

53-05001-02-00 (DD_NSV)

Page Description

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PAGE 2 - LTC4100 Charger IC

Major Revision History

Sr. No.	Revision			Description	Date
	Schematic	BOM	PCB		
1	0	0	0	Initial Release	29th August 2018
2	1	1	1	- Added CW2015 & MAX17261 IC - Added some Passive components - Removed bq28z610	23th September 2019
3	2	2	2	- Removed ISL9238 & CW2015 IC - Used LTC4100	12th January 2021

Other Details:

Notes:

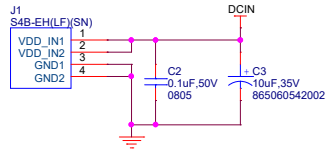
Revision:1_1_1

- Added CW2015 & MAX17261 IC for getting proper output of battery characterization.
- Added Passive components (Resistor) on I2C pin to select any one battery guage IC.

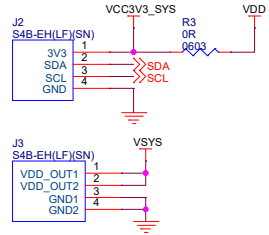
Revision:2_2_2

- Removed ISL9238 & CW2015 IC and Used LTC4100 Smart battery charger IC as we will be using Smart battery RRC2140 for better battery power management.

