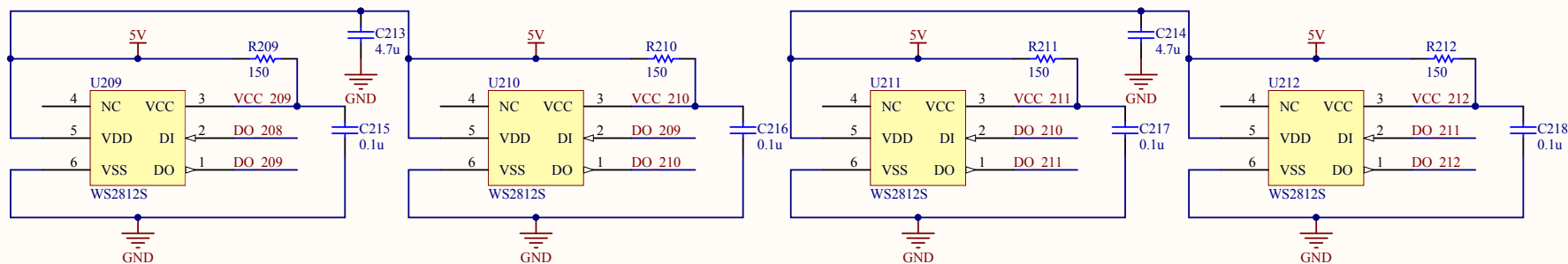
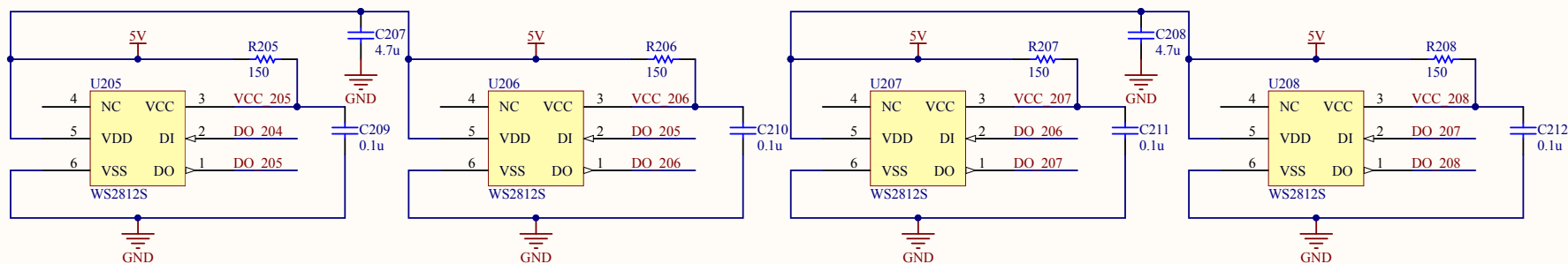
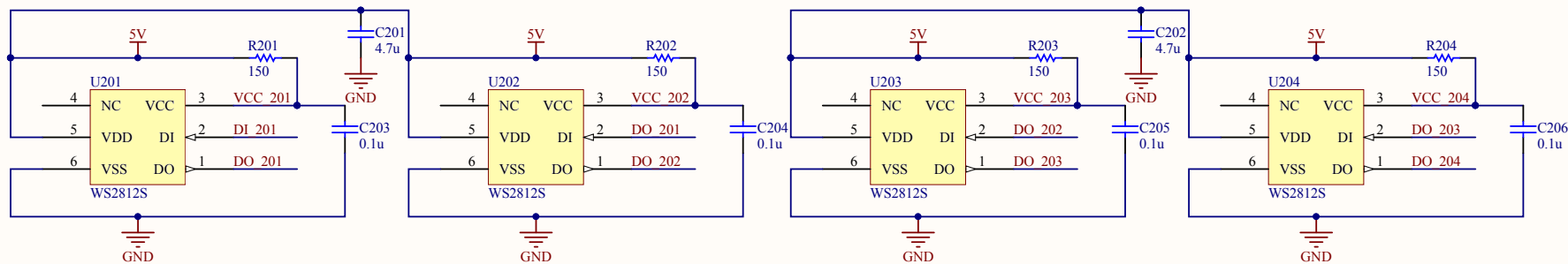


