


Bill of Materials		MCP1633 SEPIC LED DRIVER DEMO BOARD				
Document Number:	02-10900					
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Part Number:	ADM01002					
Revision:	2					
Engineer:	Marius Dracea					
Drawn By:	Marius Dracea					
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Quantity	Designator	Description_	Manufacturer 1	Manufacturer Part Number 1	Supplier 1	Supplier Part Number 1
2	C1, C6	CAP CER 1uF 50V 10% X7R SMD 0805	Murata	GRM21BR71H105KA12L	Digi-Key	490-4736-1-ND
5	C2, C3, C7, C8, C9	CAP CER 10uF 50V 20% X7S SMD 1210	TDK	C3225X7S1H106M250AB	Digi-Key	445-4537-1-ND
1	C4	CAP CER 4.7uF 25V 10% X7R SMD 0805	TDK	C2012X7R1E475K125AB	Digi-Key	445-5972-1-ND
2	C5, C17	CAP CER 1uF 25V 10% X7R SMD 0805	Kyocera AVX	08053C105K4Z2A	Digi-Key	478-6357-2-ND
2	C10, C13	CAP CER 10000pF 50V 20% X7R SMD 0603	Kyocera AVX	06035C103KAT2A4K	Digi-Key	478-1227-1-ND
2	C11, C16	CAP CER 1000pF 50V 20% X7R SMD 0603	TDK	C1608X7R2A102K080AA	Digi-Key	445-1298-1-ND
1	C12	CAP CER 33pF 50V 5% C0G SMD 0603	Murata	GRM1885C1H330JA01D	Digi-Key	490-1415-2-ND
1	C14	CAP CER 47pF 50V 5% NP0 SMD 0603	KEMET	C0603C470J5GACTU	Digi-Key	399-1056-1-ND
2	C15, C20	CAP CER 0.1uF 16V 10% X7R SMD 0603	Taiyo Yuden	EMK107B7104KA-T	Digi-Key	587-1240-1-ND
1	C18	CAP CER 100pF 50V 5% NP0 SMD 0603	Cal-Chip	GMC10CG101J50NTLF	Cal-Chip	GMC10CG101J50NTLF
1	C19	CAP ALUM 33uF 20% 50V SMD D8	Nichicon	UWT1H330MCL1GS	Digi-Key	493-2224-1-ND
1	D1	DIO SCTKY RBR2LAM60BTFTTR 60V 2A SMD SOD-128 AEC-Q101	Rohm	RBR2LAM60BTFTTR	Digi-Key	RBR2LAM60BTFTCT-ND
1	D3	DIO LED RED 1.8V 40mA 10mcd Clear SMD 0603	Vishay Lite-On	LTST-C190KRKT	Digi-Key	160-1436-1-ND
2	J1, J2	CON TERMINAL 2.54mm 1x2 Female 20-30AWG 6A TH R/A	Phoenix Contact	1725656	Digi-Key	277-1273-ND
3	J3, J6, J7	CON HDR-2.54 Male 1x2 Tin 5.84MH TH VERT	Sullins	PREC002SAAN-RC	Digi-Key	S1012EC-02-ND
1	J4	CON HDR-2.54 Male 1x3 Tin 5.84MH TH VERT	Samtec	TSW-103-07-T-S	Digi-Key	SAM1035-03-ND
1	J5	CON HDR-2.54 Male 1x6 Tin 5.84MH TH VERT	Sullins	PEC06SAAN	Digi-Key	S1012E-06-ND
1	L1	INDUCTOR 22uH 1.76A 20% SMD L12.3W12.3H6	Coilcraft	MSD1260-223MLB	Mouser	994-MSD1260-223MLB
5	LD1, LD2, LD3, LD4, LD5	DIO LED WHITE WARM 3.05V 350mA CLEAR SMD 3535 XLAMP	Cree	XPEWHT-L1-0000-00AE7	Digi-Key	XPEWHT-L1-0000-00AE7CT-ND
1	Q1	TRANS FET N-CH SQ7414AENW 60V 18A 0.028R 62W TDSO8-AEC-Q101	Vishay	SQ7414AENW-T1_GE3	Digi-Key	SQ7414AENW-T1_GE3-ND
