

Qty	Reference	Value	Description	Size	Part Number	MFR	Area
2	C10 C14	0.1uF	Capacitor, Ceramic, 50V, X7R, 10%	603	Std	Std	5650
1	C11	100pF	Capacitor, Ceramic, 200V, 10%	603	Std	Std	5650
1	C16	150pF	Capacitor, Ceramic, 50V, C0G, 10%	603	Std	Std	5650
1	C15	1uF	Capacitor, Ceramic, 16V, X7R, 10%	603	Std	Std	5650
1	C13	220pF	Capacitor, Ceramic, 50V, C0G, 10%	603	Std	Std	5650
1	C18	3300pF	Capacitor, Ceramic, 50V, C0G, 10%	603	Std	Std	5650
1	C20	4700pF	Capacitor, Ceramic, 50V, X7R, 10%	603	Std	Std	5650
1	C17	47pF	Capacitor, Ceramic, 50V, C0G, 10%	603	Std	Std	5650
2	C1 C9	DNP	Capacitor, Ceramic, 100V, C0G, 10%	603	Std	Std	5650
1	C19	DNP	Capacitor, Ceramic, 50V, X7R, 10%	603	Std	Std	5650
1	C6	0.1uF	Capacitor, Ceramic, 100V, X7R, 10%	805	Std	Std	10560
1	C21	4.7uF	Capacitor, Ceramic, 16V, X5R, 20%	805	Std	Std	10560
3	C2 C7-8	10uF	Capacitor, Ceramic, 25V, X5R, 20%	1206	C3216X5R1E106M	TDK	15390
2	C4-5	1uF	Capacitor, Ceramic, 100V, X7R, 20%	1206	C3216X7R2A105M	TDK	15390
1	C12	4700pF	Capacitor, Ceramic, 2KV, X7R, 10%	1812	Std	Std	43,360
1	C3	220uF	Capacitor, Aluminum, 16Vdc, ±20%	Code D8	EEEFK1-C221XP	Panasonic	110200
1	C22	33uF	Capacitor, Aluminum Electrolytic, 100V	0.315 inch	EEEFK2A330P	Panasonic	94,025
1	D4	BAV99	Diode, Dual Ultra Fast, Series, 200-mA, 70-V	SOT23	BAV99	Fairchild	14105
2	D1-2	MBRS260	Diode, Schottky, 2A, 60V	SMB	MBRS260LT3	On Semi	95000
1	D5	13V	Diode, Zener, 500mW, 13V	SOD123	MMSZ13ET1	On Semi	21500
1	D3	MURA120	Diode, Rectifier, 1A, 200V	SMA	MURA120	ON Semi	29520
1	D6	10V	Diode, Zener, 10-V	SOT23	BZX84C10LT1	ON Semiconductor	14105
1	D100	15V	Diode, Zener, 15-V	SOT23	BZX84C15LT1	ON Semiconductor	14105
1	D101	5.1V	Diode, Zener, 5.1-V	SOT23	BZX84C5VLT1	ON Semiconductor	14105
1	L1	1uH	Inductor, SMT, 2.5A, 55milliohm	0.130 x 0.130 inch	LPS3314-102ML	Coilcraft	42800
1	L2	DNP	Inductor, SMT, yyA, zzmilliohm	0.130 x 0.130 inch	DNP	Coilcraft	42800
1	U2	TCMT1107	IC, Photocoupler, 80-160% CTR	MF4	TCMT1107	Vishay	47740
3	R8 R18 R23	0	Resistor, Chip, 1/16W, 1%	603	Std	Std	5,650
1	R24	100	Resistor, Chip, 1/16W, 1%	603	Std	Std	5,650
4	R10 R13-14 R21	1K	Resistor, Chip, 1/16W, 1%	603	Std	Std	5,650
1	R16	20K	Resistor, Chip, 1/16W, 1%	603	Std	Std	5,650
1	R12	2K	Resistor, Chip, 1/16W, 1%	603	Std	Std	5,650
1	R17	30.1K	Resistor, Chip, 1/16W, 1%	603	Std	Std	5,650
1	R11	49.9	Resistor, Chip, 1/16W, 1%	603	Std	Std	5,650
1	R22	5.23K	Resistor, Chip, 1/16W, 1%	603	Std	Std	5,650
1	R20	DNP	Resistor, Chip, 1/16W, 1%	603	Std	Std	5,650
1	R5	0	Resistor, Chip, 1/10W, 5%	805	Std	Std	10560
1	R3	20K	Resistor, Chip, 1/10W, 5%	805	Std	Std	10560
1	R1	DNP	Resistor, Chip, 1/10W, 5%	805	Std	Std	10560
1	R15	0.05	Resistor, Chip, 1/4W, 1%	1206	Std	Std	15390