Hello

TITLE Morpheus_LED		REV PVT
DATE 12/30/2014	DRAWN BY Ben Peng	SHEET 1 OF 2

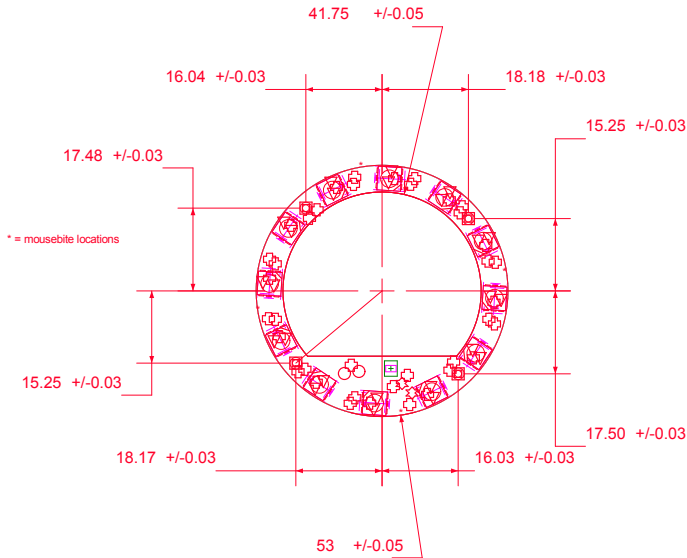


Hello		
TITLE	Morpheus LED	REV
DATE	12/30/2014	PVT
	DRAWN BY	
	Ben Peng	
		SHEET 2 OF 2

- Fabrication / Assembly Notes
1. Material: Rigid FR-4, RoHS compliant: material should meet or exceed requirements of IPC 4101/126. ITEQ IT-180A Pre-approved.
  2. Number of electrical layers: 4
  3. Trace / Space minimum: 5mil (all layers)
  4. Thickness: 0.595 mm +/- 0.1mm (finished)
  5. Finish: ENIG plating on exposed copper
  6. Soldermask: per IPC-SM-840, color "matte black" registration within +/- 76um of circuit layer
  7. Silkscreen: use white printed silkscreen on top and bottom layers
  8. All vias are tented
  9. Board must be lead free process compatible.
  10. mousebites shall be no larger than 0.05 mm
  11. All Test/QA/QC markings to be made on back side of PCB
  12. LED IC Pin #1 is noted as the triangular edge


**13. IMPORTANT! Please follow the LOW temperature reflow process as specified by World-Semi Documentation**

<https://www.dropbox.com/s/wmyal8r8ml1h7r3/WS2812S%28B%29%20Using%20Instructions.pdf?dl=0>  
Contact Ben Peng for more detail- ben@sayhello.com



Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Paste				
2	Top Overlay				
3	Top Solder	Solder Resist	0.010mm	3.5	
4	Component Side	Copper	0.036mm		
5	Dielectric 1	FR-4	0.152mm	4.8	
6	Ground Plane	Copper	0.036mm		
7	Dielectric 2	FR-4	0.127mm	4.8	
8	Power Plane	Copper	0.036mm		
9	Dielectric 3	FR-4	0.152mm	4.8	
10	Solder Side	Copper	0.036mm		
11	Bottom Solder	Solder Resist	0.010mm	3.5	
12	Bottom Overlay				
13	Bottom Paste				

Symbol	Hit Count	Finished Hole Size	Hole Type	Plated
⊙	2	0.200mm (7.87mil)	Round	PTH
○	38	0.300mm (11.81mil)	Round	PTH
▽	24	0.411mm (16.18mil)	Round	PTH
○	2	0.711mm (28.00mil)	Round	PTH
■	4	1.400mm (55.12mil)	Round	NPTH
	70 Total			

METRIC		DRAFTER	DATE	 TITLE: Morpheus LED Board				
DIMENSIONS ARE IN MILLIMETERS		DESIGNER	DATE					
TOLERANCES:		Ben					01/12/15	
0 > - < 2		PROPRIETARY AND CONFIDENTIAL						
2 > - < 10		THE INFORMATION CONTAINED IN						
10 > - < 50		THIS DRAWING IS THE SOLE						
50 > - < 100		PROPERTY OF HELLO INC.						
100 > - < 200		ANY REPRODUCTION IN PART OR						
200 > -		AS A WHOLE WITHOUT THE						
ANGLES		WRITTEN PERMISSION OF HELLO						
1.00		INC IS PROHIBITED.						
SIZE	DWG. NO.	REV		SCALE: 1:1				
B	201-00006-A						WEIGHT:	
SHEET 1 OF 1								

