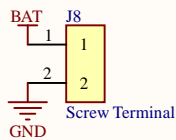
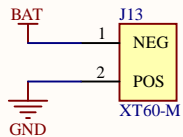


# LiPo Battery

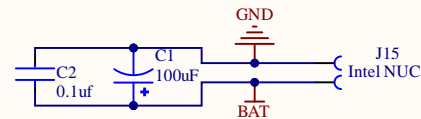
Battery Capacity: 4000mAh

Rated Discharge: 30C  
 ∴ 120 Amps



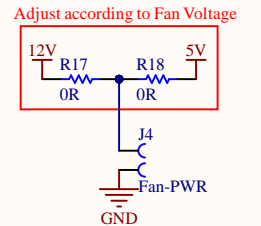
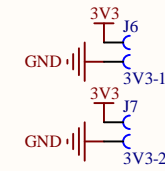
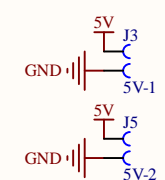
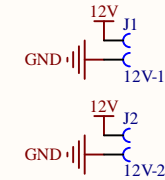
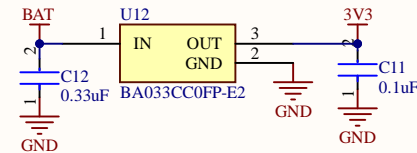
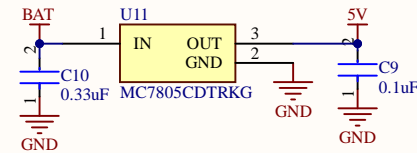
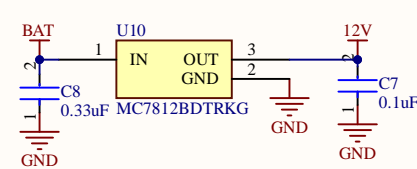
5S LiPo:  
 • 100% → 21V  
 • 75% → 19.92V  
 • 50% → 19.18V  
 • 25% → 18.73V  
 • 0% → 16.37V

# Intel NUC

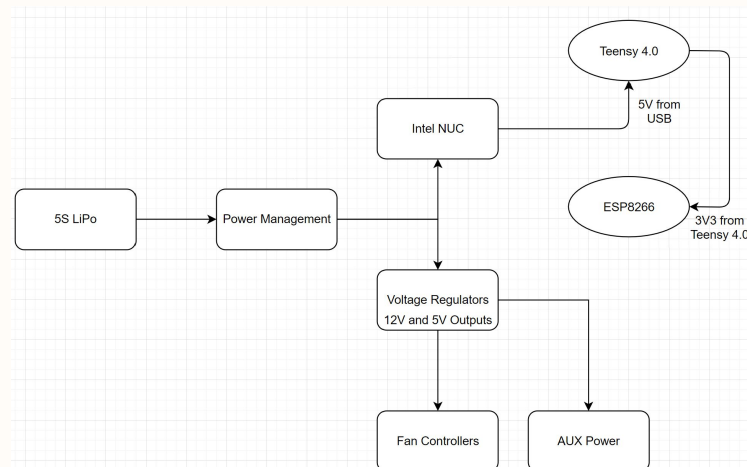


Intel NUC Requirements:  
 - 19V @ 3.43A

# Voltage Regulators



OUTPUTS:  
 - 12V @ 1A  
 - 5V @ 1A  
 - 3V3 @ 1A



• Power will be fed directly from the 5S LiPo to the Intel NUC and also to the relevant voltage regulators.

• A constant 19V Buck Boost IC was not found to supply continuous power to the NUC.

• AUX power will be supplied at 12V, 5V and 3V3 rails for fans, lights, etc.

