Date: 03/18/2010									
	Р	MP4741 BO	M						
COLINT	RefDes	Value	Description	Size	Part Number	MFR			
2	C1	100uF	Capacitor, Aluminum, 25V, 20%	·	EEVFK1E101XP	Panasonic			
	C2	100uF	Capacitor, Aluminum, 25V, 20%	0.260 x 0.276 inch	EEVFK1E101XP	Panasonic			
2	C5	10uF	Capacitor, Ceramic, 25V, X7R, 15%	1210	C3225X7R1E106M	TDK			
	C6	10uF	Capacitor, Ceramic, 25V, X7R, 15%	1210	C3225X7R1E106M	TDK			
1	C7	470pF	Capacitor, Ceramic, 50V, [temp], [tol]	0805	GRM40yyyxxxKvv	muRata			
8	C8	4.7uF	Capacitor, Ceramic, 50V, X7R, 15%	1210	C3225X7R1H475M	TDK			
	C10	4.7uF	Capacitor, Ceramic, 50V, X7R, 15%	1210	C3225X7R1H475M	TDK			
3	C11	1uF	Capacitor, Ceramic, 16V, X7R, 15%	0603	C1608X7R1C105M	TDK			
	C12	4.7uF	Capacitor, Ceramic, 50V, X7R, 15%	1210	C3225X7R1H475M	TDK			
	C13	4.7uF	Capacitor, Ceramic, 50V, X7R, 15%	1210	C3225X7R1H475M	TDK			
	C14	4.7uF	Capacitor, Ceramic, 50V, X7R, 15%	1210	C3225X7R1H475M	TDK			
	C15	1uF	Capacitor, Ceramic, 16V, X7R, 15%	0603	C1608X7R1C105M	TDK			
1	C16	330pF	Capacitor, Ceramic, 50V, NPO, 5%	0603	std	std			
1	C17	10nF	Capacitor, Ceramic, 50V, X7R [tol]	0603	std	std			
	C18	1uF	Capacitor, Ceramic, 16V, X7R, 15%	0603	C1608X7R1C105M	TDK			
1	C19	330pF	Capacitor, Ceramic, 50V, X7R, 10%	0603	std	std			
1	C20	220pF	Capacitor, Ceramic, 50V, NPO, [tol]	0603	std	std			
	C21	4.7uF	Capacitor, Ceramic, 50V, X7R, 15%	1210	C3225X7R1H475M	TDK			
	C22	4.7uF	Capacitor, Ceramic, 50V, X7R, 15%	1210	C3225X7R1H475M	TDK			
1	C23	2.2uF	Capacitor, Ceramic, 25V, X5R	0805	C2012X5R1E225M	TDK			
1	C24	100nF	Capacitor, Ceramic, 50V, X7R [tol]	0603	std	std			
	C100	4.7uF	Capacitor, Ceramic, 50V, X7R, 15%	1210	C3225X7R1H475M	TDK			
1	D1	MBRB2545CT	Diode, Dual Schottky, 30A, 45V	D2PAK	MBRB2545CT	On Semi			
1	D100	BAV99	Diode, Dual Ultra Fast, Series, 200-mA, 70-V	SOT23	BAV99	Fairchild			
3	HS1	SK 437 35 STC 2	Heatsink, TO-220/218 veritcal, Rth 18K/W	0.640 x 0.640 inch	SK 437 35 STC 2 and THF 409 220 2	Fischer Elektronik			
	HS2		Heatsink, TO-220/218 veritcal, Rth 18K/W		SK 437 35 STC 2 and THF 409 220 2	Fischer Elektronik			
	HS3	SK 437 35 STC 2	Heatsink, TO-220/218 veritcal, Rth 18K/W	0.640 x 0.640 inch	SK 437 35 STC 2 and THF 409 220 2	Fischer Elektronik			
2	J1	D120/2DS	Terminal Block, 2-pin, 15-A, 5.1mm	0.40 x 0.35 inch	D120/2DS	OST			
	J2	D120/2DS	Terminal Block, 2-pin, 15-A, 5.1mm	0.40 x 0.35 inch	D120/2DS	OST			
1	L1	10uH	Inductor, SMT, 10A, 17milliohm	0.51 x 0.51 inch	IHLP5050FDER10RM01	Vishay			
1	Q2	SiR426DP	MOSFET, NChan, 40V, 12.8A, 10.5millohm	PWRPAK S0-8	SiR426DP	Vishay-Siliconix			
1	R1	4.7	Resistor, Chip, 1/16W, 1%	0603	std	std			
1	R2	182k	Resistor, Chip, 1/16W, 1%	0603	std	std			
1	R3	1	Resistor, Chip, 1/2W, 5%	2010	Std	Std			
1	R4	1k	Resistor, Chip, 1/16W, 1%	0603	std	std			
1		0.01	Resistor, Chip, 1/2W, 5%	2010	Std	Std			
1	R6	4.64k	Resistor, Chip, 1/16W, 1%	0603	std	std			
1	R7	66.5k	Resistor, Chip, 1/16W, x%	0603	Std	Std			

