



Title		20A Core and I/O Controller-based	
Solution		Solution for Cyclone/Stratix/Stratix GX	
Size	Number	PR345	Rev
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Date: 08/19/2004					
		PR345 BOM			
COUNT	RefDes	DESCRIPTION	SIZE	MFR	Part Number
6	C1, C2, C3, C18, C19, C20	Capacitor, POSCAP, 330-uF, 6.3-V, 10-milliohm, 20%	7343 (D)	Sanyo	6TPB330ML
6	C10, C11, C12, C27, C28, C29	Capacitor, POSCAP, 470-uF, 4-V, 10-milliohm, 20%	7343 (D)	Sanyo	4TPD470M
4	C13, C15, C30, C32	Capacitor, Ceramic, 10-uF, 6.3-V, 20%	1206	Taiyo Yuden	JMK316BJ106ML
2	C14, C31	Capacitor, Ceramic, 0.015-uF, 50-V, X7R, 15%	603	muRata	GRM188R71H153KA01D
2	C16, C33	Capacitor, Ceramic, 1800-pF, 50-V, X7R, 10%	603	muRata	GRM188R71H182KA01
2	C17, C34	Capacitor, Ceramic, 0.022-uF, 50-V, X7R, 10%	603	muRata	GRM188R71H223KA01
4	C4, C5, C21, C22	Capacitor, Ceramic, 22-uF, 6.3-V, X5R, 20%	1210	Taiyo Yuden	JMK325BJ226MM
2	C6, C23	Capacitor, Ceramic, 1.0-uF, 10-V, X7R, 10%	805	Taiyo Yuden	LMK212 BJ105KG
2	C7, C24	Capacitor, Ceramic, 47-pF, 50-V, C0G, 5%	603	muRata	GQM1885C1H470JB01D
2	C8, C25	Capacitor, Ceramic, 1.0-uF, 10-V, X7R, 10%	805	Taiyo Yuden	LMK212 BJ105KG
2	C9, C26	Capacitor, Ceramic, 2200-pF, 50-V, X7R, 10%	603	muRata	GRM188R71H222KA01
2	L1, L2	Inductor, SMT, 0.7-uH, 24-A, 1.1-milliohms	0.598 x 0.638	Sumida	CDEP149-0R7
2	Q1, Q3	MOSFET, NChannel, 12V, 29A, 3.0 milliohm	PWRPAK S0-8	Siliconix	Si7858DP
2	Q2, Q4	MOSFET, NChannel, 30V, 29A, 3.0 milliohm	PWRPAK S0-8	Siliconix	Si7880DP
2	R1, R10	Resistor, Chip, 1.43k-Ohms, 1/16-W, 1%	603	Std	Std
1	R18	Resistor, Chip, 2.67k-Ohms, 1/16-W, 1%	603	Std	Std
2	R2, R12	Resistor, Chip, 2.2-Ohms, 1/10-W, 1%	805	Std	Std
3	R3, R8, R13	Resistor, Chip, 8.66k-Ohms, 1/16-W, 1%	603	Std	Std
5	R4, R9, R11, R14, R19	Resistor, Chip, 10k-Ohms, 1/16-W, 1%	603	Std	Std
2	R5, R15	Resistor, Chip, 30.1k-Ohms, 1/16-W, 1%	603	Std	Std
2	R6, R16	Resistor, Chip, 2.87k-Ohms, 1/16-W, 1%	603	Std	Std
2	R7, R17	Resistor, Chip, 118k-Ohms, 1/16-W, 1%	603	Std	Std
2	U1, U2	IC, Enhanced, Low Input Voltage-Mode, Synchronous Buck Controller	HTSSOP-16	TI	TPS40021PWP

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