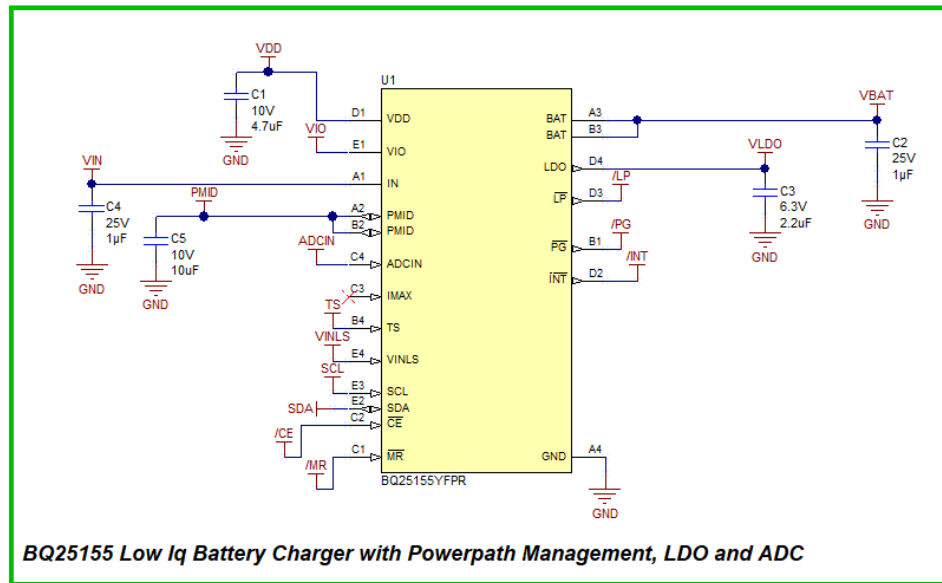
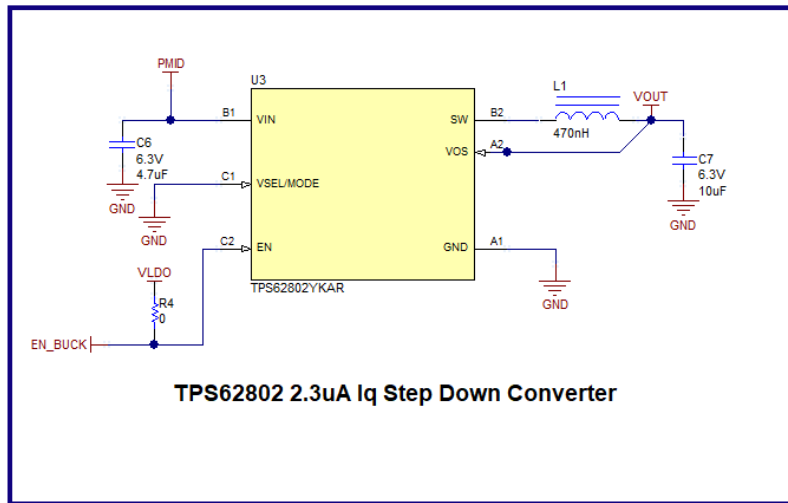