1	R8	49.9	Resistor, Chip, 1/16W, 1%	0603	std	std		
1	R9	2k	Resistor, Chip, 1/16W, 0.1%	0603	TNPW0603xxxxBT9	Vishay		
3	TP1	5010	Test Point, Red, Thru Hole	0.125 x 0.125 inch	5010	Keystone		
1	TP2	5011	Test Point, Black, Thru Hole	0.125 x 0.125 inch	5011	Keystone		
1	TP3	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone		
	TP4	5010	Test Point, Red, Thru Hole	0.125 x 0.125 inch	5010	Keystone		
	TP5	5010	Test Point, Red, Thru Hole	0.125 x 0.125 inch	5010	Keystone		
	TP6	5002	Test Point, White, Thru Hole Color Keyed	0.100 x 0.100 inch	5002	Keystone		
2	TP7	5002	Test Point, White, Thru Hole Color Keyed	0.100 x 0.100 inch	5002	Keystone		
1	U1	TPS40210DGQ	IC, 4.5V-52V I/P, Current Mode Boost Controller	DGQ10	TPS40210DGQ	TI		
1	U2	UCC27324D	IC, High Speed Low Side Power MOSFET driver	SO8	UCC27324D	Texas Instruments		
Notes:	1. These assemblies are ESD sensitive, ESD precautions shall be observed.							
	2. These assemblies must be clean and free from flux and all contaminants.							
	Use of no clean flux is not acceptable.							
	3. These assemblies must comply with workmanship standards IPC-A-610 Class 2.							
	4. Ref designators marked with an asterisk ('**') cannot be substituted.							
	All other components can be substituted with equivalent MFG's components.							

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 Applications

Audio www.ti.com/audio Communications and Telecom www.ti.com/communications **Amplifiers** amplifier.ti.com Computers and Peripherals www.ti.com/computers dataconverter.ti.com Consumer Electronics www.ti.com/consumer-apps **Data Converters DLP® Products** www.dlp.com **Energy and Lighting** www.ti.com/energy DSP dsp.ti.com Industrial www.ti.com/industrial Clocks and Timers www.ti.com/clocks Medical www.ti.com/medical Interface interface.ti.com Security www.ti.com/security

Logic Space, Avionics and Defense <u>www.ti.com/space-avionics-defense</u>

Power Mgmt power.ti.com Transportation and Automotive www.ti.com/automotive

Microcontrollers microcontroller.ti.com Video and Imaging www.ti.com/video

RFID <u>www.ti-rfid.com</u>

OMAP Mobile Processors www.ti.com/omap

Wireless Connectivity www.ti.com/wirelessconnectivity

TI E2E Community Home Page <u>e2e.ti.com</u>