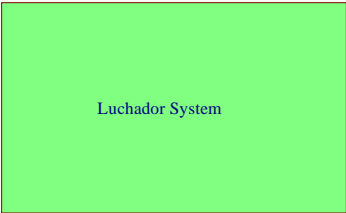


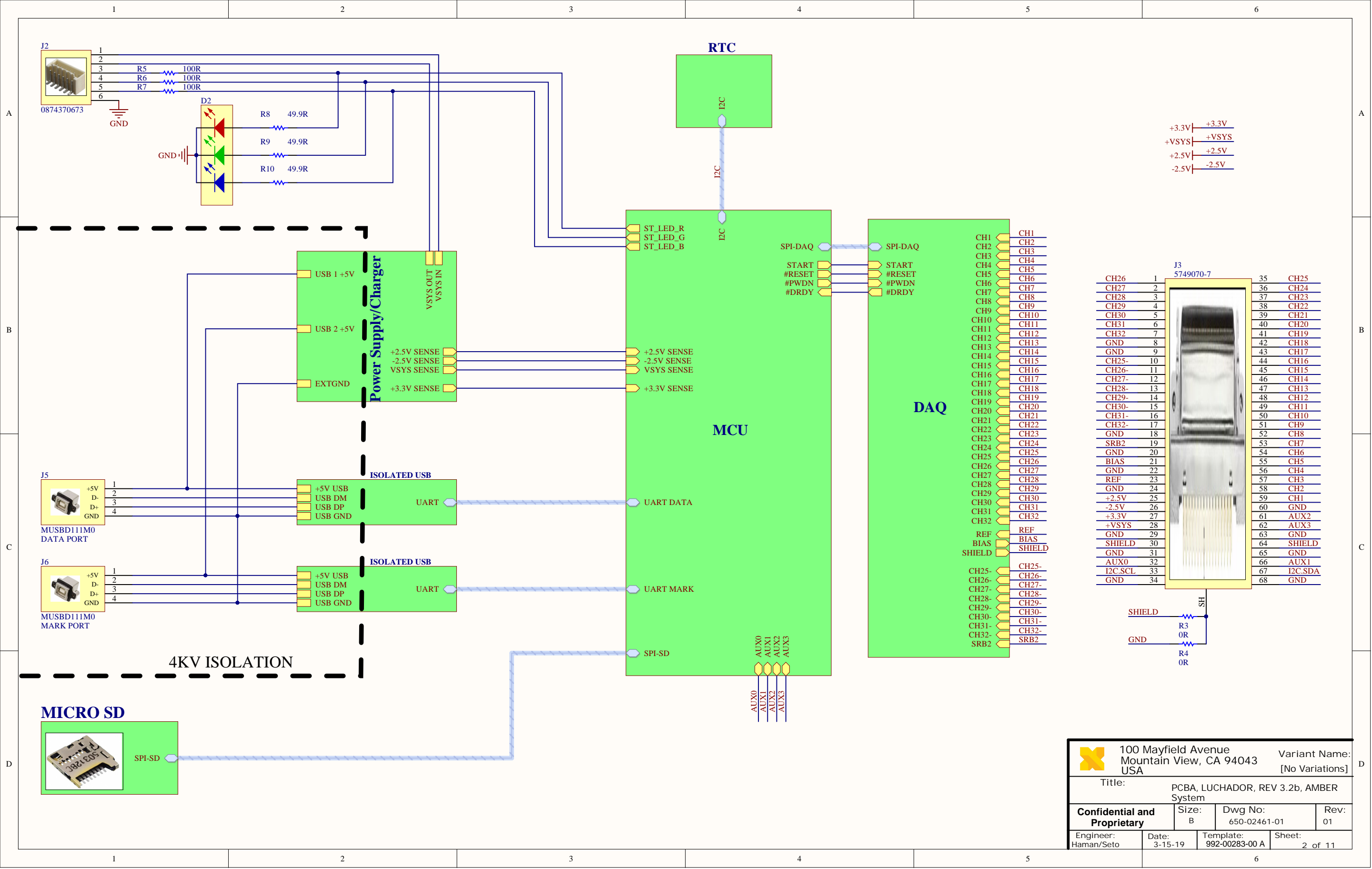
	1	2	3	4	5	6
A						A
B						B
C						C
D						D

