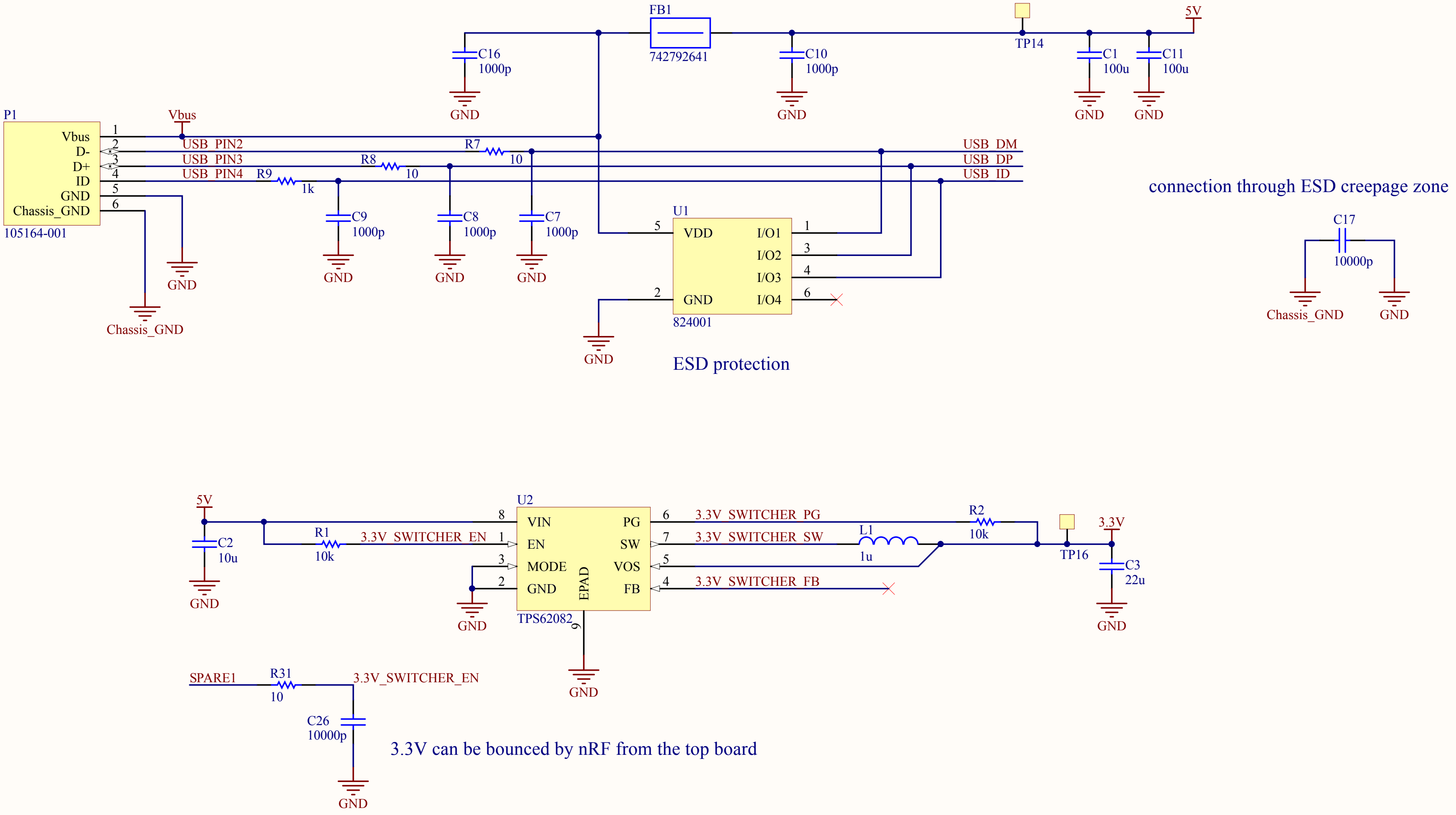


connection through ESD creepage zone

ESD protection

3.3V can be bounced by nRF from the top board

Hello

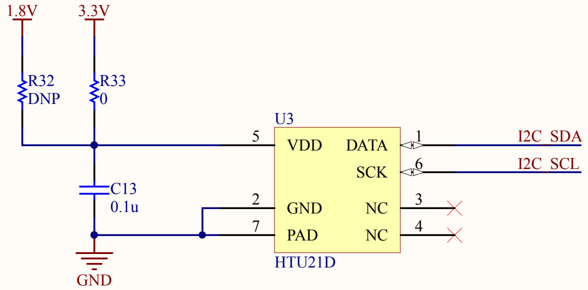
TITLE
Power management

REV
DVT

DATE
10/30/2014

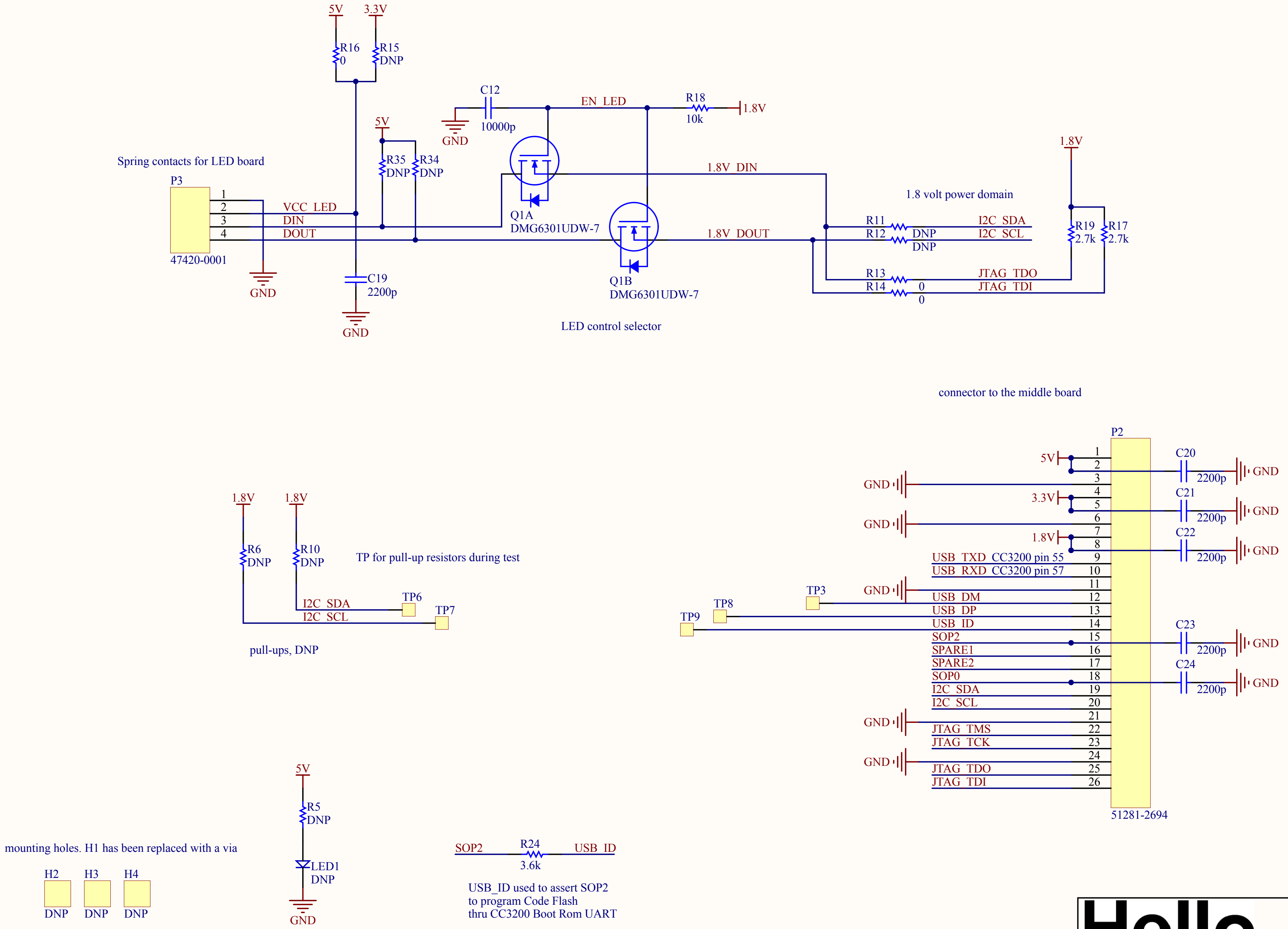
DRAWN BY
D. Fusi

SHEET 1 OF 3



Hello

TITLE Temperature / Humidity	REV DVT
DATE 10/29/2014	DRAWN BY D. Fusi
SHEET 2 OF 3	



Spring contacts for LED board

LED control selector

1.8 volt power domain

connector to the middle board

TP for pull-up resistors during test

pull-ups, DNP

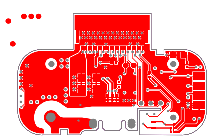
mounting holes. H1 has been replaced with a via

