

N2G Module TPS40190DRC_12V_5V_6A_EVM BOM RevA

COUNT	RefDes	Value	Description	Size	Part Number	MFR	AREA	EXT	Pr/Ea*	EXT
1	C1	.01uF	Capacitor, Ceramic, 50V, X7R, 10%	0603	C1608X7R1C103K	Std	5650	5650	0.005	0.005
1	C12	.01uF	Capacitor, Ceramic, 50V, X7R, 10%	0603	C1608X7R1C103K	Std	5650	5650	0.005	0.005
4	C3,C4,C5	10uF	Capacitor, Ceramic, 16V, X7R, 20%	1210	C3225X5R1C106M	TDK	83,600	334400	0.04	0.16
	C116									
1	C6	3300pF	Capacitor, Ceramic, 25V, X7R, 10%	0603	C1608COG1E682J	Std	5650	5650	0.040	0.04
1	C7	330pF	Capacitor, Ceramic, 50V, X7R, 10%	0603	C1608COG1H680J	Std	5650	5650	0.005	0.005
2	C8,C14	0.1uF	Capacitor, Ceramic, 16V, X7R, 10%	0603	C1608X7R1C105K	TDK	5650	11300	0.005	0.01
2	C11,C117	100uF	Capacitor, Ceramic, 6.3V, X5R, 20%	1210	C3225X5R0J107M	TDK	83,600	167200	0.19	0.38
1	C12	0.01uF	Capacitor, Ceramic, 16V, X7R, 10%	0603	C1608X7R1C104K	TDK	5650	5650	0.005	0.005
1	C13	4.7uF	Capacitor, Ceramic, 6.3V, X5R, 20	0805	C2012X5R0J475M	TDK	10560	10560	0.03	0.03
1	C15	open	Capacitor, Ceramic, 25V, COG, 10%	0603	C1608X7R1C104K	Std	5650	5650	0.005	0.005
2	C118,C119	1uF	Capacitor, Ceramic, 16V, X7R, 10%	0603	C1608X7R1C105K	TDK	5650	11300	0.005	0.01
1	D1	MBR0530	Diode, Schottky, 0.5-, 30V	SOD-123	MBR0530T1	ON	13300	13300	0.03	0.03
1	L1	4.7uH	Inductor, SMT, 10A, 15mΩ	13x13x10	IHLP5050CE-4R7-01	Vishay	296,400	296400	0.3	0.3
2	Q2,Q4	Si4390DY	MOSFET, N-ch, 30V, 10.5A, 13.5mΩ	S08	Si4390DY	Vishay	52,578	105156	0.25	0.5
1	R2	249	Resistor, Chip, 1/16W, 1%	0603	Std	Std	5650	5650	0.005	0.005
1	R3	10K	Resistor, Chip, 1/16W, 1%	0603	Std	Std	5650	5650	0.005	0.005
1	R4	49.9	Resistor, Chip, 1/16W, 1%	0603	Std	Std	5650	5650	0.005	0.005
1	R5	open	Resistor, Chip, 1/16W, 1%	0603	Std	Std	5650	5650	0.005	0.005
1	R6	3.3	Resistor, Chip, 1/16W,1%	0603	Std	Std	5650	5650	0.005	0.005
1	R7	open	Resistor, Chip, 1/10W, 1%	0805	Std	Std	15300	15300	0.01	0.01
1	R8	3.01K	Resistor, Chip, 1/16W, 1%	0603	Std	Std	5650	5650	0.005	0.005
1	R9	open	Resistor, Chip, 1/16W, 1%	0603	Std	Std	5650	5650	0.005	0.005
1	R10	1.33K	Resistor, Chip, 1/16W, 1%	0603	Std	Std	5650	5650	0.005	0.005
1	U1	TPS40190DRC	IC, Low cost synchronous buck controller	DRC10	TPS40190DRC	TI	36,229	36229	0.34	0.34

* Pricing for Budgetary Purposes

Total Area(in) 1.08
Total Cost (\$) \$1.88

R1 100K Resistor, Chip, 1/16W, 1%
Q1 2N7002 MOSFET - 2N7002
J1,J2,J3

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