

## Bill of Materials for the NCP5181 Evaluation Board

ON Semiconductor



2/15/2006

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
U2	1	NCP5181	NA	NA	DIP8	ON Semiconductor	NCP5181PG	NO	YES
U1	1	CMOS IC	analog/timer	NA	DIP8	Texas Instruments	TLC555CP	YES	NO
C1,C2	2	Electrolytic Capacitor	47 uF, 400 V	20%	Radial	Panasonic	ECA2GM470	YES	NO
C3	1	Electrolytic Capacitor	220 uF, 16 V	20%	Radial	Panasonic	ECA1CM221	YES	NO
C4	1	Electrolytic Capacitor	4.7 uF, 63 V	20%	Radial	Panasonic	EEUEB1J4R7	YES	NO
C5,C6	2	Capacitor	100 nF, 50 V	10%	Radial	Murata	RPER71H104K2M1A05U	YES	NO
C7,C8	2	Capacitor	220 nF, 400 V	10%	Radial	Vishay	MKT1822422405	YES	NO
C9,C10	2	Capacitor	220 pF, 100 V	5%	Radial	Murata	RPE5C2A221J2M1Z05A	YES	NO
C11	1	Capacitor	10 nF, 100 V	10%	Radial	Murata	RPER72A103K2M1B05A	YES	NO
C12,C13	2	Capacitor	18 pF, 100 V	2%	Radial	Vishay	2252 586 20154	YES	YES
C14	1	Capacitor	220 pF, 400 V	10%	Radial	Panasonic	ECKATS221KB	YES	NO
C15	1	Capacitor	6.8 nF, 1600 V	5%	Radial	Vishay	2222 375 30682	YES	NO
C16	1	Capacitor	NC	-	Radial	-	-	-	-
C17	1	Electrolytic Capacitor	100 uF, 16 V	20%	Radial	Panasonic	ECA1CM101	YES	NO
D1	1	Zener Diode	15 V, 1.3 W	5%	Axial	Vishay	BZX85C15	YES	NO
D2	1	High-Speed Diode	0.2 A, 75 V	NA	Axial	Philips Semiconductor	1N4148	YES	NO
D3,D5,D6	3	Rectifier Diode	1 A, 400 V	NA	Axial	ON Semiconductor	1N4936G	YES	YES
D4	1	Zener Diode	5.1 V, 1.3 W	5%	Axial	Vishay	BZX85C5V1	YES	NO
F1	1	Fuse	500 mA, 250 V	NA	Radial	Schurter	0034.6612	YES	NO
L1	1	Inductor	1.4 mH	NA	NA	Vogt	53-044	NO	NO
PT1	1	Diode Bridge	600 V, 1 A	NA	DFM	Vishay	DF06M	YES	NO
R1	1	Resistor	12 kΩ, 0.33 W	5%	Axial	Vishay	CFA020712K	YES	NO
R2	1	Resistor	82 kΩ, 0.33 W	5%	Axial	Vishay	CFA020782K	YES	NO
R3,R4	2	Resistor	82 kΩ, 3 W	5%	Axial	Vishay	CPF382K000JN	YES	NO
R5,R6,R7	3	Resistor	10 Ω, 0.33 W	5%	Axial	Vishay	CFA020710R	YES	NO
R8,R9	2	Resistor	10 kΩ, 0.33 W	5%	Axial	Yageo	CFA020710K	YES	NO
R10	1	Resistor	33 kΩ, 0.33 W	5%	Axial	Vishay	CFA020733K	YES	NO
R11	1	Resistor	47 kΩ, 0.33 W	5%	Axial	Vishay	CFA020747K	YES	NO
R12	1	Resistor	27 kΩ, 0.33 W	5%	Axial	Vishay	CFA020727K	YES	NO
R13	1	Resistor	15 kΩ, 0.33 W	5%	Axial	Vishay	CFA020715K	YES	NO
R14	1	Resistor	390 kΩ, 0.33 W	5%	Axial	Vishay	CFA0207390K	YES	NO
R15	1	Resistor	22 kΩ, 0.33 W	5%	Axial	Vishay	CFA020722K	YES	NO
R16	1	Resistor	68 kΩ, 0.33 W	5%	Axial	Vishay	CFA020768K	YES	NO
Q1,Q2	2	Power MOSFET N-Channel	8 A, 500 V	NA	TO220	International Rectifier	IRF840LC	YES	NO
Q3,Q4	2	NPN transistor	100 mA, 45 V	NA	TO-92	ON Semiconductor	BC547BG	YES	YES
B1,J1	3	Connector	2"	NA	5.08mm	Weidmuller	PM5.08/2/90 (1760510000)	YES	NO
J2	1	Jumper Resistor	0 Ω, 0.25 W	NA	Axial	Yageo	ZOR-25-B-52	YES	NO