PMP6021						
REFERENCE	QTY	VALUE	DESCRIPTION	SIZE	MFGR	MFGR'S P/N
DESIGNATOR	QII	VALUE	DESCINI TION	OIZE		IMI GICOTAIC
ADIM1, GND1	2	SMT	Test Point, Miniature, SMT		Keystone	5015
<u>C1</u>	1	0.33uF	CAP, Film, 0.33 μF, 630 V, +/- 20%, TH	B32922_14.5mm	EPCOS Inc	B32922C3334M
C2 C3	1	0.1uF	CAP, Film, 0.1 µF, 305 V, +/- 20%, TH CAP, CERM, 680 pF, 200 V, +/- 10%, X7R, 0805	13x6x12mm 0805	EPCOS Inc	B32921C3104M CC0805KRX7RABB681
C4	1 1	680pF 47uF	CAP, CERM, 680 pr, 200 V, +/- 10%, X/R, 0805 CAP, AL, 47uF, 200V, +/-20%, 0.380955 ohm, TH	12.5x20	Yageo America Panasonic	EEUED2D470
C5	1	0.1uF	CAP, CERM, 0.1uF, 100V, +/-10%, X7R, 0805	0805	Samsung	CL21B104KCFSFNE
C6	1	10uF	CAP, CERM, 10uF, 25V, +/-10%, X7R, 1206	1206	MuRata	GRM31CR71E106KA12L
C7	1	100uF	CAP, AL, 100uF, 100V, +/-20%, TH	10x20mm	Panasonic	ECA-2AHG101
C8, C11	2	1uF	CAP, CERM, 1uF, 16V, +/-10%, X7R, 0603	0603	TDK	C1608X7R1C105K
C9, C14	2	0.1uF	CAP, CERM, 0.1uF, 16V, +/-5%, X7R, 0603	0603	Kemet	C0603C104J4RACTU
C10	1	220µF	CAP, Alum, 220uF, 50V, +/-20%, Radial	Radial, Can	Nichicon	UPW1H221MPD
C12 C15	1	470μF 1000pF	CAP, Alum, 470uF, 25V, +/-20%, Radial CAP, CERM, 1000pF, 50V, +/-10%, X7R, 0603	Radial, Can 0603	Nichicon MuRata	UPW1E471MPD GRM188R71H102KA01D
C16	1	4.7uF	CAP, CERM, 1000pF, 30V, 47-10%, X7R, 0603 CAP, CERM, 4.7uF, 16V, +/-10%, X5R, 0603	0603	MuRata	GRM188R61C475KAAJ
C17	1	10µF	CAP, CERM, 10uF, 6.3V, X5R, 20%, 0603	0603 (1608 Metric)	Taiyo Yuden	JMK107ABJ106MAHT
D1, D25, D34,	4	200V	Diode, Switching, 200V, 0.2A, SOT-23	SOT-23	Diodes Inc.	BAS21-7-F
D39			<b>g</b> , , , ,			
D2, D3, D4, D5,	50		LED SMD NEUTRAL WHITE 4000K	2-SMD, No Lead	Seoul Semiconductor Inc	STW8C2SA-J19K24-EA
D7, D8, D9, D10,						
D12, D13, D14,						
D15, D17, D18,						
D19, D20, D22, D23, D26, D27,						
D29, D30, D31,						
D32, D33, D35,						
D37, D38, D40,						
D41, D42, D43,						
D44, D45, D46,						
D47, D48, D49,						
D50, D51, D52,						
D53, D54, D55,						
D56, D57, D58, D59, D60, D61						
D6	1		Diode, Switching-Bridge, 600V, 0.8A, MiniDIP	MiniDIP	Diodes Inc.	HD06-T
D11	1	100V	Diode, Ultrafast, 100V, 0.15A, SOD-123	SOD-123	Diodes Inc.	1N4148W-7-F
D16	1	12V	Diode, Zener, 12V, 300mW, SOT-23	SOT-23	Diodes Inc.	AZ23C12-7-F
D21	11	100V	Diode, P-N, 100 V, 0.2 A, SOT-23	SOT-23	Fairchild Semiconductor	MMBD914