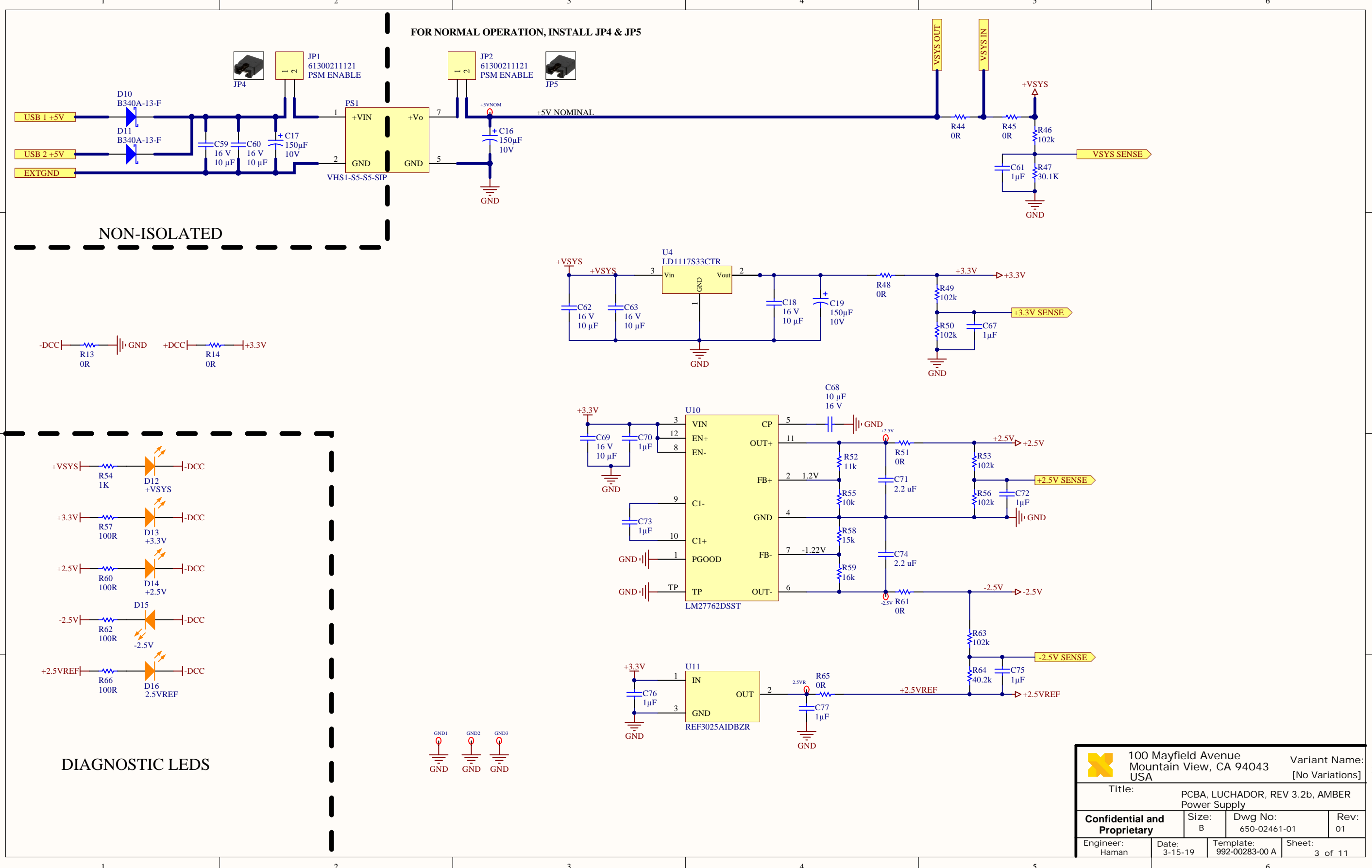
CHANGELOG


- REV 3.2B
Added symbols to the data and stim ports
- Added revision to the back of the board
- J2 Depopulated
- SMA diode footprint updated
- 0402 diode footprint updated
- Updated J1 footprint to make assembly clearer
- REV 3.2
Increased via size
Increases manufacturing flexibility
Pin 1 indicated on J3
New hardware resistor revision
- REV 3.1
Changed isolated power module
Less noisy
- Added selection jumpers to disable power module
Allows operation on battery
- Changed 3.3V DC/DC to LDO
Less noisy, efficiency not needed
- Added 150uF capacitors to power module
Decrease noise
- Removed diagnostic jumpers
Replaced with resistors
- Added capacitor to REF
Decrease noise
- Added selection resistors to filter caps
Selectable between REF and GND
- Added additional decoupling caps to -2.5V
Decrease noise
- Routed -2.5V as polygon under ADCs
Lower impedance coupling
- Fitted R44
Power switch not needed
- Grounded unused ADC inputs
Decrease noise
- Made programming port double-sided
- Changed MCU to MKL27Z256VLH4
Pin compatible, includes ROM bootloader
- Changed MCU UART pins to 23,24
Make compatible with bootloader