BQ25155 + TPS6280x

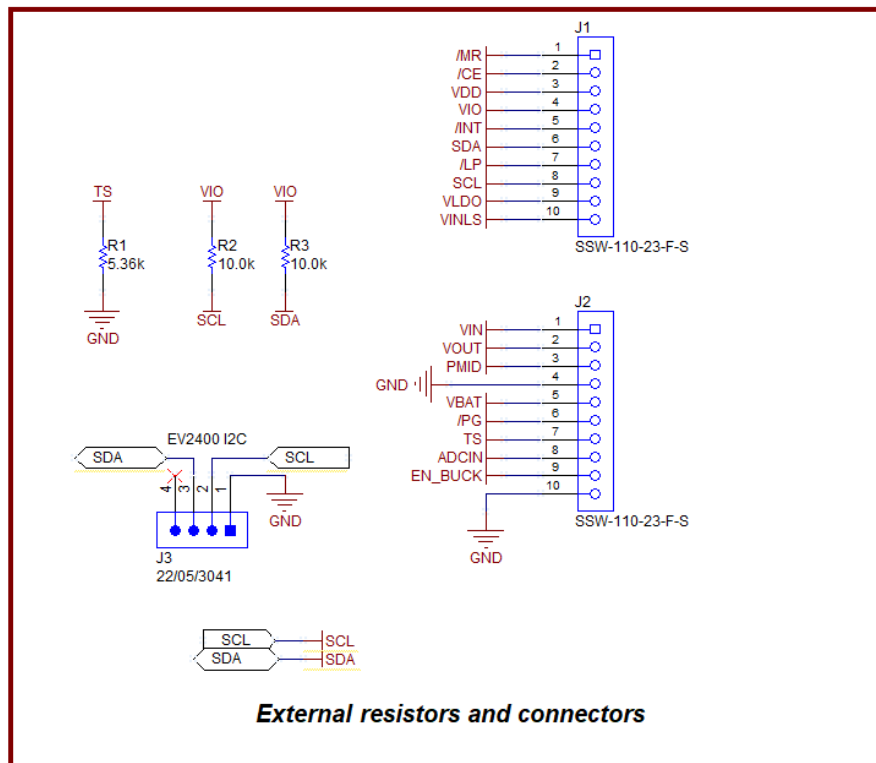
Charger + Low Iq Buck Converter

Sharafadeen Raheem
Linear Charger Applications

Schematic

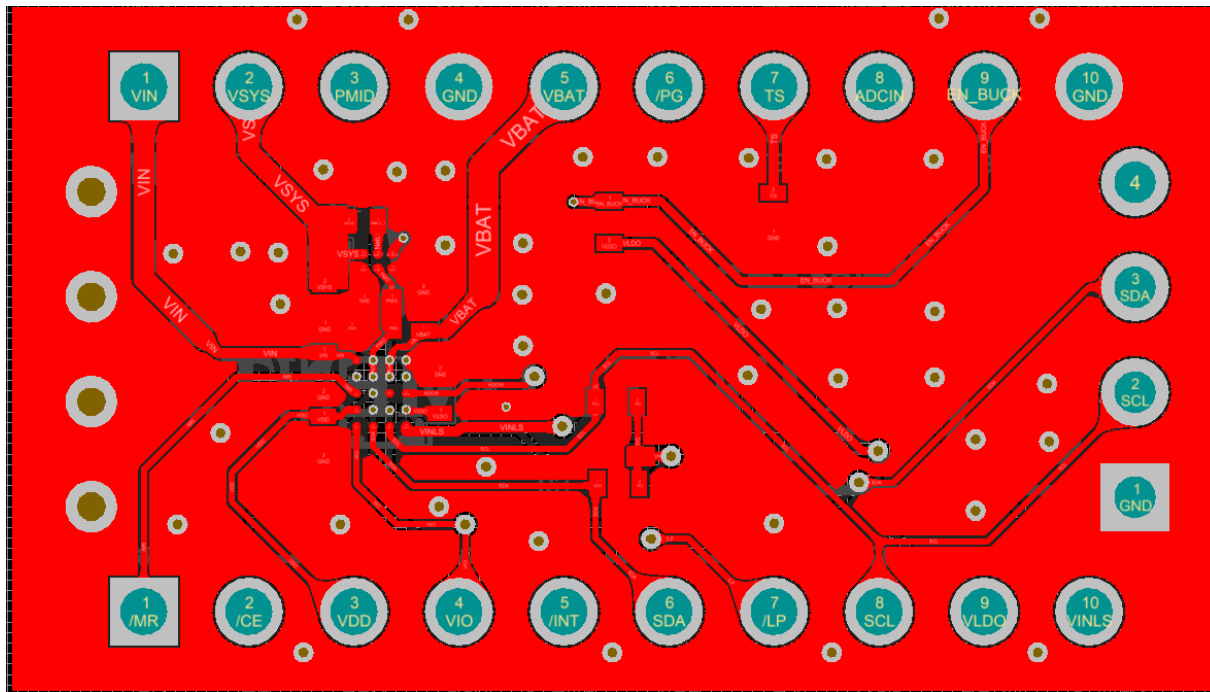


Connectors



Layout

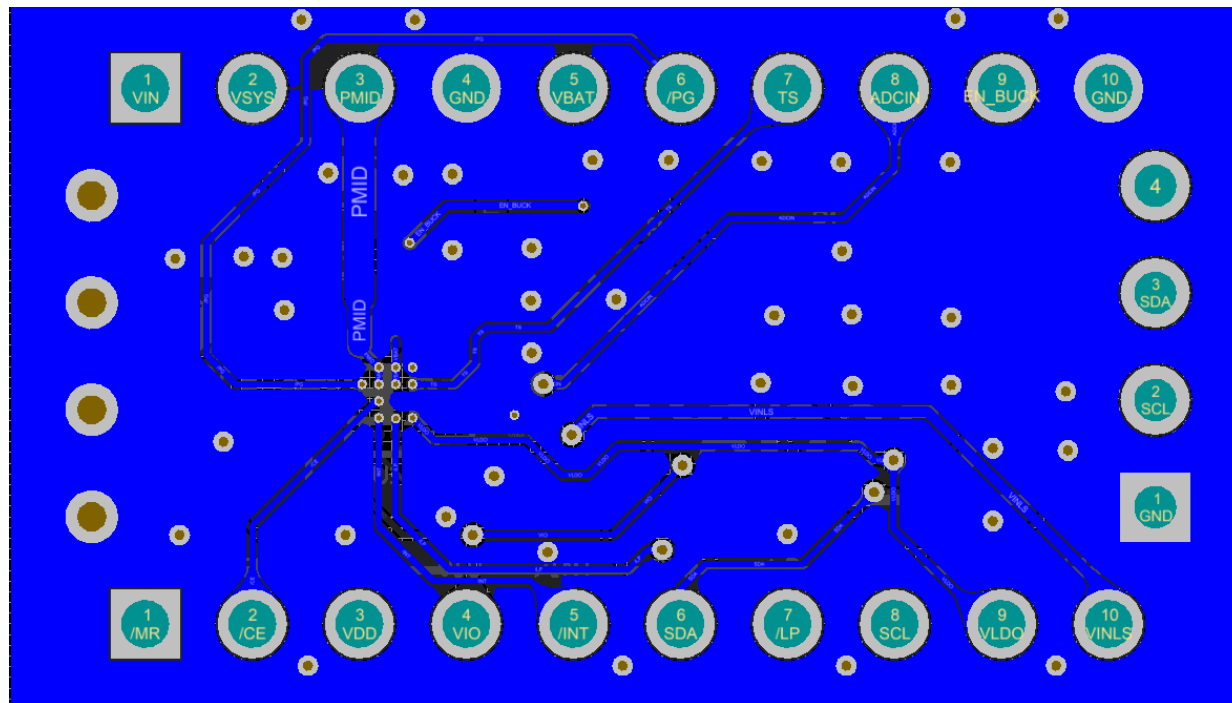
- 2 Layer Board



Top layer

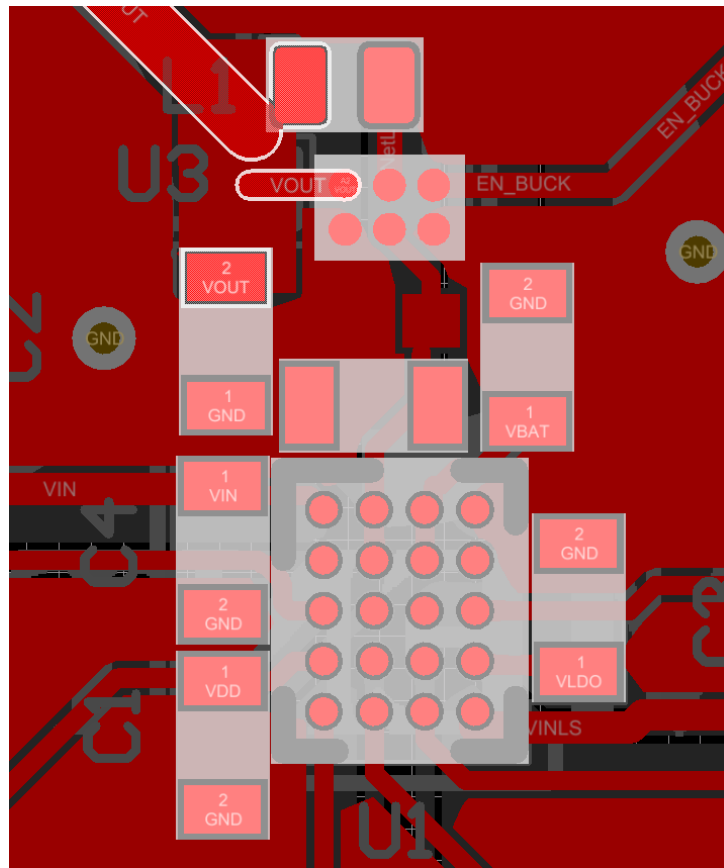
Layout

- 2 Layer Board