H1, H2, H3, H4	4	0001/	MACHINE SCREW PAN PHILLIPS 4-40	T000 0	B&F Fastener Supply	PMS 440 0031 PH
Q1	1	200V	MOSFET, N-CH, 200V, 0.6A, TSOP-6	TSOP-6	International Rectifier	IRF5801TRPBF
Q2 Q3	1	0.25V 600V	Transistor, NPN, 140V, 0.6A, SOT-23 MOSFET, N-CH, 600V, 2A, DPAK	SOT-23 DPAK	ON Semiconductor AOS	MMBT5550LT1G AOD2N60
R1	1	1.00k	RES, 1.00k ohm, 1%, 0.125W, 0805	0805	Vishay-Dale	CRCW08051K00FKEA
R2, R12, R22,	4	1.00	RES, 1.00 ohm, 1%, 0.125W, 0805	0805	Stackpole Electronics Inc	RMCF0805FT1R00
R27						
R3, R4, R7, R32	4	1.6k	RES, 1.6k ohm, 5%, 1W, 2512	2512	Vishay-Dale	CRCW25121K60JNEG
R5	1	1.00Meg	RES, 1.00Meg ohm, 1%, 0.25W, 1206	1206	Vishay-Dale	CRCW12061M00FKEA
R6	1	10.0k	RES, 10.0k ohm, 1%, 0.125W, 0805	0805	Vishay-Dale	CRCW080510K0FKEA
R8, R10	2	2.00Meg	RES, 2.00Meg ohm, 1%, 0.125W, 0805	0805	Vishay-Dale	CRCW08052M00FKEA
R9 R11, R18, R24,	1 4	1.54Meg 806k	RES, 1.54Meg ohm, 1%, 0.25W, 1206 RES, 806k ohm, 1%, 0.25W, 1206	1206 1206	Vishay-Dale Vishay-Dale	CRCW12061M54FKEA CRCW1206806KFKEA
R11, R16, R24,	4	OUUK	11LO, GOOK OHHI, 170, U.20VV, 1200	1200	visilay-Dale	ONOW IZUUUURFREA
R13, R15	2	2.00Meg	RES, 2.00Meg ohm, 1%, 0.25W, 1206	1206	Vishay-Dale	CRCW12062M00FKEA
R14	1	1.47Meg	RES, 1.47Meg ohm, 1%, 0.125W, 0805	0805	Vishay-Dale	CRCW08051M47FKEA
R16	1	100	RES, 100 ohm, 1%, 0.1W, 0603	0603	Vishay-Dale	CRCW0603100RFKEA
R17	1	200k	RES, 200k ohm, 1%, 0.1W, 0603	0603	Vishay-Dale	CRCW0603200KFKEA
R19, R20	2	34.8	RES, 34.8, 1%, 0.25 W, 1206	1206	Vishay-Dale	CRCW120634R8FKEA
R23	1	1.37Meg 30.1k	RES, 1.37Meg ohm, 1%, 0.125W, 0805	0805	Vishay-Dale	CRCW08051M37FKEA
R25, R26 R28	2	30.1k 1.18Meg	RES, 30.1k ohm, 1%, 0.1W, 0603 RES, 1.18Meg ohm, 1%, 0.125W, 0805	0603 0805	Vishay-Dale Vishay-Dale	CRCW060330K1FKEA CRCW08051M18FKEA
R29	1	54.9k	RES, 54.9k ohm, 1%, 0.1W, 0603	0603	Vishay-Dale Vishay-Dale	CRCW06031W18FKEA
R31	1	121k	RES, 121k ohm, 1%, 0.1W, 0603	0603	Vishay-Dale	CRCW060334131 KEX
RF1	1	33	RES 33 OHM 2W 10% AXIAL	Axial	TT Electronics/Welwyn	EMC2-33RKI
RT1	1	470k ohm	Thermistor NTC, 470k ohm, 5%, 0603	0603	MuRata	NCP18WM474J03RB
RV1	1	430V	Metal Oxide Varistor, TH	9.00 mm Diameter	Bourns	MOV-07D431K
U1, U2, U3, U4	4		Switch Controlled Direct Drive Switch for Offline LED Drivers, DBV0005A	DBV0005A	Texas Instruments	TPS92411PDBV
U5	1		Switch Controlled Direct Drive Linear Controller for Offline LED Drivers, D0013A	D0013A	Texas Instruments	TPS92410D

