

Spartan-3 PCIe Starter Board

Item	Qty	Reference Designator	Description	Mfg	Part Number	Val/Tol	Pkg	Notes
1	88	C1, C2, C3, C4, C6, C14, C27, C28, C33, C34, C46, C53, C54, C55, C56, C57, C58, C59, C60, C61, C62, C65, C66, C67, C68, C69, C71, C72, C73, C74, C79, C80, C81, C82, C83, C84, C85, C86, C87, C91, C94, C96, C100, C109, C116, C121, C147, C148, C159, C169, C171, C174, C179, C180, C187, C188, C189, C190, C192, C193, C194, C195, C196, C197, C198, C199, C200, C201, C202, C203, C204, C206, C207, C208, C209, C210, C211, C213, C214, C215, C216, C217, C218, C219, C220, C221, C222, C223						
			Ceramic Capacitor 0.1uF 0402	AVX	0402ZD104KAT2A	0.1uF	0402	DNI C14
2	60	C95, C101, C102, C103, C104, C105, C106, C107, C108, C110, C111, C115, C117, C118, C119, C120, C123, C124, C125, C127, C128, C130, C131, C132, C133, C134, C135, C136, C137, C140, C141, C142, C143, C149, C153, C154, C155, C156, C157, C158, C160, C161, C163, C164, C165, C166, C167, C168, C170, C172, C175, C176, C177, C178, C182, C183, C184, C185, C186, C191						
			Ceramic Capacitor 0.01uF 0201	PIC	ECJ-ZEB0J103K	0.01uF	0201	

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3	36	C17, C18, C20, C22, C23, C29, C30, C41, C42, C47, C48, C50, C51, C75, C76, C77, C78, C88, C89, C90, C92, C93, C99, C112, C113, C126, C129, C138, C139, C144, C145, C150, C151, C152, C162, C181	Ceramic Capacitor 1.0uF 0402	PIC	ECJ-0EB0J105M	1.0uF	0402	
4	14	C5, C12, C19, C21, C25, C26, C35, C36, C49, C114, C122, C146, C173, C212	Ceramic Capacitor 4.7uF 0603	PIC	ECJ-1VB0J475M	4.7uF	0603	
5	3	C8, C9, C70	Tantalum Capacitor 47uF	AVX	TAJB476M010R	47uF	TANB	
6	4	C10, C11, C31, C32	Tantalum Capacitor 100uF	AVX	TAJD107K010R	100uF	TAND	
7	5	C37, C38, C63, C64, C205	Tantalum Capacitor 10uF	AVX	TAJA106K010R	10uF	TANA	
8	4	C15, C16, C97, C98	Ceramic Capacitor 10uF	PIC	ECJ-2FB0J106M	10uF	0805	
9	5	C24, C39, C40, C43, C52	Tantalum Capacitor 470uF	AVX	TAJD477K004R	470uF	TAND	
10	2	C44, C45	Tantalum Capacitor 330uF	AVX	TAJE337K010R	330uF	TAND	
11	2	C7, C13	Ceramic Capacitor 2.2uF	PIC	ECJ-1VB1A225M	2.2uF	0603	
12	14	D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, D12, D13, D15	LED	FSC	QTLP650C4TR	Green	1206	
13	1	D14	LED	LTP	LTST-C191TBKT	Blue	0603	
14	7	FBI-7	Ferrite Bead	MUR	BLM18BB121SN1D	120ohm, 200mA	0603	
15	2	F1, F2	Fuseholder	DigiKey	WK0001-ND		Thru-hole	
16	1	F1	Fuse, 6.3A	DigiKey	WK4066BK-ND			
17	5	JP1, JP2, JP5, JP6, JP8	Header 0.1"	AMP	5-146280-3	3x1	Thru-hole	
18	5	J4, JP7, JP9, JP10, JP11	Header 0.1"	AMP	5-146280-2	2x1	Thru-hole	
19	3	J3, JP3, JP4	Header 0.1", Right Angle	SAT	TSW-103-08-F-D-RA	3x2	Thru-hole	
20	1	J1	Hard Drive Power Connector	MLX	15-24-4441		Thru-hole	
21	1	J5	Barrel Socket	SWT	RAPC722X		Thru-hole	
22	1	J6	Header 2mm (parallel IV)	MLX	87832-1420	7x2	SMT	
	1	J2	Header 2mm (parallel IV)	MLX	87833-1420	7x2	Thru-Hole	
23	2	JX1, JX2	Connector, High Speed	Samtec	QTE-060-09-F-D-A		SMT	
24	1	P1	Connector DB9	AMP	5747844-6		Thru-hole	
25	1	P2	Connector DB15	AMP	1-1734530-3		Thru-Hole	
26	2	Q1, Q2	NPN General Purpose Amplifier		MMBT2222LT1G		SOT-23	
27	6	R19, R59, R80, R81, R82,	Resistor	DAL	CRCW06030000Z0EA	0R0	0603	DNI R59
28	23	RP1, RP2, RP3, RP4, RP5, RP7, RP9, RP10, RP11, RP12, RP13, RP14, RP15, RP20, RP21, RP22, RP24, RP32, RP38, RP43, RP48, RP50, RP52	Resistor Pack	BNS	CAT16-240J4LF	24R0	0603	
29	26	RP6, RP8, RP16, RP17, RP18, RP19, RP23, RP25, RP26, RP30, RP31, RP33, RP34, RP35, RP36, RP37, RP39, RP40, RP41, RP42, RP44, RP45, RP46, RP47, RP49, RP51	Resistor Pack	BNS	CAT16-49R9F4LF	49R9	603	
30	2	RP28, RP29	Resistor Pack	BNS	CAT16-102J4LF	1K	603	
31	1	RP27	Resistor Pack	BNS	CAT16-103J4LF	10K	603	