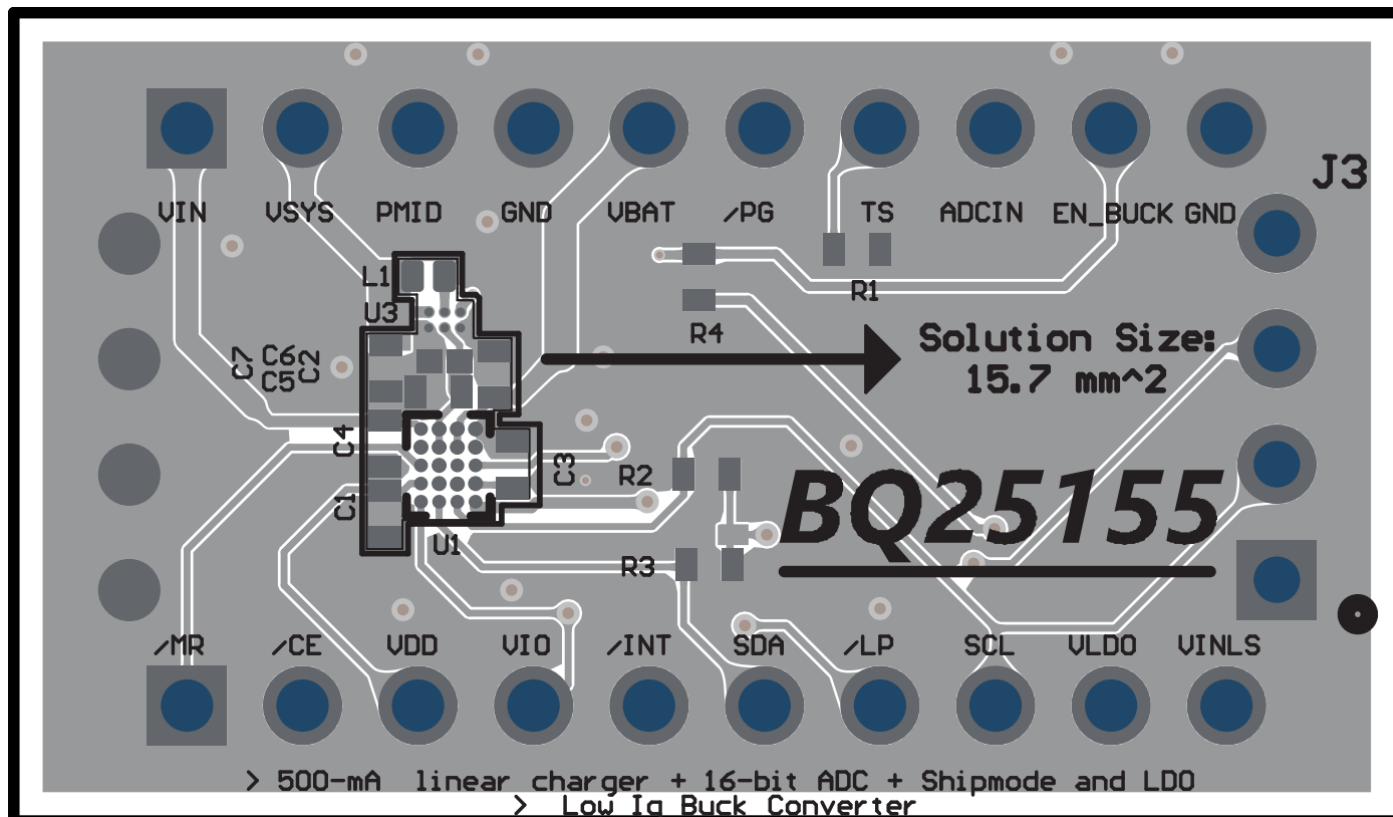


Bottom layer

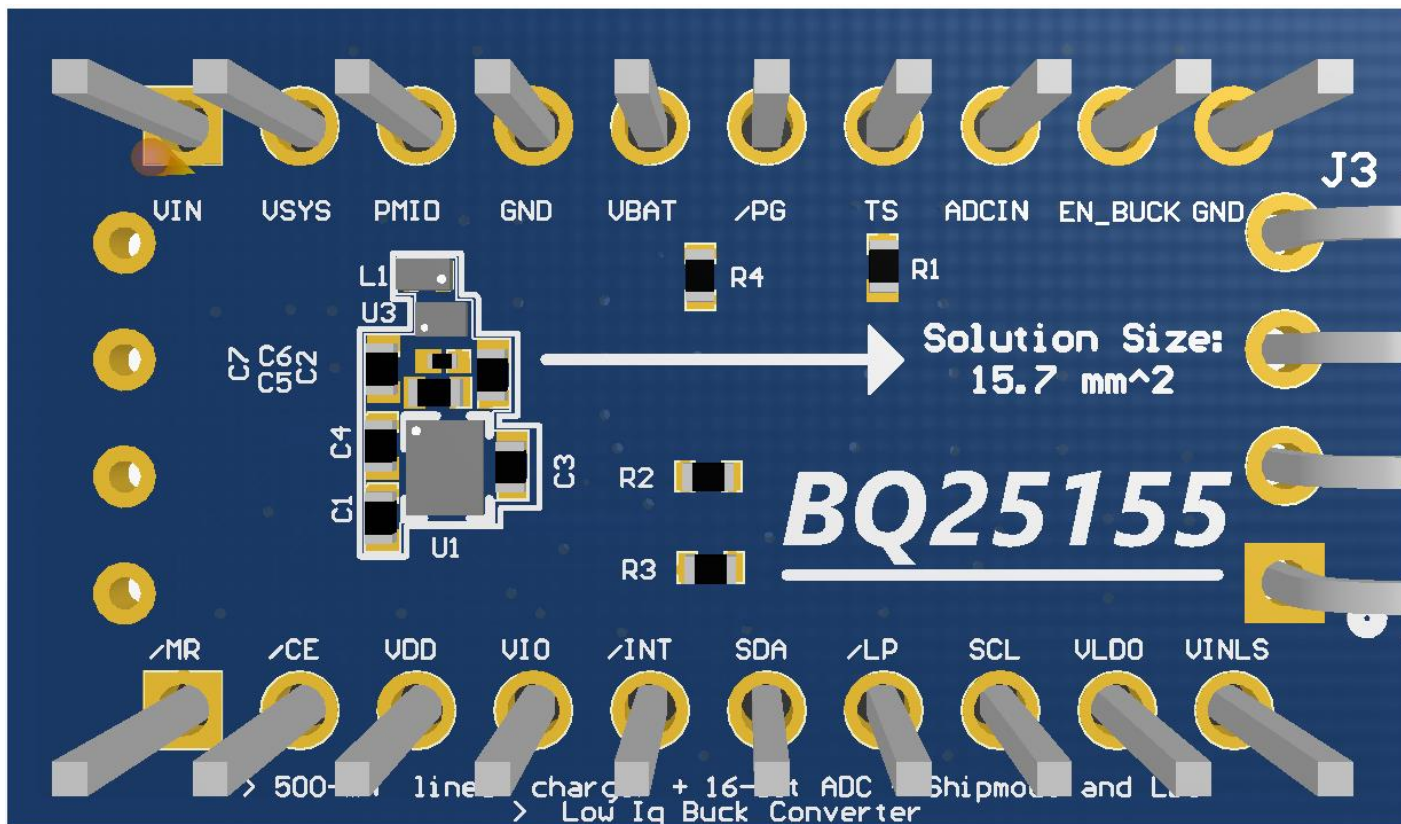
Key Components



Component View



3D View



Bill Of Materials

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
C1	1	4.7uF	CAP, CERM, 4.7 uF, 10 V, +/- 20%, X5R, 0402	0402	GRM155R61A475MEA AD	MuRata		
C2, C4	2	1uF	CAP, CERM, 1 uF, 25 V, +/- 20%, X5R, 0402	0402	GRM155R61E105MA12 D	MuRata		