Adapter Input



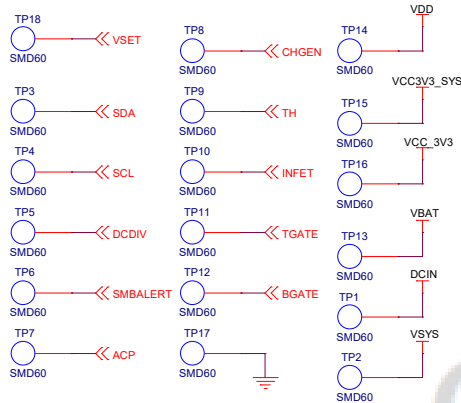
To Connect with AIO



To Connect with J47 of AIO for I2C Connection

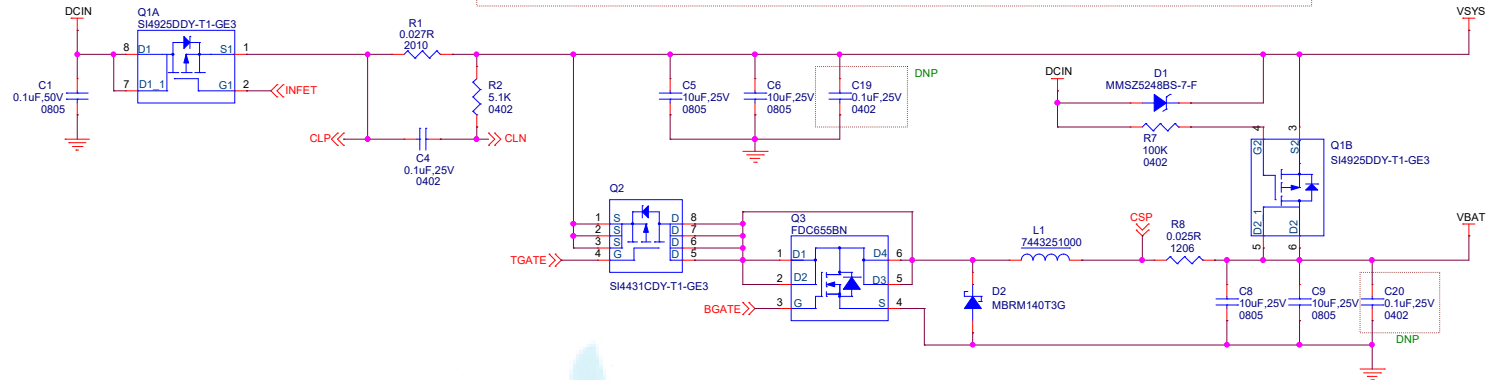
To Connect with J2 of AIO for Power

Test Point

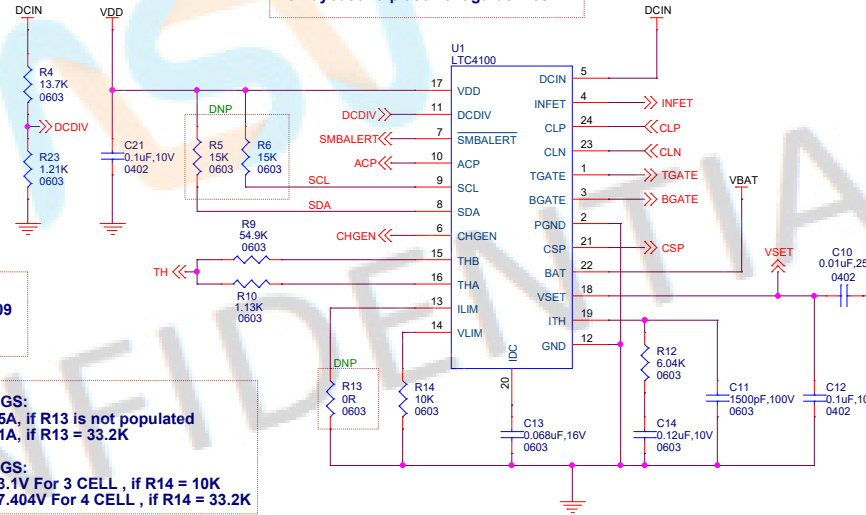


LTC4100 Charger IC

Please Refer the Design files of DC512B Ref board for the component placement and routing.
Link : <https://www.analog.com/media/en/reference-design-documentation/design-integration-files/DC512B.zip>



Refer Page no. 27 of LTC4100 datasheet for layout and placement guidelines

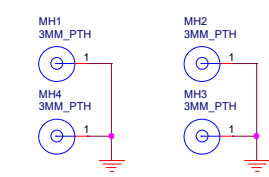


I2C Device Address :
For 7 bit Address : 0x09
Write Address : 0x12
Read Address : 0x13

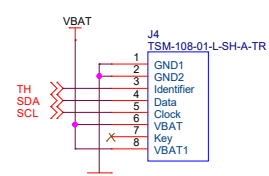
For CURRENT SETTINGS:
Charge Current = 4.095A, if R13 is not populated
Charge Current = 3.071A, if R13 = 33.2K

For VOLTAGE SETTINGS:
Charging Voltage = 13.1V For 3 CELL, if R14 = 10K
Charging Voltage = 17.404V For 4 CELL, if R14 = 33.2K

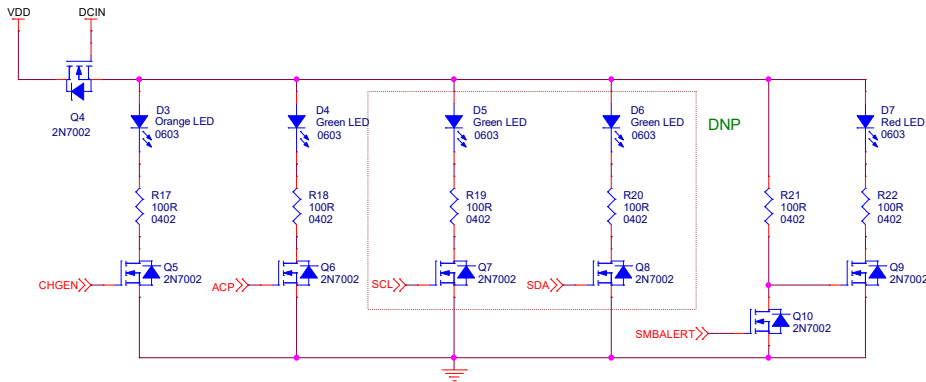
Mounting holes



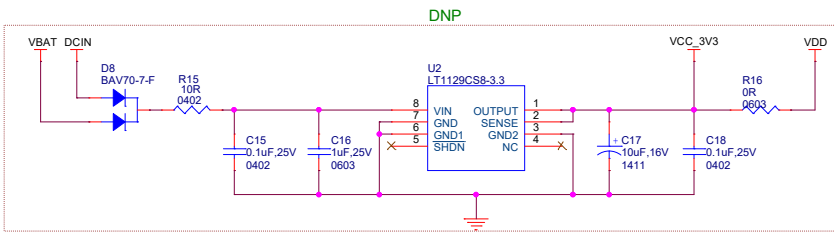
Smart Battery Connection



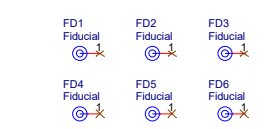
Status LED



Power Supply for LTC4100 [VBAT/DCIN (9V to 13.05V/19V) -> 3.3V]



Fiducial



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