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32	21	R22, R23, R24, R26, R27, R28, R30, R52, R56, R75, R76, R77, R78, R86, R87, R89, R90, R91, R92, R93, R94	Resistor	DAL	CRCW060349R9FKEA	49R9	0603	
33	13	R5, R6, R7, R17, R21, R38, R43, R44, R48, R49, R51, R74, R107	Resistor	DAL	CRCW06034K75FKEA	4.75K	0603	
34	4	R1, R3, R50, R110	Resistor	DAL	CRCW060310K0FKEA	10K	0603	DNI R50
35	4	R29, R36, R47, R57	Resistor	DAL	CRCW0603680RJNEA	680	0603	
36	5	R53, R54, R102, R103, R104	Resistor	DAL	CRCW0603560RJNEA	560	0603	DNI R53, R103
37	2	R55, R109	Resistor	DAL	CRCW0603330RJNEA	330	0603	
38	1	R2	Resistor	DAL	CRCW0603475RFKEA	470	0603	
39	12	R4, R16, R60, R61, R62, R63, R64, R65, R66, R67, R105, R106	Resistor	DAL	CRCW0603100RJNEA	100	0603	
40	14	R8, R9, R10, R11, R20, R46, R58, R84, R85, R88, R99, R108, R111, R112	Resistor	DAL	CRCW06031K00JNEA	1K	0603	DNI R108
41	3	R41, R42, R45	Resistor	DAL	CRCW060375R0FKEA	75	0603	
42	1	R15	Resistor	DAL	CRCW0603100KFKEA	100K	0603	
43	1	R32	Resistor	DAL	CRCW060356K2FKEA	56.2K	0603	
44	11	R13, R25, R68, R69, R70, R71, R95, R96, R97, R98, R101	Resistor	DAL	CRCW060324R0FKEA	24R0	0603	
45	7	R31, R34, R35, R37, R39, R40, R73	Resistor	DAL	CRCW060333R0FKEA	33R0	0603	
46	1	R72	Resistor	DAL	CRCW0603576RFKEA	576	0603	
47	1	R79	Resistor	DAL	CRCW060324K3FKEA	24.3K	0603	
48	1	R14	Resistor	DAL	CRCW0603909KFKEA	909K	0603	DNI R14
49	1	R100	Resistor	DAL	CRCW0603698RFKEA	698	0603	
50	1	R12	Resistor	DAL	CRCW06031M00FKEA	1M	0603	
51	1	R33	Resistor	DAL	CRCW0603118KFKEA	118K	0603	
52	1	R18	Resistor	DAL	CRCW060356R2FKEA	56R2	0603	
53	4	SW1, SW2, SW3, SW4	Switch, PushButton	BNS	7914J-1-000E		SMT	
54	1	SW5	Switch, 4-pos SPST	AMP	4-5435166-9		4x Switch	
55	1	SW6	Switch, Toggle RA DPST	CKS	ET01MD1ABE			
