



Title		15A Core and I/O Controller-based	
Solution for Cyclone/Stratix/Stratix GX			
Size	Number	PR348	Rev
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PR348 BOM					
COUNT	RefDes	DESCRIPTION	SIZE	MFR	Part Number
4	C1, C2, C16, C17	Capacitor, Ceramic, 22uF, 16V, X5R, 20%	1812	TDK	C4532X5R1C226MT
2	C11, C26	Capacitor, Ceramic, 47uF, 6.3V, X5R, 15%	1812	TDK	C4532X5R0J476MT
2	C12, C27	Capacitor, Ceramic, 5600-pF, 50-V, X7R, 10%	805	Vishay	VJ0805Y562KXAAT
2	C13, C28	Capacitor, Ceramic, 1.0-uF, 16-V, X5R, 10%	805	TDK	C2012X5R1C105KT
2	C15, C30	Capacitor, Ceramic, 4700-pF, 50-V, X7R, 10%	805	Vishay	VJ0805Y472KXAAT
1	C23	Capacitor, Ceramic, 0.022-uF, 50-V, X7R, 10%	805	Vishay	VJ0805Y223KXAAT
6	C3, C6, C7, C18, C21, C22	Capacitor, Ceramic, 0.1-uF, 25-V, X7R, 10%	805	Vishay	VJ0805Y104KXXAT
2	C4, C19	Capacitor, Ceramic, 100-pF, 50-V, NPO, 10%	805	Vishay	VJ0805A101KXAAT
4	C5, C14, C20, C29	Capacitor, Ceramic, 470-pF, 50-V, X7R, 10%	805	Vishay	VJ0805Y471KXAAT
1	C8	Capacitor, Ceramic, 0.01-uF, 50-V, X7R, 10%	805	Vishay	VJ0805Y103KXAAT
4	C9, C10, C24, C25	Capacitor, POSCAP, 470-uF, 4-V, 10-milliohm, 20%	7343 (D)	Sanyo	4TPD470M
2	D1, D3	Diode, Switching, 10-mA, 85-V, 350-mW	SOT23	Vishay-Liteon	BAS16
2	D2, D4	Diode, Schottky, 3-A, 40-V	SMC	IR	30BQ040
2	L1, L2	Inductor, SMT, 1.7-uH, 22.3-A, 1.8-milliohms	0.512 X 0.512	Coiltronics	HC1-1R7
2	Q1, Q3	Mosfet, N-Ch, Vds 30V, Rds 6 miliohms, Id 30A	LFPAK	Hitachi	HAT2168H
2	Q2, Q4	Mosfet, N-Ch, Vds 30V, Rds 4.2 miliohms, Id 40A	LFPAK	Hitachi	HAT2167H
2	R1, R9	Resistor, Chip, 16.2k-Ohms, 1/10-W, 1%	805	Std	Std
1	R15	Resistor, Chip, 2.32k-Ohms, 1/10-W, 1%	805	Std	Std
2	R2, R10	Resistor, Chip, 243k-Ohms, 1/10-W, 1%	805	Std	Std
2	R3, R11	Resistor, Chip, 71.5k-Ohms, 1/10-W, 1%	805	Std	Std
2	R4, R12	Resistor, Chip, 165k-Ohms, 1/10-W, 1%	805	Std	Std
2	R5, R13	Resistor, Chip, 10k-Ohms, 1/10-W, 1%	805	Std	Std
2	R6, R14	Resistor, Chip, 8.66k-Ohms, 1/10-W, 1%	805	Std	Std
1	R7	Resistor, Chip, 7.5k-Ohms, 1/10-W, 1%	805	Std	Std
2	R8, R16	Resistor, Chip, 226-Ohms, 1/10-W, 1%	805	Std	Std
2	U1, U2	IC, Wide Input Synchronous Buck Controller, 10-40 V Input	PWP16	TI	TPS40055PWP

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