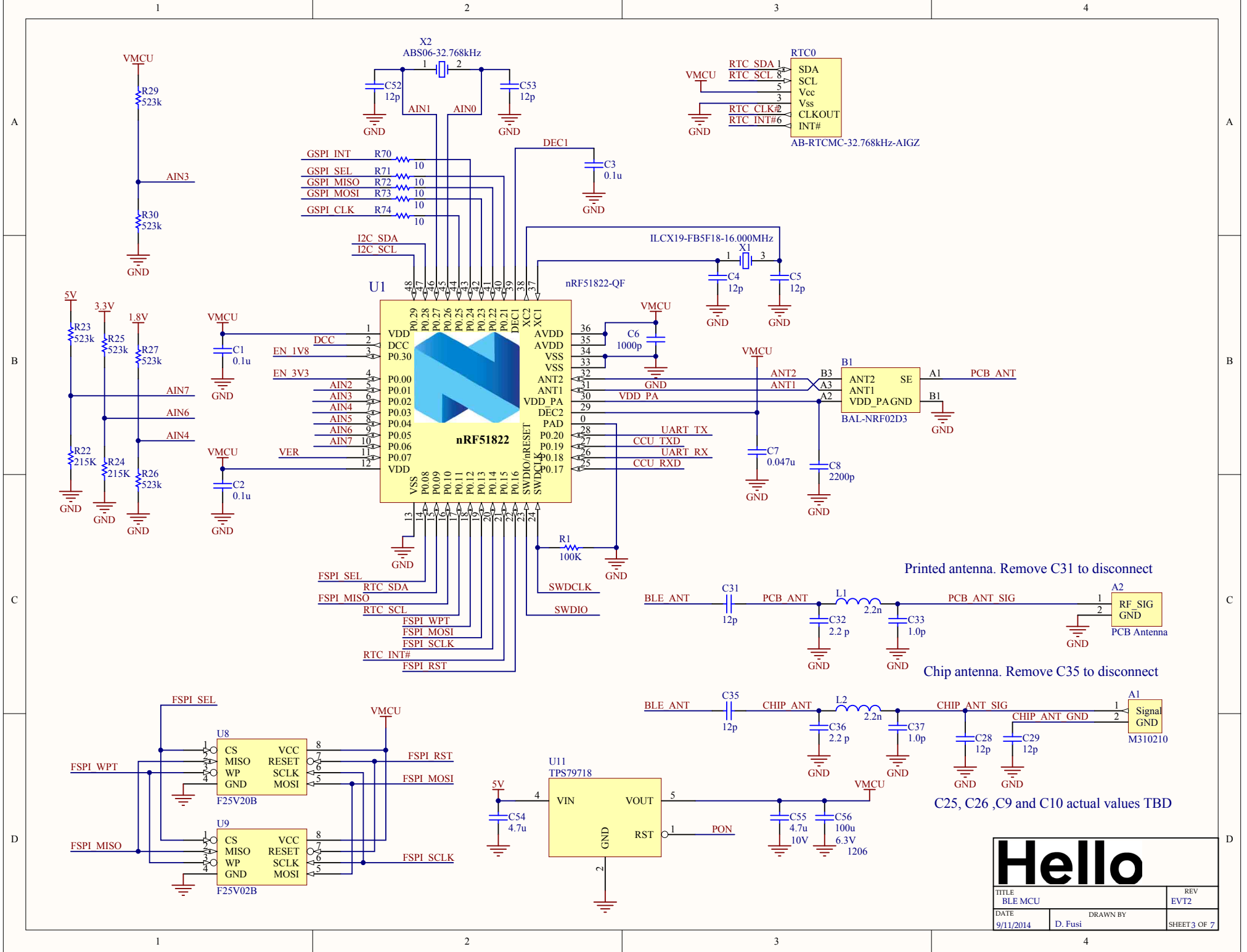


Hello

TITLE Morpheus top		REV EVT2
DATE 9/11/2014	DRAWN BY D. Fusi	SHEET 1 OF 7



Hello		
TITLE	Codec	REV
DATE	9/10/2014	EVT2
DRAWN BY	D. Fusi	SHEET 2 OF 7



Hello

TITLE		REV
BLE MCU		EVT2
DATE	DRAWN BY	SHEET 3 OF 7
9/11/2014	D. Fusi	

A

B

C

D

A

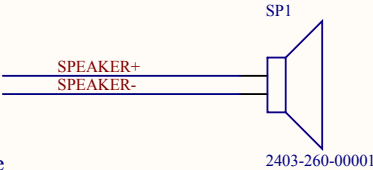
B

C

D

max output current @ 5V = 15mA

max speaker power = 500mW
max sp7.9 mA @ 8 ohm impedance



Hello		
TITLE Speaker		REV 1
DATE 9/6/2014	DRAWN BY D. Fusi	SHEET 4 OF 6

A

B

C

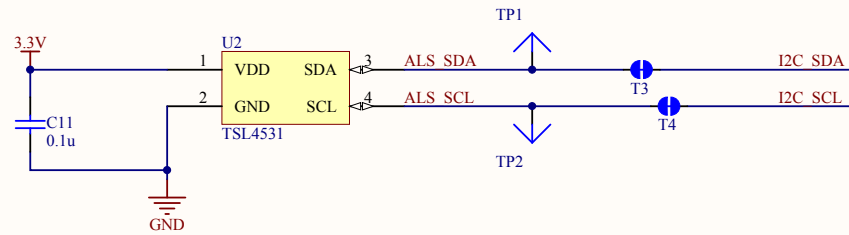
D

A

B

C

D



Hello		
TITLE ALS		REV EVT2
DATE 9/6/2014	DRAWN BY D. Fusi	SHEET 5 OF 7



TITLE Proximity		REV EVT2
DATE 9/6/2014	DRAWN BY D. Fusi	SHEET 6 OF 7

A

B

C

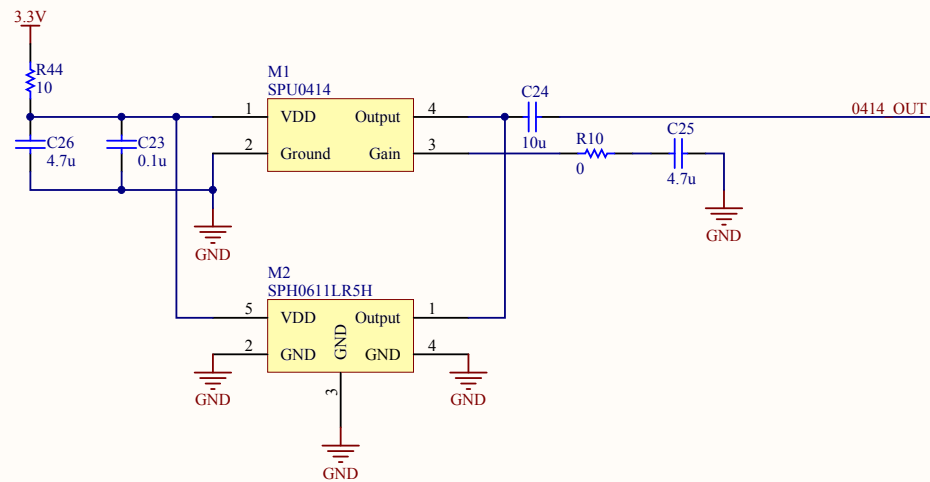
D

A

B

C

D



Hello		
TITLE Microphone		REV EVT2
DATE 9/8/2014	DRAWN BY D. Fusi	SHEET 7 OF 7

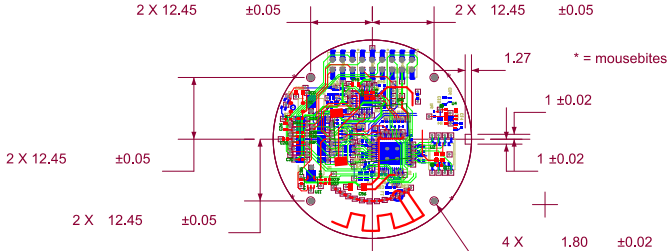
Fabrication / Assembly Notes

1. Material: Rigid
2. Number of electrical layers: 4
3. Trace / Space minimum: 0.1 mm (all layers)
4. Thickness: 0.76 mm (finished)
5. Finish: ENIG plating on exposed copper
6. Soldermask: per IPC-SM-840, color green registration within +/- 50um of circuit layer
7. Silkscreen: do print silkscreen on top and bottom layers
8. RoHS: parts shall be RoHS compliant as per European Union directive 2002/95/EC