1	Q2	TRANS FET N-CH SI4850EY-T1-E3 60V 6A 1.7W SOIC-8	Vishay	SI4850EY-T1-E3	Digi-Key	SI4850EY-T1-E3CT-ND
3	R1, R2, R10	RES TF 100k 1% 1/8W SMD 0603	Vishay Beyschlag	MCT06030C1003FP500	Digi-Key	MCT0603-100K-CFTR-ND
1	R4	RES TKF 4.7R 1% 1/10W SMD 0603	Panasonic	ERJ-3RQF4R7V	Digi-Key	P4.7AJCT-ND
1	R5	RES TKF 240k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF2403V	Digi-Key	P240KHCT-ND
5	R7, R13, R14, R20, R21	RES TKF 1k 1% 1/10W SMD 0603	Panasonic	ERJ3EKF1001V	Digi-Key	P1.00KHCT-ND
1	R9	RES TKF 0.1R 1% 1W SMD 1206	Panasonic	ERJ-8BWF100V	Digi-Key	P.10AUCT-ND
3	R11, R22, R23	RES TKF 20k 1% 1/10W SMD 0603	Panasonic	ERJ3EKF2002V	Digi-Key	P20.0KHCT-ND
1	R12	RES TF 10k 1% 1/16W SMD 0603	TE Connectivity Neohm	CPF0603F10KC1	Digi-Key	A102203CT-ND
1	R15	RES TKF 0.22R 1% 1/4W SMD 1206	Panasonic	ERJ-8RQFR22V	Digi-Key	P.22RTR-ND
1	R16	RES TKF 51k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF5102V	Digi-Key	P51.0KHCT-ND
1	R17	RES TKF 4.02k 1% 1/10W SMD 0603	Stackpole Electronics	RMCF0603FT4K02	Digi-Key	RMCF0603FT4K02CT-ND
1	R18	RES TKF 220R 1% 1/10W SMD 0603	Yageo Phycomp	RC0603FR-07220RL	Digi-Key	311-220HRCT-ND
1	R19	RES TKF 10R 1% 1/10W SMD 0603	Panasonic	ERJ3EKF10R0V	Digi-Key	P10.0HTR-ND
1	R24	RES TKF 24k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF2402V	Digi-Key	P24.0KHCT-ND
1	R25	RES TRIMMER Cermet 10k 10% 500mW TH 3386F	Bourns	3386F-1-103T	Digi-Key	3386F-1-103T-ND
1	R26	RES TKF 1k 5% 1/10W SMD 0603	Panasonic	ERJ-3GEYJ102V	Digi-Key	P1.0KGCT-ND
1	R27	RES TKF 4.7k 1% 1/16W SMD 0603	Multicomp	MC0063W060314K7	Newark	58K4608
5	TP1, TP2, TP3, TP6, TP9	MISC. TEST POINT MULTI PURPOSE MINI BLACK	Terminal	5001	Digi-Key	36-5001-ND
Microchip Parts listed below						
1	U1	MCHP ANALOG LDO 5V MCP1790-5002E/DB SOT-223-3	Microchip	MCP1790T-5002E/DB	Microchip	MCP1790T-5002E/DB
1	U2	MCHP ANALOG PWM CONTROLLER 2.2MHz MCP1633-E/MG QFN-16	Microchip Technology	MCP1633-E/MG	Microchip Tech	MCP1633-E/MG
1	U3	MCHP MCU 8-BIT 32MHz 3.5k 128B PIC12F1822T-E/SN SOIC-8	Microchip	PIC12F1822T-E/SN	Microchip	PIC12F1822T-E/SN
1	U4	MCHP ANALOG TEMPERATURE SENSOR -40C to +150C MCP9700AT-E/TT SOT-23-3	Microchip	MCP9700AT-E/TT	Microchip	MCP9700AT-E/TT
Mechanical Parts to be added in the package						
2	JP1, JP2	MECH HW JUMPER 2.54mm 1x2 w/ Handle	TE Connectivity	880584-4	Digi-Key	A122487-ND
4	PAD1, PAD2, PAD3, PAD4	MECH HW RUBBER PAD CYLINDRICAL D7.9 H5.3 BLACK	3M	SJ61A11	Digi-Key	SJ5747-0-ND