	100 Mayfield Avenue Mountain View, CA 94043 USA		Variant Name: [No Variations]	
	Title: PCBA, LUCHADOR, REV 3.2b, AMBER Luchador System			
Confidential and Proprietary		Size: B	Dwg No: 650-02461-01	Rev: 01
Engineer: Haman/Seto	Date: 3-15-2019	Template: 992-00283-00 A	Sheet: 1 of 11	





 100 Mayfield Avenue
Mountain View, CA 94043
USA

Variant Name:
[No Variations]

Title:
PCBA, LUCHADOR, REV 3.2b, AMBER
Power Supply

Confidential and
Proprietary

Size:
B

Dwg No:
650-02461-01

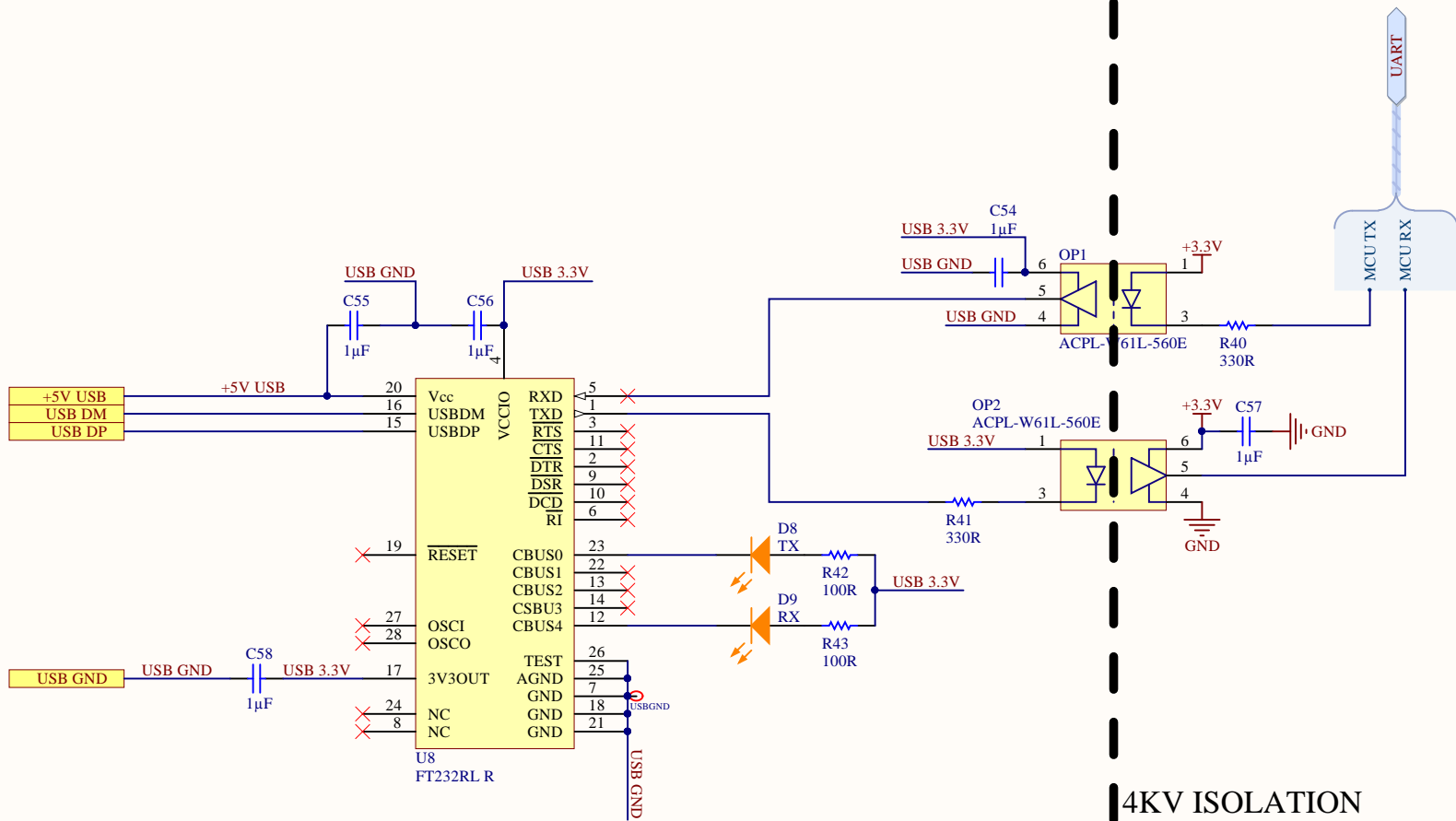
Rev:
01

Engineer:
Haman


Date:
3-15-19

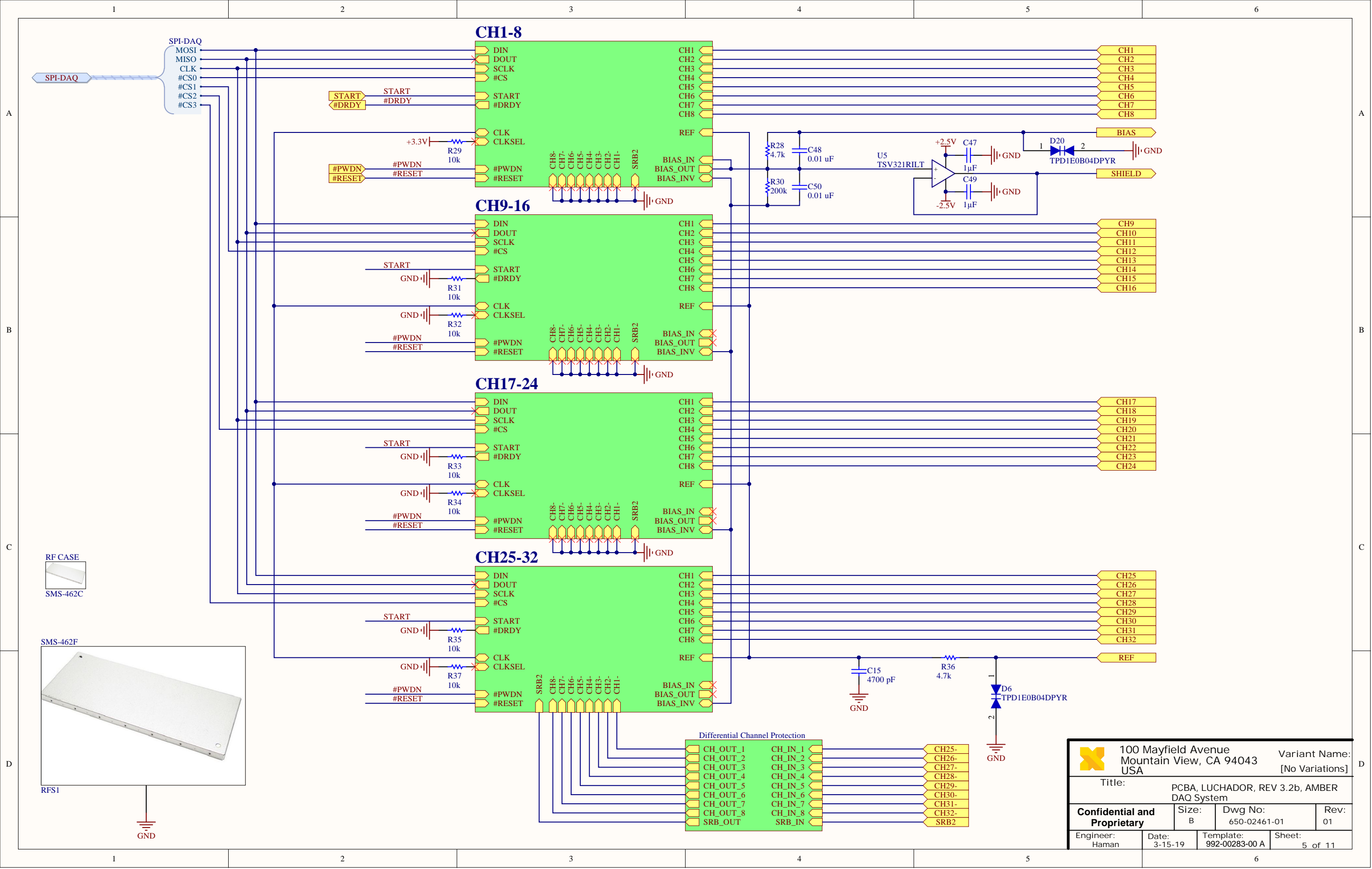
Template:
992-00283-00 A


Sheet:
3 of 11