Title: **Power Distribution & Management**

Size: A4 Author: K. Pereira, J. Vartanian, E. Andrade, J. Wind

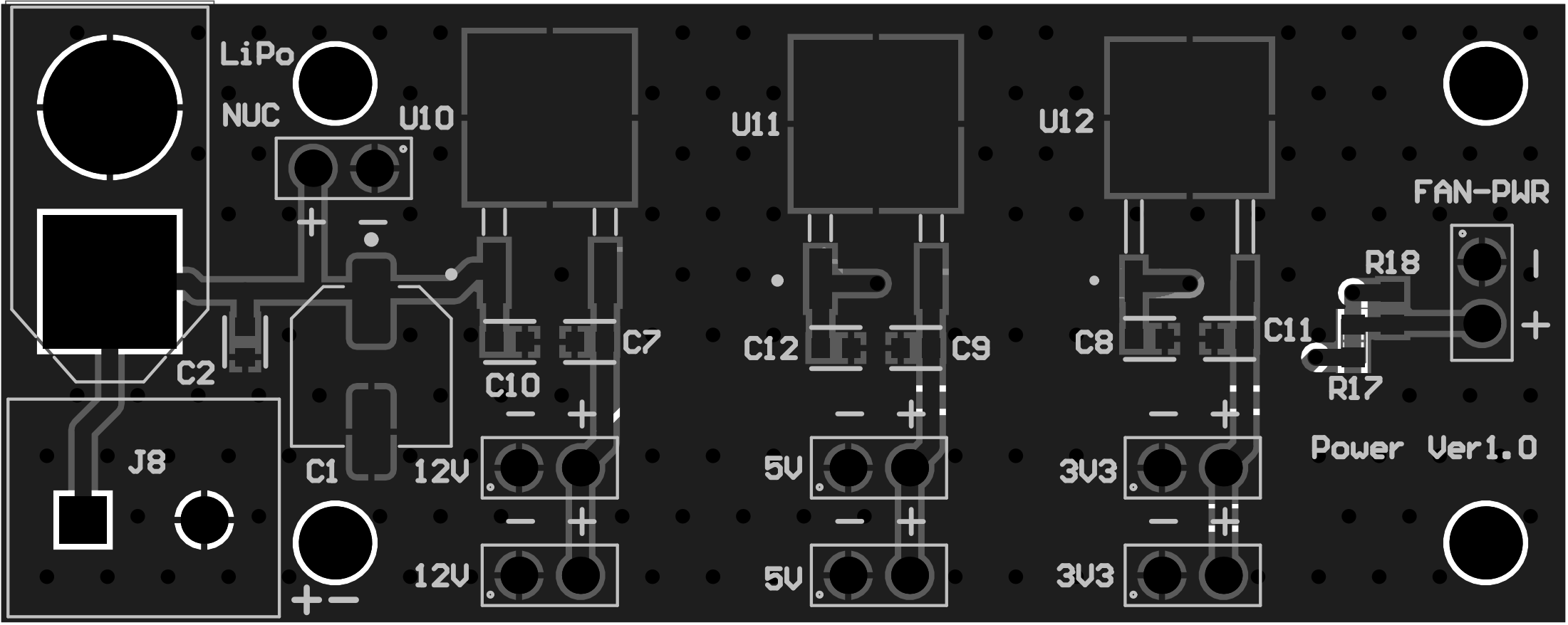
Date: May 2021

Revision: 1.0

Sheet: 1 of 1

Ignis Automation  
 15 Broadway  
 Ultimo, Sydney  
 NSW, 2007  
 Australia





Comment	Description	Designator	Footprint	LibRef	Quantity
100uF	CAP ALUM 100UF 20% 25V SMD	C1	CAPAE660X800N_EEE- FPV101XAP	EEE-FPV101XAP	1
0.1uf	CAP CER 0.1UF 50V X7R 0603	C2, C7, C9, C11	FP-CL10-IPC_C	CMP-13271-003248-1	4
0.33uF	CAP CER 0.33UF 35V X7R 0603	C8, C10, C12	FP-CL10-IPC_C	CMP-13271-003248-1	3
12V-1	2 Pin	J1	61300711821	61300711821	1
12V-2	2 Pin	J2	61300711821	61300711821	1
5V-1	2 Pin	J3	61300711821	61300711821	1
Fan-PWR	2 Pin	J4	61300711821	61300711821	1
5V-2	2 Pin	J5	61300711821	61300711821	1
3V3-1	2 Pin	J6	61300711821	61300711821	1
3V3-2	2 Pin	J7	61300711821	61300711821	1
Screw Terminal	2 Position Wire to Board Terminal Block Horizontal with Board 0.197 _5.00mm_ Through Hole	J8	OST_OSTTA020161	OSTTA020161	1
XT60-M	XT60	J13	AMASS_XT60-M	XT60-M	1
Intel NUC	2 Pin	J15	61300711821	61300711821	1
OR	RES 0 OHM JUMPER 1/10W 0603	R17, R18	RESC1608X55X30NL15 T15	CMP-2000-00180-1	2
MC7812BDTRKG	IC REG LINEAR 12V 1A DPAK	U10	DPAK-3_ONS	MC7812BDTRKG	1
MC7805CDTRKG	IC REG LINEAR 5V 1A DPAK	U11	DPAK-3_ONS	MC7805CDTRKG	1
BA033CC0FP-E2	IC REG LINEAR 3.3V 1A TO252-3	U12	TO252-3_ROM	BA033CC0FP-E2	1