



LM2743 4.5-5.5Vin, 1.8Vout @10A
 12-Nov-2004

NATIONAL SEMICONDUCTOR
 3050 W AGUA FRIA FREEWAY
 SUITE 150
 PHOENIX ARIZONA 85027



Altera BOM Cyclone Vccio Reference Design

5V to 1.8V @ 3A to >6A

National Semiconductor Corp. 2004.

Designator	Part Type	Manufacturer Part No	Description
C1	1500uF	SANYO 16MV1500WG	SANYO Through Hole Cap
C2	1500uF	SANYO 16MV1500WG	SANYO Through Hole Cap
C4	0.1uF	VISHAY VJ0805Y104KXXA	Capacitor Ceramic X7R
C6	2.2uF	TDK C2012X5R1A225	Capacitor Ceramic X5R
C8	0.01uF	VISHAY VJ0805Y103KXXA	Capacitor Ceramic X7R
C10	330pF	VISHAY VJ0805A331KXXA	Capacitor Ceramic X7R
C11	10nF	VISHAY VJ0805Y103KXXA	Capacitor Ceramic X7R
C13	2.7nF	VISHAY VJ0805Y272KXXA	Capacitor Ceramic X7R
C15	1nF	VISHAY VJ0805Y102KXXA	Capacitor Ceramic X7R
C19	560uF	SANYO 4MB560EXR	Sanyo surface mount super low ERS
C20	560uF	SANYO 4MB560EXR	Sanyo surface mount super low ERS
C21	560uF	SANYO 4MB560EXR	Sanyo surface mount super low ERS
D1	BAT54H	ON SEMI BAT54H	Schottky Diode
D3	MBRS240	ON SEMI MBRS240	Schottky Diode
L2	CDEP105-2R5	SUMIDA CDEP105-2R5	SMT Power Inductor
P1	4.5V to 5.5V		TEST POINT
P2	Gnd		TEST POINT
P3	Gnd		TEST POINT
P5	1.8V@6A		TEST POINT
Q1	SI4838DY	VISHAY SI4838DY	Logic Level, Single N-Channel MOSFET Power Trench
Q3	SI4838DY	VISHAY SI4838DY	Logic Level, Single N-Channel MOSFET Power Trench
R1	10R	VISHAY CRCW080510R0F	1% Thick Film
R3	1.13k	VISHAY CRCW08051131F	1% Thick Film
R4	117k	VISHAY CRCW08051173F	1% Thick Film
R5	5.49k	VISHAY CRCW08055491F	1% Thick Film
R7	2k	VISHAY CRCW08052001F	1% Thick Film
R8	2k	VISHAY CRCW08052001F	1% Thick Film
R10	221R	VISHAY CRCW08052210F	1% Thick Film
R11	1R	VISHAY CRCW08051R00F	1% Thick Film
U1	LM2743	NAT SEMI LM2743	Synchronous Buck Controller