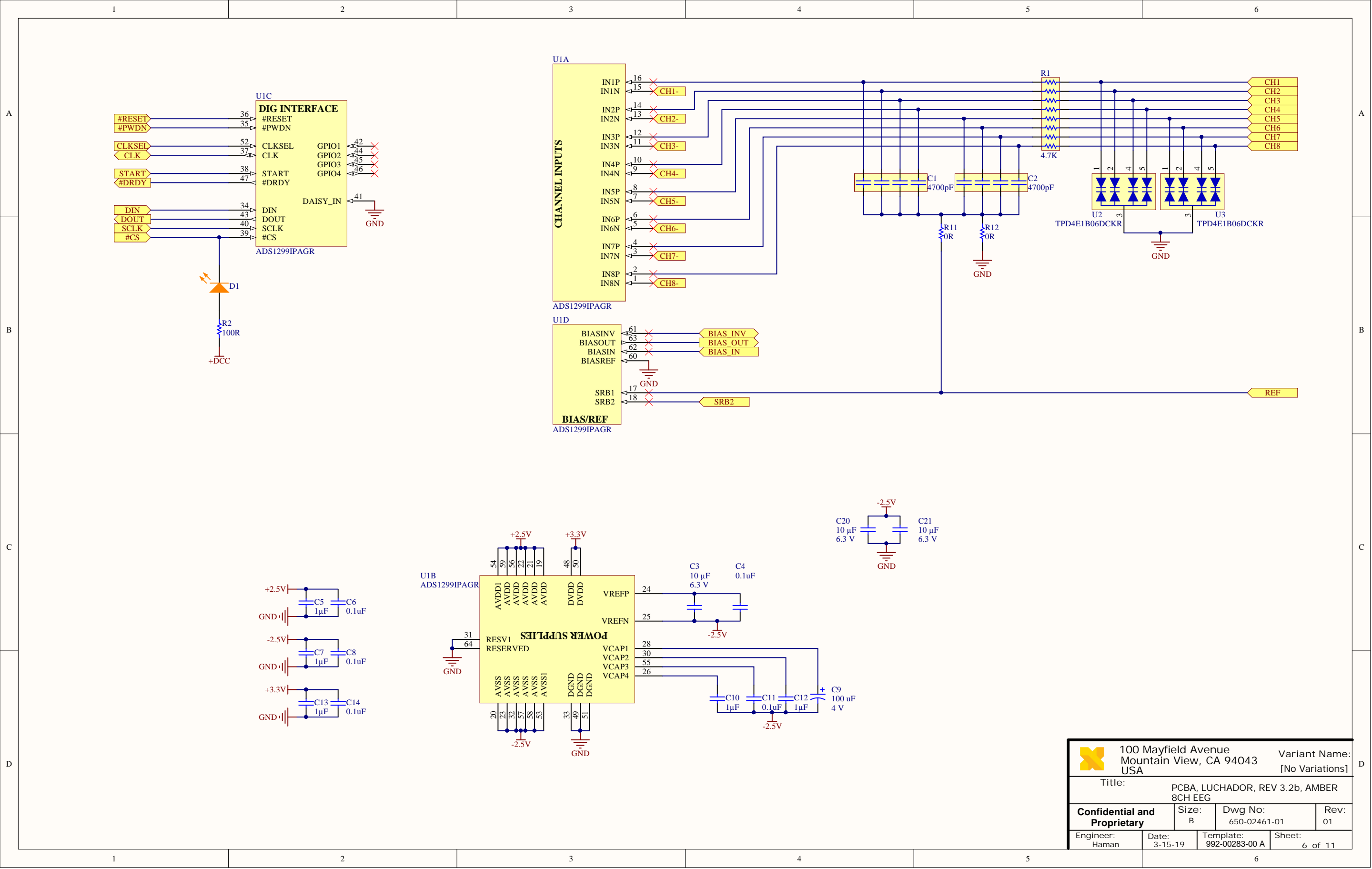


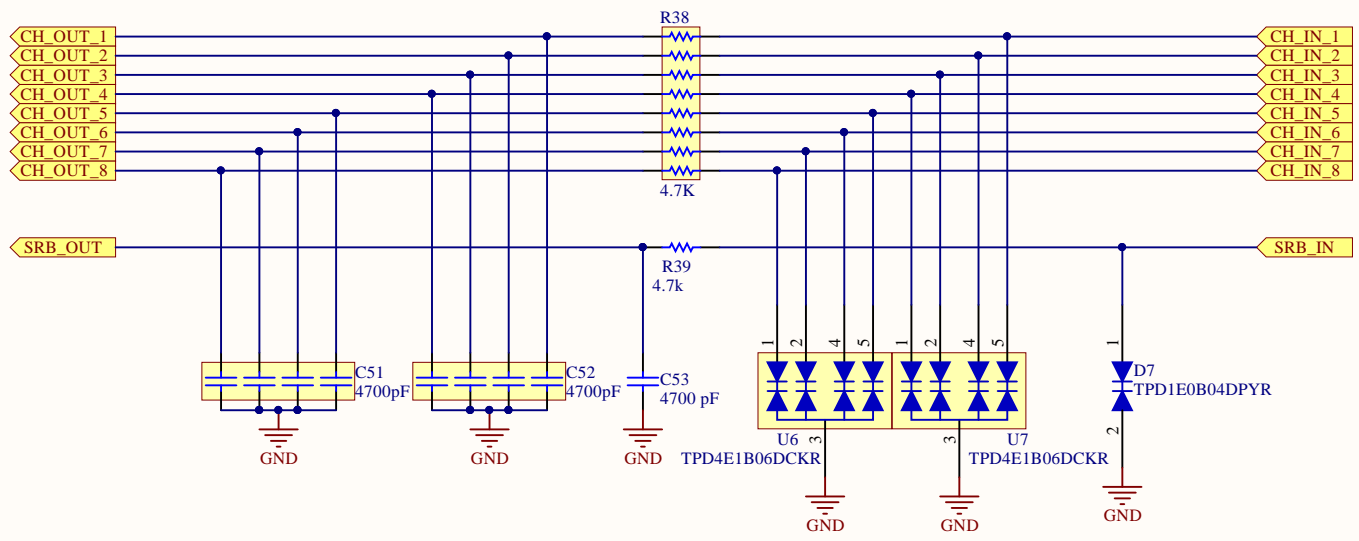
4KV ISOLATION


	100 Mayfield Avenue Mountain View, CA 94043 USA		Variant Name: [No Variations]	
	Title: PCBA, LUCHADOR, REV 3.2b, AMBER Isolated USB			
Confidential and Proprietary		Size: A4	Dwg No: 650-02461-01	Rev: 01
Engineer: Haman	Date: 3-15-19	Template: 992-00283-00 A	Sheet: 4 of 11	