9. Board must be lead free process compatible and able to withstand minimum of 5 cycles at 250 degrees celsius
10. All Test/QA/QC markings to be made on back side of PCB

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Paste				[Hatched Pattern]
2	Top Overlay				
3	Top Solder	Solder Resist	0.010mm	3.5	
4	Top Layer	Copper	0.036mm		
5	Dielectric 1	FR-4	0.254mm	4.2	
6	GND	Copper	0.017mm		
7	Dielectric 2		0.127mm	4.2	
8	PWR	Copper	0.017mm		
9	Dielectric 3	FR-4	0.254mm	4.2	
10	Bottom Layer	Copper	0.036mm		
11	Bottom Solder	Solder Resist	0.010mm	3.5	
12	Bottom Overlay				
13	Bottom Paste				

Symbol	Hit Count	Finished Hole Size	Plated	Hole Type
x	1	0.700mm (27.56mil)	NPTH	Round
o	1	0.900mm (35.43mil)	NPTH	Round
□	4	0.900mm (35.43mil)	PTH	Round
⊠	16	0.100mm (3.94mil)	PTH	Round
▽	16	1.700mm (66.93mil)	PTH	Round
o	57	0.200mm (7.87mil)	PTH	Round
95 Total				

* = Mousebite locations
for panelization



METRIC		DRAWER	DATE	TITLE:		
DIMENSIONS ARE IN MILLIMETERS		DESIGNER	DATE			
TOLERANCES:		PROPRIETARY AND CONFIDENTIAL				
0 > - < 2 0.05 2 > - < 10 0.08 10 > - < 50 0.10 50 > - < 100 0.15 100 > - < 200 0.20 200 > - 0.20						
ANGLES 1.00		THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF HELLO INC.		SIZE	DWG. NO.	REV
		ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF HELLO INC IS PROHIBITED.		B		
				SCALE: 2:1	WEIGHT:	SHEET 1 OF 1