

# Bill of Materials

# ADM00578

Board Number: MCP19114 Flyback Standalone Evaluation Board

Revision: 1

Engineer: Joseph Depew

Drawn By: Joseph Depew



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Quantity	Designator	Description_	Manufacturer	Manufacturer Part Number	Distributor	Distributor Part Number
3	Q1, Q3, Q4	N-Channel MOSFET, 100V	Vishay	SIS890DN-T1-GE3	Digi-Key	SIS890DN-T1-GE3DKR-ND
1	Q2	MOSFET N-CH 200V 15.2A 8TSDSON	Infineon Technologies	BSZ900N20NS3 G	Digi-Key	BSZ900N20NS3GCT-ND
1	D1A,D1B	DIODE SW DBL 200V 225mA SOT143B	NXP Semiconductors	BAV23,215	Digi-Key	568-1620-1-ND
1	C17	Capacitor, Ceramic, 50V, COG	Murata	GCM1885C1H221JA16D	Digi-Key	490-4963-1-ND
1	C18	Capacitor, Ceramic, 50V, COG	Murata	GCM1885C1H102JA16D	Digi-Key	490-4768-1-ND
1	C19	CAP CER 10000PF 50V 10% X7R 0603	TDK	C1608X7R1H103K080AA	Digi-Key	445-1311-1-ND
1	C21	Capacitor, Ceramic, 50V, X7R, Auto	TDK	CGA3E2X7R1H104K	Digi-Key	445-5666-1-ND
2	C12, C20	Capacitor, Ceramic, 25V, X7R, Auto	TDK	CGA3E1X7R1E105K	Digi-Key	445-6931-1-ND
2	C15,C16	Capacitor, Ceramic, 16V, X5R, Auto	TDK	C1608X5R1C475K	Digi-Key	445-7478-1-ND
1	C3	Capacitor, Ceramic, 100V, X7R, Auto	TDK	CGA5L2X7R2A105M/SOFT	Digi-Key	445-7974-1-ND
2	C6, C11	Capacitor, Ceramic, 50V, X7R, Auto	TDK	CGA5L3X7R1H225K	Digi-Key	445-6986-1-ND
1	C8	Capacitor, Ceramic, 50V, X7R, Auto	TDK	C3216X7R1H335K160AC	Digi-Key	445-5990-1-ND
1	C7	Capacitor, Ceramic, 50V, X7R, Auto	TDK	C3216X7R1H475K160AC	Digi-Key	445-8032-1-ND
2	C4, C5	Capacitor, Ceramic, 50V, X7R, Auto	Taiyo Yuden	UMK325AB7106MM-T	Digi-Key	587-3166-1-ND
6	R3,R5,R15,R16,R17,R21	RES 0.0 OHM 1/10W 0603 SMD	Panasonic-ECG	ERJ-3GEY0R00V	Digi-Key	P0.0GCT-ND
1	R4	Resistor, 1 Watt, 1%	Susumu	PRL1632-R050-F-T1	Digi-Key	PRL1632.050FCT-ND
1	R6	Resistor, 1 Watt, 1%	Rohm Semiconductor	LTR18EZPFLR200	Digi-Key	RHM1222CT-ND
1	R19	RES 10.0 OHM 1/10W 1% 0603 SMD	Panasonic-ECG	ERJ-3EKF10R0V	Digi-Key	P10.0HCT-ND
1	R23	Resistor, 1/10th Watt, 1%	Panasonic-ECG	ERJ-3EKF1002V	Digi-Key	P10.0KHCT-ND
1	R18	Resistor, 1/10th Watt, 1%	Panasonic-ECG	ERJ-3EKF4750V	Digi-Key	P475HCT-ND
1	R11	Resistor, 1/10th Watt, 1%	Panasonic-ECG	ERJ-3EKF1021V	Digi-Key	P1.02KHCT-ND
1	R9	Resistor, 1/10th Watt, 1%	Panasonic-ECG	ERJ-3EKF4021V	Digi-Key	P4.02KHCT-ND
2	R1,R2	Resistor, 1/10th Watt, 1%	Panasonic-ECG	ERJ-3EKF3921V	Digi-Key	P3.92KHCT-ND
4	R10,R12,R13,R14	Resistor, 1/10th Watt, 1%	Panasonic-ECG	ERJ-3EKF1002V	Digi-Key	P10.0KHCT-ND
1	R7	Resistor, 1/10th Watt, 1%	Panasonic-ECG	ERJ-3EKF1003V	Digi-Key	P100KHCT-ND
1	T1	Uni-Cuk Transformer 1:2	WURTH	750341878	Digi-Key	TBD

1	D2	LED, Super Red, Clear	Lite-On	LTST-C190KRKT	Digi-Key	160-1436-1-ND
1	D3	TVS DIODE 90VWM 146VC SMA Uni-Dir	Littelfuse Inc.	SMAJ90A	Digi-Key	SMAJ90ALFCT-ND
2	J3,J5	Header, 6 Pos., 2.54mm, SMT, Vert., Gold	Samtec	TSM-106-01-L-SV	SamTec	TSM-106-01-L-SV
6	VOUT, LSW1, LSW2	TEST POINT PC COMPACT SMT	Keystone Electronics	5016	Digi-Key	5016K-ND
4	4-40 STANDOFF 1/4"	HEX STANDOFF 4-40 ALUMINUM 1/4"	Keystone Electronics	2201	Digi-Key	2201K-ND
4	4-40 SCREW	MACHINE SCREW 4-40 1/4"	B&F FASTENERS	PMSSS 440 0025 PH	Digi-Key	H703-ND

**Microchip Parts listed below**

1	U1	Digitally Enhanced PWM Power Analog Controller	Microchip Technology	MCP19114-E/MJ	Digi-Key	MCP19114-E/MJ
1	U2	Charge Pump, Doubler	Microchip Technology	TC1240A-E/CH	Digi-Key	TC1240A-E/CH

**Mechanical Parts to be added in the package**


**Do Not Populate Parts listed below**

2	C13, C14 DNP					
4	C9,C10,C1,C2 DNP					
1	R22 DNP	RES 10.0 OHM 1/10W 1% 0603 SMD				
1	R8 DNP					

Approved	Notes