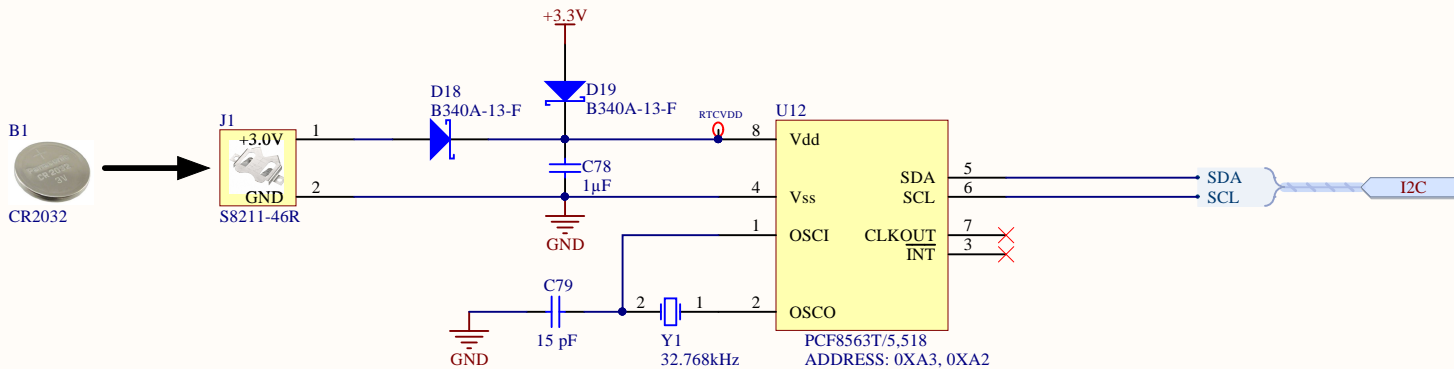



	100 Mayfield Avenue Mountain View, CA 94043 USA	Variant Name: [No Variations]	
Title:		PCBA, LUCHADOR, REV 3.2b, AMBER DAQ System	
Confidential and Proprietary		Size: B	Dwg No: 650-02461-01
Rev: 01			
Engineer: Haman	Date: 3-15-19	Template: 992-00283-00 A	Sheet: 5 of 11