C3	1	2.2uF	CAP, CERM, 2.2 uF, 6.3 V, +/- 10%, X6S, 0402	0402	GRM155C80J225KE95 D	MuRata		
C5	1	10uF	CAP, CERM, 10 uF, 10 V, +/- 20%, X5R, 0402	0402	GRM155R61A106ME11	MuRata		
C6	1	4.7uF	CAP, CERM, 4.7 uF, 6.3 V, +/- 20%, X5R, 0201	0201	GRM035R60J475ME15 D	MuRata		
C7	1	10uF	CAP, CERM, 10 uF, 6.3 V, +/- 20%, X5R, 0402	0402	GRM155R60J106ME15 D	MuRata		
J1, J2	2		Connector, Receptacle, 100mil, 10x1, Gold plated, TH	10x1 Receptacle	SSW-110-23-F-S	Samtec		
J3	1		Header (friction lock), 100mil, 4x1, R/A, TH	4x1 R/A Header	22/05/3041	Molex		
L1	1	470nH	Inductor, 470 nH, 0.9 A, 0.175 ohm, SMD	1x0.5mm	HTET1005FE-R47MSR- 11	Cyntec		
R1	1	5.36k	RES, 5.36 k, 1%, 0.063 W, 0402	0402	MCR01MZPF5361	Rohm		
R4	1	10.0k	RES, 10.0 k, 1%, 0.063 W, 0402	0402	RC0402FR-0710KL	Yageo America		
U1	1		BQ25155, YFP0020ACAC (DSBGA-20)	YFP0020ACAC	BQ25155YFPR	Texas Instruments	BQ25155YFPT	Texas Instruments
U3	1		Tiny High Frequency Ultra-low Iq Step-Down Converter, YKA0006ACAC (DSBGA-6)	YKA0006ACAC	TPS62802YKAR	Texas Instruments	TPS62802YKAT	Texas Instruments
R2, R3	0	10.0k	RES, 10.0 k, 1%, 0.063 W, 0402	0402	RC0402FR-0710KL	Yageo America		