



ON Semiconductor

Bill of Material for the NCL30076LED1GEVB

Designator	Quantity	Description	Value	Footprint	Manufacturer	Part Number
U1	1	QR Buck Controller	NCL30076	SOIC-8	ON Semiconductor	NCL30076
CIN	1	Electrolytic Capacitor	450V / 10uF	10*16mm	Samyoung	NHA series
LBUCK	1	Inductor	1.6mH (0.1pi *12 90turns)	EFD25/13/9 10pin Bobbin	TDK Electronics Inc	B66422W1010D001
CLED	1	Electrolytic Capacitor	450V / 22uF	12.5*20mm	Samyoung	NFC series
DBUCK	1	Ultra-Fast Recovery Rectifier	600V / 1A	SMA	ON Semiconductor	ES1J
QBUCK	1	N-Channel MOSFET	600V 3.4A, 2.5ohm	DPAK-3	ON Semiconductor	FDD4N60NZ
RFF1, RFF2	2	Resistor Axial (±5%)	30Mohm	Axial	Stackpole Electronics Inc	MG14JT30M0
RCS1	1	Resistor SMD (±1%)	1.3ohm	3216F	Yageo	
RCS2	1	Resistor SMD (±1%)	0.75ohm	3216F	Yageo	
RLED1, RLED2 RLED3	3	Resistor SMD (±1%)	110kohm	3216	Yageo	
RZCD1.1, RZCD1.2	2	Resistor SMD (±1%)	1.3Mohm	2012	Yageo	
RZCD2	1	Resistor SMD (±1%)	1.5kohm	2012	Yageo	
RFB	0	N.C				
RDIM	1	Resistor SMD (±1%)	0ohm	2012	Yageo	
RDRV	1	Resistor SMD (±1%)	10ohm	2012	Yageo	
RGS	1	Resistor SMD (±1%)	100kohm	2012	Yageo	
DDRV	1	Small Signal Diode	100V / 0.2A	SOD80	ON Semiconductor	LL4148
CVDD1	1	MLCC X7R capacitor (±10%)	50V / 10uF	3216	TDK	
CVDD2	1	MLCC X7R capacitor (±10%)	100nF	2012	TDK	
CBIAS	1	MLCC X7R capacitor (±10%)	1nF	2012	TDK	
CFB	1	MLCC X7R capacitor (±10%)	10nF	2012	TDK	
CFB1	0	N.C				
CDIM	1	MLCC X7R capacitor (±10%)	10nF	2012	TDK	
J1,J2,J3	3	Jumper Wire	Short	Axial	ANY	
JP1	1	Jumper Wire (For Inductor Current measurement)	Short	Axial	ANY	
CON1, CON2	2	IN / OUT Connector	4Pin	Pitch 3.5mm	CUI Devices	TBL002A-350-04GY-2GY
PCB	1	FR-4, 1.6T, 91mm (L) x 33mm (W)	Single Layer PCB			