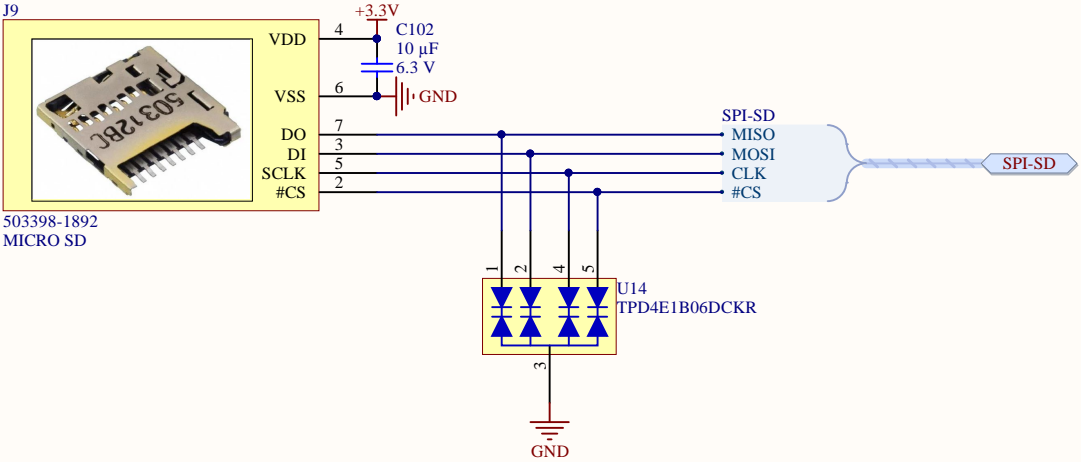




		100 Mayfield Avenue Mountain View, CA 94043 USA		Variant Name: [No Variations]	
Title: PCBA, LUCHADOR, REV 3.2b, AMBER Differential Channel Protection					
Confidential and Proprietary		Size: A4	Dwg No: 650-02461-01	Rev: 01	
Engineer: Haman	Date: 3-15-19	Template: 992-00283-00 A	Sheet: 7 of 11		



	100 Mayfield Avenue Mountain View, CA 94043 USA		Variant Name: [No Variations]	
	Title: PCBA, LUCHADOR, REV 3.2b, AMBER Real Time Clock			
Confidential and Proprietary		Size: A4	Dwg No: 650-02461-01	Rev: 01
Engineer: Haman	Date: 3-15-19	Template: 992-00283-00 A		Sheet: 8 of 11



100 Mayfield Avenue
Mountain View, CA 94043
USA

Variant Name:
[No Variations]