1	R9	82	Resistor, Chip, 1/4W, 1%	1206	Std	Std	15390
2	R2 R4	DNP	Resistor, Chip, 1/4W, 1%	1206	Std	Std	15390
1	R7	10	Resistor, Chip, 1/16W, 5%	603	Std	Std	9100
1	R101	100K	Resistor, Chip, 1/16W, 1%	603	Std	Std	9100
1	R19	10K	Resistor, Chip, 1/16W, 1%	603	Std	Std	9100
1	R102	15K	Resistor, Chip, 1/16W, 1%	603	Std	Std	9100
1	R6	301K	Resistor, Chip, 1/16W, 1%	603	Std	Std	9100
1	R100	51K	Resistor, Chip, 1/16W, 1%	603	Std	Std	9100
1	J1	ED555/2DS	Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25 inch	ED555/2DS	OST	70125
1	J2	ED555/3DS	Terminal Block, 3-pin, 6-A, 3.5mm	0.41 x 0.25 inch	ED555/3DS	OST	105825
1	U3	TL431ACDBZ	IC, Precision Adjustable Shunt Regulator	SOT23-3	TL431ACDBZ	TI	16384
2	TP1-2	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone	10
1	TP3	5001	Test Point, Black, Thru Hole Color Keyed	0.100 x 0.100 inch	5001	Keystone	10
1	U1	TPS40210DGQ	IC, 4.5V-52V I/P, Current Mode Boost Controller	DGQ10	TPS40210DGQ	TI	38400
1	Q100	MMBT3904LT1	Bipolar, NPN, xx-V, yy-mA, zz-W	SOT23	MMBT3904LT1	On Semi	14105
1	Q1	SI4848DY	MOSFET, Nch, 150V, 3.7A, 90milliohm	SO8	Si4850EY	Vishay	75900
1	T1	35uH	XFMR, 35uH, ±10%	31.00 x 31.00 mm	POE13F-12L	Coilcraft	1089.00 mm

IMPORTANT NOTICE

Texas Instruments Incorporated and its subsidiaries (TI) reserve the right to make corrections, modifications, enhancements, improvements, and other changes to its products and services at any time and to discontinue any product or service without notice. Customers should obtain the latest relevant information before placing orders and should verify that such information is current and complete. All products are sold subject to TI's terms and conditions of sale supplied at the time of order acknowledgment.

TI warrants performance of its hardware products to the specifications applicable at the time of sale in accordance with TI's standard warranty. Testing and other quality control techniques are used to the extent TI deems necessary to support this warranty. Except where mandated by government requirements, testing of all parameters of each product is not necessarily performed.

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

TI does not warrant or represent that any license, either express or implied, is granted under any TI patent right, copyright, mask work right, or other TI intellectual property right relating to any combination, machine, or process in which TI products or services are used. Information published by TI regarding third-party products or services does not constitute a license from TI 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.

Reproduction of TI information in TI data books or data sheets is permissible only if reproduction is without alteration and is accompanied by all associated warranties, conditions, limitations, and notices. Reproduction of this information with alteration is an unfair and deceptive business practice. TI is not responsible or liable for such altered documentation. Information of third parties may be subject to additional restrictions.

Resale of TI products or services with statements different from or beyond the parameters stated by TI for that product or service voids all express and any implied warranties for the associated TI product or service and is an unfair and deceptive business practice. TI is not responsible or liable for any such statements.

TI products are not authorized for use in safety-critical applications (such as life support) where a failure of the TI product would reasonably be expected to cause severe personal injury or death, unless officers of the parties have executed an agreement specifically governing such use. Buyers represent that they have all necessary expertise in the safety and regulatory ramifications of their applications, and acknowledge and agree that they are solely responsible for all legal, regulatory and safety-related requirements concerning their products and any use of TI products in such safety-critical applications, notwithstanding any applications-related information or support that may be provided by TI. Further, Buyers must fully indemnify TI and its representatives against any damages arising out of the use of TI products in such safety-critical applications.

TI products are neither designed nor intended for use in military/aerospace applications or environments unless the TI products are specifically designated by TI as military-grade or "enhanced plastic." Only products designated by TI as military-grade meet military specifications. Buyers acknowledge and agree that any such use of TI products which TI has not designated as military-grade is solely at the Buyer's risk, and that they are solely responsible for compliance with all legal and regulatory requirements in connection with such use.

TI products are neither designed nor intended for use in automotive applications or environments unless the specific TI products are designated by TI as compliant with ISO/TS 16949 requirements. Buyers acknowledge and agree that, if they use any non-designated products in automotive applications, TI will not be responsible for any failure to meet such requirements.

Following are URLs where you can obtain information on other Texas Instruments products and application solutions:

Products

Audio	www.ti.com/audio
Amplifiers	amplifier.ti.com
Data Converters	dataconverter.ti.com
DLP® Products	www.dlp.com
DSP	dsp.ti.com
Clocks and Timers	www.ti.com/clocks
Interface	interface.ti.com
Logic	logic.ti.com
Power Mgmt	power.ti.com
Microcontrollers	microcontroller.ti.com
RFID	www.ti-rfid.com
OMAP Mobile Processors	www.ti.com/omap
Wireless Connectivity	www.ti.com/wirelessconnectivity

Applications

Communications and Telecom	www.ti.com/communications
Computers and Peripherals	www.ti.com/computers
Consumer Electronics	www.ti.com/consumer-apps
Energy and Lighting	www.ti.com/energy
Industrial	www.ti.com/industrial
Medical	www.ti.com/medical
Security	www.ti.com/security
Space, Avionics and Defense	www.ti.com/space-avionics-defense
Transportation and Automotive	www.ti.com/automotive
Video and Imaging	www.ti.com/video

TI E2E Community Home Page

e2e.ti.com

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265
Copyright © 2011, Texas Instruments Incorporated