

Consolidated Bill of Material for the NCP102 Demonstration Board

ON Semiconductor



1/22/2008

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitutions Allowed	Lead Free
C1, C3	2	Capacitor, Ceramic	.01uF, 25V (.01uF, 50V)	10%	0603	Vishay (TDK)	VJ0603Y103KXXA (C1608X7R1H103K)	Yes	Yes
C4, C11	2	Capacitor, Ceramic	100pF, 25V (100pF, 50V)	5%	0603	Vishay (TDK)	VJ0603Y101KXXA (C1608C0G1H101J)	Yes	Yes
C5,C8	2	Capacitor, Ceramic	4.7uF, 16V	10%	1206	TDK	C3216X5R1C475K	Yes	Yes
C6,C9	2	Capacitor, Ceramic	.1uF, 25V	10%	1206	Vishay (TDK)	VJ1206Y104KXXA (C3216CH1E104J)	Yes	Yes
C7	1	Capacitor, Aluminum Electrolytic	1000uF, 25V	20%	Radial Lead	United-Chemicon	ESMG250ELL102MJ20S	No	Yes
C10	1	Capacitor, Aluminum Electrolytic	470uF, 25V	20%	Radial Lead	United-Chemicon	ESMG250ELL471MJC5S	Yes	Yes
Q1	1	Power MOSFET, N-Channel	45 A, 25V	n/a	D-Pack	ON Semiconductor	NTD40N03R	No	Yes
Q2		Do Not Place		n/a	D-Pack		Do Not Place	Yes	
Q3	1	Transistor, Sm Signal, NPN	200mA,40V	n/a	SOT-23	ON Semiconductor	MMBT3904LT1G	Yes	Yes
R1	1	Resistor, Thick Film	200 Ohm, 0.25W	1%	1206	Vishay	CRCW1206200RF	Yes	Yes
R2	1	Resistor, Thick Film	100 Ohm, 0.25W	1%	1206	Vishay	CRCW1206100RF	Yes	Yes
R3	1	Resistor, Thick Film	10kOhm, 0.25W	1%	1206	Vishay	CRCW12061002F	Yes	Yes
R4	1	Resistor, Thick Film	20kOhm, 0.25W	1%	1206	Vishay	CRCW12062002F	Yes	Yes
R5	1	Resistor, Thick Film	0 Ohm, 0.1W		0603	Vishay	CRCW06030R00F, or CRCW06030000Z0	Yes	Yes
R6	1	Resistor, Thick Film	10k Ohm, 0.1W	1%	0603	Vishay	CRCW06031002F	Yes	Yes
R7	1	Resistor, Thick Film	365kOhm, 0.1W	1%	0603	Vishay	CRCW06033653F	Yes	Yes
R8	1	Resistor, Thick Film	1000 Ohm, 0.25W	1%	1206	Vishay	CRCW12061001F	Yes	Yes
U1	1	Controller, Low Dropout Linear Regulator			TSOP-6	ON Semiconductor	NCP102G	No	Yes
C2		Not Used							
Hardware									
H1	1	Printed Circuit Board			3.5" x 3.2" x 0.062"	Circuit Express, Inc.	NCP102_DEMOBD	Yes	Yes
J1	1	Banana Jack, 4mm Socket, Brown, Horizontal Mt.	10ADC	n/a	10.5mm x 23.5mm x 12.4mm; 15.3mm lead pitch	Deltron Emcon	571-0300	Yes	Yes
J2	1	Banana Jack, 4mm Socket, Red, Horizontal Mt.	10ADC	n/a	10.5mm x 23.5mm x 12.4mm; 15.3mm lead pitch	Deltron Emcon	571-0500	Yes	Yes
J3	1	Banana Jack, 4mm Socket, Yellow, Horizontal Mt.	10ADC	n/a	10.5mm x 23.5mm x 12.4mm; 15.3mm lead pitch	Deltron Emcon	571-0700	Yes	Yes
J4, J6	2	Banana Jack, 4mm Socket, Black, Horizontal Mt.	10ADC	n/a	10.5mm x 23.5mm x 12.4mm; 15.3mm lead pitch	Deltron Emcon	571-0100	Yes	Yes
J5	1	Terminal Block, 2 Pole, Side Entry	300V, 16A	n/a	10mm x 10mm x 13.5mm; 5mm lead pitch		DigiKey ED1930-ND, or equiv	Yes	Yes
TP1	1	Test Point, Brown			.18"ht x .05"dia eyelet	Components Corporation	TP-015-01-01	Yes	Yes
TP2	1	Test Point, Red			.18"ht x .05"dia eyelet	Components Corporation	TP-015-01-02	Yes	Yes
TP3	1	Test Point, Orange			.18"ht x .05"dia eyelet	Components Corporation	TP-015-01-03	Yes	Yes
TP4	1	Test Point, Yellow			.18"ht x .05"dia eyelet	Components Corporation	TP-015-01-04	Yes	Yes
TP5	1	Test Point, Green			.18"ht x .05"dia eyelet	Components Corporation	TP-015-01-05	Yes	Yes
TP6	1	Test Point, Blue			.18"ht x .05"dia eyelet	Components Corporation	TP-015-01-06	Yes	Yes
TP7	1	Test Point, Violet			.18"ht x .05"dia eyelet	Components Corporation	TP-015-01-07	Yes	Yes
TP8, TP9, TP10, TP11	4	Test Point, Black			.18"ht x .05"dia eyelet	Components Corporation	TP-015-01-00	Yes	Yes
TP12	1	Test Point, Gray			.18"ht x .05"dia eyelet	Components Corporation	TP-015-01-08	Yes	Yes
TP6a, TP2a	2	3.5mm dia Probe Adapter				Tektronix	131-5031-00 (pkg of 25)	Yes	Yes