Title: PCBA, LUCHADOR, REV 3.2b, AMBER
Micro SD

**Confidential and
Proprietary**

Size:
A4

Dwg No:
650-02461-01

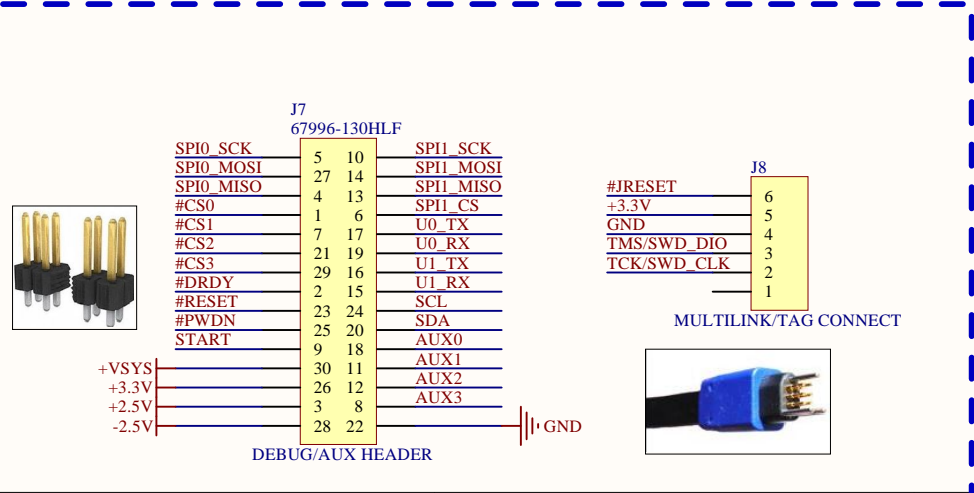
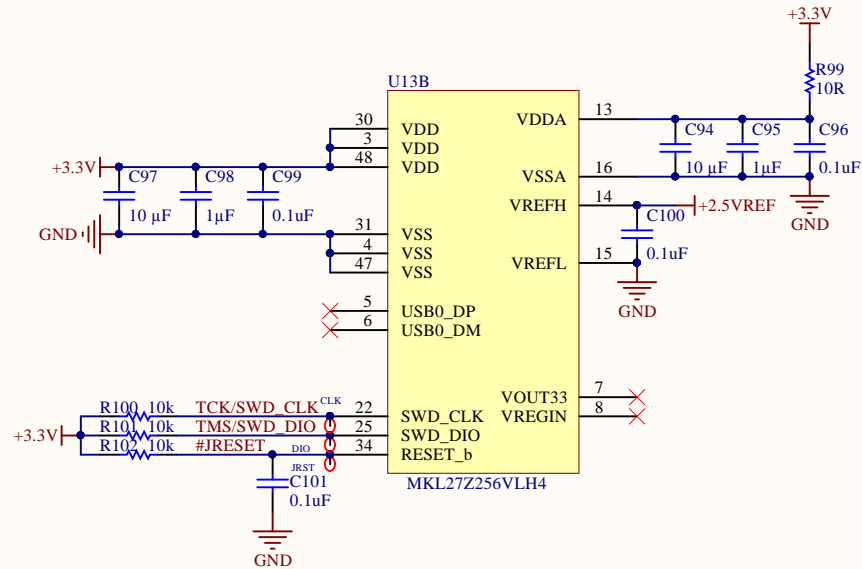
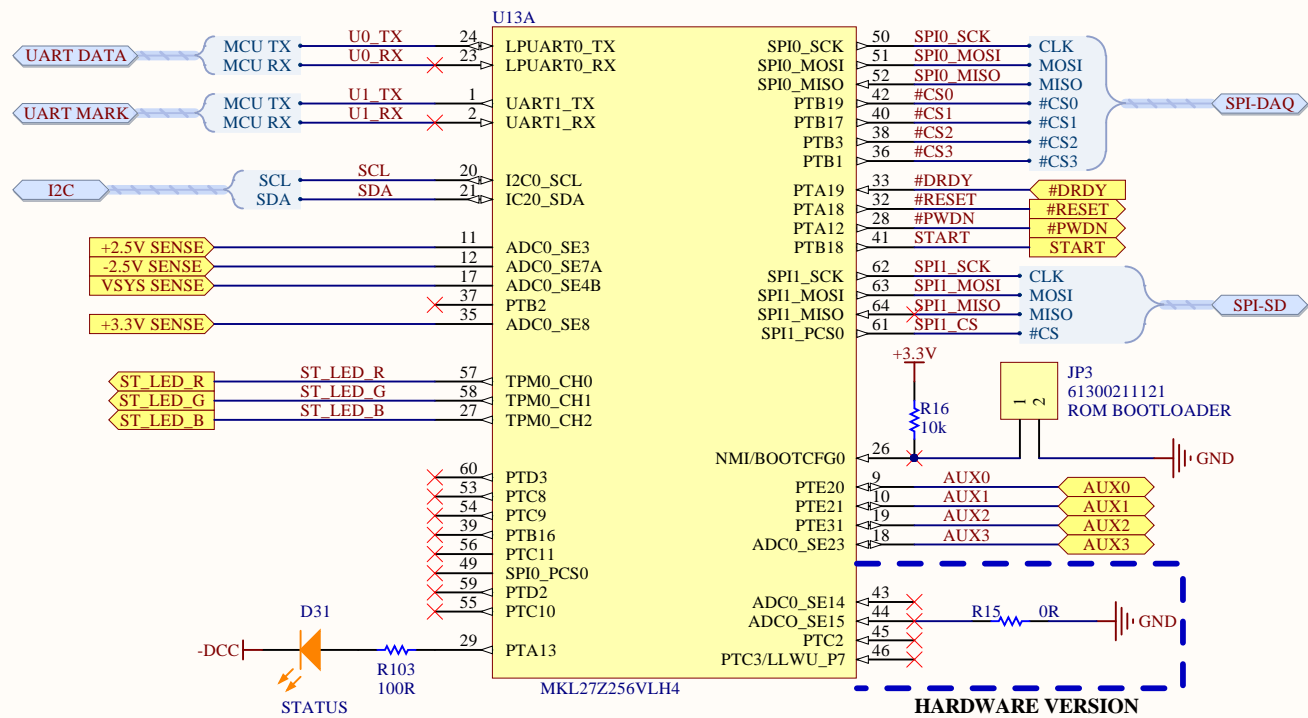
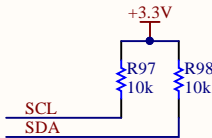
Rev:
01

Engineer:
Haman

Date:
3-15-19

Template:
992-00283-00 A

Sheet:
10 of 11



		100 Mayfield Avenue Mountain View, CA 94043 USA		Variant Name: [No Variations]	
Title: PCBA, LUCHADOR, REV 3.2b, AMBER Microcontroller					
Confidential and Proprietary		Size: B	Dwg No: 650-02461-01	Rev: 01	
Engineer: Haman	Date: 3-15-19	Template: 992-00283-00 A	Sheet: 11 of 11		