

Bill of Materials for NCP5425SOEVB Demonstration Board

ON Semiconductor



1/26/2004

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C30*,31*	2	Ceramic Capacitor	0.01 μ F, 25 V	\pm 10%	805	Vishay	VJ0805Y103KXXAT00	Yes	No
C13	1	Ceramic Capacitor	0.047 μ F, 25 V	\pm 10%	805	Vishay	VJ0805Y473KXXAT00	Yes	No
C14,23	2	Ceramic Capacitor	0.1 μ F, 25 V	\pm 10%	805	Vishay	VJ0805Y104KXXAT00	Yes	No
C16	1	Ceramic Capacitor	0.22 μ F, 25 V	\pm 10%	1206	Vishay	VJ1206Y224KXXAT00	Yes	No
C8	1	Ceramic Capacitor	0.22 μ F, 25 V	\pm 10%	805	Vishay	VJ0805Y224KXXAT00	Yes	No
C10,11	2	Ceramic Capacitor	1.0 μ F, 16 V	\pm 20%	805	TDK	C2012X5R1C105MT	Yes	No
C19,22,26,28	4	Ceramic Capacitor	10 μ F, 16 V	\pm 20%	1206	TDK	C3225X7R1C106MT	Yes	No
C27*,32*	2	Ceramic Capacitor	10 μ F, 16 V	\pm 20%	1,206	TDK	C3225X7R1C106MT	Yes	No
C3,4,7,9	4	Through Hole Cap	1800 μ F, 6.3 V	\pm 20%	TH-F	Rubycon	6.3 MBZ1800M (10X16)	Yes	No
C12*,20*	2	Through Hole Cap	1800 μ F, 6.3 V	\pm 20%	TH-F	Rubycon	6.3 MBZ1800M (10X16)	Yes	No
C1,2,6,17	4	Through Hole Cap	1500 μ F, 16 V	\pm 20%	TH-F	Rubycon	16 MBZ1500M (10X20)	Yes	No
C5*,18*	2	Through Hole Cap	1500 μ F, 16 V	\pm 20%	TH-F	Rubycon	16 MBZ1500M (10X20)	Yes	No
C29*	1	Ceramic Capacitor	Open	-	805	-	-	Yes	No
R5,11,23	3	Resistor	0 Ω , 1/8 W	\pm 1%	805	Vishay	CRCW0805000Z	Yes	No
R26*,27*	2	Resistor	10 Ω , 1/8 W	\pm 1%	805	Vishay	CRCW080510R0F	Yes	No
R3,15	2	Resistor	523 Ω , 1/8 W	\pm 1%	805	Vishay	CRCW0805523RF	Yes	No
R22	1	Resistor	7.5 k Ω , 1/8 W	\pm 1%	805	Vishay	CRCW08057K50F	Yes	No
R1,4,16	3	Resistor	10 k Ω , 1/8 W	\pm 1%	805	Vishay	CRCW080510K0F	Yes	No
R17,20	2	Resistor	11 k Ω , 1/8 W	\pm 1%	805	Vishay	CRCW080511K0F	Yes	No
R6*	1	Resistor	20 k Ω , 1/8 W	\pm 1%	805	Vishay	CRCW080520K0F	Yes	No
R12	1	Resistor	30.1 k Ω , 1/8 W	\pm 1%	805	Vishay	CRCW080530K1F	Yes	No
R8*,19*	2	Resistor	Open	-	805	-	-	Yes	No
L1 & 2	2	SER-1590	1.0 μ H, 1.0 m Ω	\pm 20%	Inductor	Coilcraft	SER1590-102MX	Yes	No
D1	1	Dual Diode	70 V, 215 mA	-	SOT-23	ON Semiconductor	BAV99LT1	No	No
D4*	1	Zener Diode	2.4 - 91 V, 225 mW	-	SOT-23	ON Semiconductor	MMBZ5240BLT1	No	No
D2,3	2	Schottky Diode	20 V, 1 A	-	PowerMite	ON Semiconductor	MBRM120ET3	No	No
U1	1	Dual Synchronous PWM	300 kHz	-	TSSOP-20	ON Semiconductor	NCP5425	No	No
Q1,Q3	2	N Ch MOSFET	62 A, 25 V	-	D-Pak	ON Semiconductor	NTD60N02R	No	No
Q2,Q4	2	N Ch MOSFET	110 A, 24 V	-	D-Pak	ON Semiconductor	NTD110N02R	No	No
Q5	1	N Ch MOSFET	300 mA, 20 V	-	SOT-323	ON Semiconductor	MMBF2201NT1	No	No

*Not Used