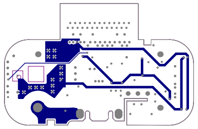
DNP R5 and LED1 in PVT

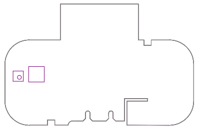
USB_ID used to assert SOP2
to program Code Flash
thru CC3200 Boot Rom UART

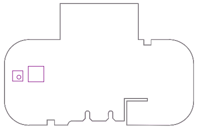
Hello

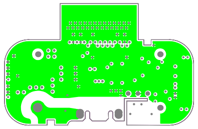
TITLE Morpheus_bottom	REV DVT
DATE 10/30/2014	DRAWN BY D. Fusi
SHEET 3 OF 3	

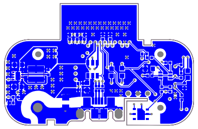


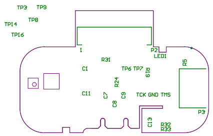


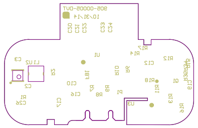


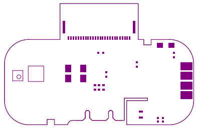


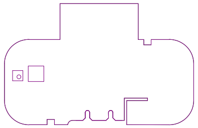


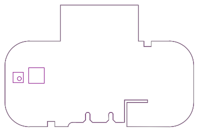


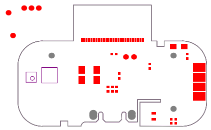

TP3
TP9
TP8
TP14
TP16
1
P2
LED1
R31
C1
TP6 TP7
R19
R5
R24
C11
C7
C9
TCK GND TMS
C8
P3
C13
R32
R33

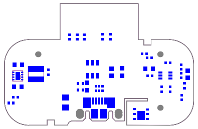

905-00005-DVT
10/31/14
C20
C21
C22
C23
C24
R17
R14
U1
R12
C12
C3
L1
U2
R2
FB1
R10
R6
R18
Q1
C19
R23
R25
R26
C2
C10
R7
R9
P1
R11
C16
R8
R1
C26
C17
U3
R13
R16

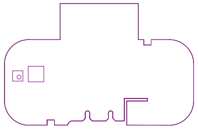










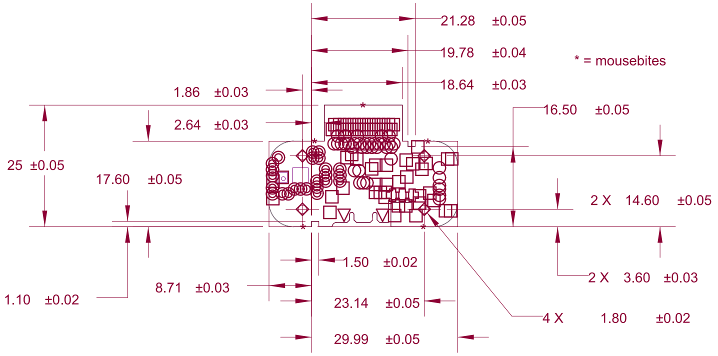


Fabrication / Assembly Notes

1. Material: Rigid FR-4, RoHS compliant: material should meet or exceed requirements of IPC 4101/129
2. Number of electrical layers: 4
3. Trace / Space minimum: 5mil (all layers)
4. Thickness: 1.25mm (finished)
5. Finish: ENIG plating on exposed copper
6. Soldermask: per IPC-SM-840, color blue 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
11. x mousebites shall be no larger than 0.05 mm
12. All Dimensions are after plating/finishing
13. All components must be placed within +/- 0.10mm

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Paste				▨
2	Top Overlay				▨
3	Top Solder	Solder Resist	0.010mm	3.5	▨
4	Top Layer	Copper	0.036mm		▨
5	Dielectric1	FR-4	0.254mm	4.2	▨
6	GND	Copper	0.036mm		▨
7	Dielectric2		0.254mm	4.2	▨
8	PWR	Copper	0.036mm		▨
9	Dielectric3		0.127mm	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**
▽	2	0.600mm (23.62mil)	PTH	Slot
✣	3	0.700mm (27.56mil)	PTH	Round
◇	4	1.800mm (70.87mil)	PTH	Round
◉	24	0.400mm (15.75mil)	PTH	Round
○	38	0.305mm (12.00mil)	PTH	Round
□	63	0.200mm (7.87mil)	PTH	Round
	134 Total			



METRIC	DRAFTER	DATE	
DIMENSIONS ARE IN MILLIMETERS	DESIGNER	DATE	TITLE:

TOLERANCES:

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

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SIZE	DWG. NO.		REV
B			
SCALE: 2:1	WEIGHT:	SHEET 1 OF 1