Offline LED Drivers, D0013A

## IMPORTANT NOTICE FOR TI REFERENCE DESIGNS

Texas Instruments Incorporated ("TI") reference designs are solely intended to assist designers ("Buyers") who are developing systems that incorporate TI semiconductor products (also referred to herein as "components"). Buyer understands and agrees that Buyer remains responsible for using its independent analysis, evaluation and judgment in designing Buyer's systems and products.

TI reference designs have been created using standard laboratory conditions and engineering practices. TI has not conducted any testing other than that specifically described in the published documentation for a particular reference design. TI may make corrections, enhancements, improvements and other changes to its reference designs.

Buyers are authorized to use TI reference designs with the TI component(s) identified in each particular reference design and to modify the reference design in the development of their end products. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER TI INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT, IS GRANTED HEREIN, including but not limited to any patent right, copyright, mask work right, or other intellectual property right relating to any combination, machine, or process in which TI components or services are used. Information published by TI regarding third-party products or services does not constitute a license to use such products or services, or a warranty or endorsement thereof. Use of such information may require a license from a third party under the patents or other intellectual property of the third party, or a license from TI under the patents or other intellectual property of TI.

TI REFERENCE DESIGNS ARE PROVIDED "AS IS". TI MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE REFERENCE DESIGNS OR USE OF THE REFERENCE DESIGNS, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. TI DISCLAIMS ANY WARRANTY OF TITLE AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUIET POSSESSION, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS WITH REGARD TO TI REFERENCE DESIGNS OR USE THEREOF. TI SHALL NOT BE LIABLE FOR AND SHALL NOT DEFEND OR INDEMNIFY BUYERS AGAINST ANY THIRD PARTY INFRINGEMENT CLAIM THAT RELATES TO OR IS BASED ON A COMBINATION OF COMPONENTS PROVIDED IN A TI REFERENCE DESIGN. IN NO EVENT SHALL TI BE LIABLE FOR ANY ACTUAL, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR INDIRECT DAMAGES, HOWEVER CAUSED, ON ANY THEORY OF LIABILITY AND WHETHER OR NOT TI HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, ARISING IN ANY WAY OUT OF TI REFERENCE DESIGNS OR BUYER'S USE OF TI REFERENCE DESIGNS.

TI reserves the right to make corrections, enhancements, improvements and other changes to its semiconductor products and services per JESD46, latest issue, and to discontinue any product or service per JESD48, latest issue. Buyers should obtain the latest relevant information before placing orders and should verify that such information is current and complete. All semiconductor products are sold subject to TI's terms and conditions of sale supplied at the time of order acknowledgment.

TI warrants performance of its components to the specifications applicable at the time of sale, in accordance with the warranty in TI's terms and conditions of sale of semiconductor products. Testing and other quality control techniques for TI components are used to the extent TI deems necessary to support this warranty. Except where mandated by applicable law, testing of all parameters of each component is not necessarily performed.

TI assumes no liability for applications assistance or the design of Buyers' products. Buyers are responsible for their products and applications using TI components. To minimize the risks associated with Buyers' products and applications, Buyers should provide adequate design and operating safeguards.

Reproduction of significant portions of TI information in TI data books, data sheets or reference designs is permissible only if reproduction is without alteration and is accompanied by all associated warranties, conditions, limitations, and notices. TI is not responsible or liable for such altered documentation. Information of third parties may be subject to additional restrictions.

Buyer acknowledges and agrees that it is solely responsible for compliance with all legal, regulatory and safety-related requirements concerning its products, and any use of TI components in its applications, notwithstanding any applications-related information or support that may be provided by TI. Buyer represents and agrees that it has all the necessary expertise to create and implement safeguards that anticipate dangerous failures, monitor failures and their consequences, lessen the likelihood of dangerous failures and take appropriate remedial actions. Buyer will fully indemnify TI and its representatives against any damages arising out of the use of any TI components in Buyer's safety-critical applications.

In some cases, TI components may be promoted specifically to facilitate safety-related applications. With such components, TI's goal is to help enable customers to design and create their own end-product solutions that meet applicable functional safety standards and requirements. Nonetheless, such components are subject to these terms.

No TI components are authorized for use in FDA Class III (or similar life-critical medical equipment) unless authorized officers of the parties have executed an agreement specifically governing such use.

Only those TI components that TI has specifically designated as military grade or "enhanced plastic" are designed and intended for use in military/aerospace applications or environments. Buyer acknowledges and agrees that any military or aerospace use of TI components that have *not* been so designated is solely at Buyer's risk, and Buyer is solely responsible for compliance with all legal and regulatory requirements in connection with such use.

TI has specifically designated certain components as meeting ISO/TS16949 requirements, mainly for automotive use. In any case of use of non-designated products, TI will not be responsible for any failure to meet ISO/TS16949.