56	1	U18	Spartan III FPGA	XLX	XC3S1000-4FGG676C		FG676	
57	1	U26	???MHz Oscillator					DNI U26
58	1	U20	50MHz oscillator	FOX	F4100-500			
59	1	U24	FPGA Configuration Prom	XLX	XCF08PVOG48C		TSOP-48	
60	1	U14	RS232 Transceiver	TIS	MAX3221CDBE4		SSOP-16	
61	1	U33	4Mbit SPI Serial EEPROM	SGS	M25P40-VMN6P		SO-8	
62	1	U38	Single Gate Inverter	SGS	74V1G04STR		SOT23-5L	
63	1	U35	PCI Express PHY	PHA	PX1011A-EL1/G		SOT643-1	
64	2	U43, U46	16-bit Buffer	TIS	SN74ALVCH162244DL		SSOP-48	
65	17	U16, U17, U19, U22, U23, U25, U27, U28, U29, U31, U36, U37, U40, U41, U42, U44, U45	Single Gate Tri-State Bus Driver	FSC	NC7SV126P5X_NL		SC70	
66	1	U11	1A LDO Regulator	TIS	TPS72501DCQG4		SOT223-5	
67	1	U34	5V to 3.3V@15A Power Module	TIS	PTH05010WAH			
68	2	U9, U15	3.3V/6A Power Module	TIS	PTH03000WAH			
69	1	U1	1.2V Processor Supervisor	TIS	TPS3126E12DBVTG4		SOT23-5	
70	1	U2	Triple Processor Supervisor	TIS	TPS3307-25DG4		SO-8	
71	2	U3, U4	512Mbit (8M x 16 x 4) DDR Memory	MIC	MT46V32M16BN-6:F		FBGA-60	
72	1	U30	10-bit RGB DAC	PHA	TDA8777HL/14/C1		LQFP48	

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73	1	U21	Oscillator 25.175MHz	FOX	JITO2-DC3AF 25.1750 MHz			
74	1	U39	4.55V Power Monitor	TIS	TPS3828-50DBVTG4		SOT23-5	
75	1	U6	3A DDR Termination Regulator	TIS	TPS51100DGQG4		DGQ-10	
76	1	U7	3.3V to 5V DC/DC Converter	TIS	TPS60131PWPG4		PWP-20	
77	1	U8	8-bit AVR Microcontroller	Atmel	ATtiny13V-10SSU		S8S1	DNI U8
78	1	U32	400mA LDO Regulator	TIS	TPS736125DRBRG4		DRB-8	
79	1	U10	DIP Socket for half-size Oscillator	AMP	210806-1		DIP-8	
80	2	U12, U13	Single FET Bus Switch	TIS	SN74CB3T1G125DBVR		SOT23-6	
81	1	U5	IEEE EUI-64 Node Address Chip	MAX	DS2502P-E64		TSOC-6	DNI U5
82	4	HG1, HG2, HG3, HG16	1-pin Header	AMP	5-146280-1			