

XILINX[®] Spartan[™] and Virtex[™] Field Programmable Gate Arrays (Cont.)

Package	Gates	#CLB	I/O Pins	Operating Voltage (V)	Digi-Key Part No.	1	Price Each 25	100	Xilinx Part No.
144-TQFP	50K	384	102	1.8	122-1331-ND	12.65	12.55	12.35	XC2S50E-6TQG144C
256-FBGA	100K	600	182	1.8	122-1322-ND	24.20	24.00	23.70	XC2S100E-6FTG256C
144-TQFP	100K	600	102	1.8	122-1462-ND	17.30	17.15	16.90	XC2S100E-6TQG144C
456-FBGA	200K	1176	289	1.8	122-1323-ND	37.50	37.20	36.70	XC2S200E-6FGG456C
208-PQFP	200K	1176	146	1.8	122-1324-ND	25.20	25.00	24.65	XC2S200E-6PQG208C
256-FBGA	300K	1536	182	1.8	122-1325-ND	47.50	47.15	46.45	XC2S300E-6FTG256C
208-PQFP	300K	1536	146	1.8	122-1326-ND	38.60	38.35	37.76	XC2S300E-6PQG208C
456-FBGA	400K	2400	329	1.8	122-1327-ND	123.00	107.00	90.40	XC2S400E-4FGG456C
456-FBGA	600K	3456	329	1.8	122-1332-ND	170.00	147.00	125.01	XC2S600E-6FGG456C
Virtex-5 Series — RoHS Compliant									
324-FBGA	30K	2400	220	1.0	122-1558-ND	240.00	—	—	XC5VLX30-1FFG324C
676-FBGA	30K	2400	400	1.0	122-1559-ND	276.00	—	—	XC5VLX30-1FFG676C
665-FBGA	30K	2400	360	1.0	122-1560-ND	320.40	—	—	XC5VLX30T-1FFG665C
665-FBGA	35K	2720	360	1.0	122-1566-ND	440.40	—	—	XC5VSX35T-1FFG665C
324-FBGA	50K	3600	220	1.0	122-1562-ND	378.00	—	—	XC5VLX50-1FFG324C
676-FBGA	50K	3600	440	1.0	122-1563-ND	434.40	—	—	XC5VLX50-1FFG676C
665-FBGA	50K	3600	360	1.0	122-1565-ND	508.80	—	—	XC5VLX50T-1FFG665C
1136-FBGA	50K	3600	480	1.0	122-1564-ND	559.20	—	—	XC5VLX50T-1FFG1136C
1153-FBGA	50K	3600	560	1.0	122-1561-ND	499.20	—	—	XC5VLX50-1FFG1153C
665-FBGA	50K	4080	360	1.0	122-1568-ND	836.40	—	—	XC5VSX50T-1FFG665C
1136-FBGA	50K	4080	480	1.0	122-1567-ND	920.40	—	—	XC5VSX50T-1FFG1136C
1136-FBGA	85K	6480	480	1.0	122-1527-ND	903.60	—	—	XC5VLX85T-1FFG1136C
676-FBGA	110K	8640	440	1.0	122-1557-ND	1320.00	—	—	XC5VLX110-1FFG676C
Virtex-4 Series — RoHS Compliant									
363-FCBGA	24K	2688	240	1.2	122-1489-ND	211.20	—	—	XC4VLX25-10SFG363C
668-FBGA	24K	2688	448	1.2	122-1488-ND	253.20	—	—	XC4VLX25-10FFG668C
668-FBGA	24K	2688	448	1.2	122-1490-ND	316.80	—	—	XC4VLX25-11FFG668C
668-FBGA	35K	3840	448	1.2	122-1498-ND	448.80	—	—	XC4VX35-10FFG668C
668-FBGA	35K	3840	448	1.2	122-1489-ND	560.40	—	—	XC4VX35-11FFG668C
668-FBGA	40K	4806	448	1.2	122-1492-ND	399.60	—	—	XC4VLX40-10FFG668C
1148-FBGA	40K	4806	640	1.2	122-1491-ND	439.20	—	—	XC4VLX40-10FFG1148C
1148-FBGA	55K	6144	640	1.2	122-1500-ND	1123.20	—	—	XC4VX55-10FFG1148C
668-FBGA	60K	6656	448	1.2	122-1494-ND	609.60	—	—	XC4VLX60-10FFG668C
668-FBGA	60K	6656	448	1.2	122-1496-ND	762.00	—	—	XC4VLX60-11FFG668C
1148-FBGA	60K	6656	640	1.2	122-1495-ND	838.80	—	—	XC4VLX60-11FFG1148C
1148-FBGA	60K	6656	640	1.2	122-1493-ND	670.80	—	—	XC4VLX60-10FFG1148C
1148-FBGA	80K	8960	768	1.2	122-1497-ND	1042.80	—	—	XC4VLX80-10FFG1148C
1148-FBGA	100K	12288	768	1.2	122-1486-ND	1905.60	—	—	XC4VLX100-10FFG1148C
1513-FBGA	100K	12288	960	1.2	122-1487-ND	2000.40	—	—	XC4VLX100-10FFG1513C
Virtex-II Pro Series — RoHS Compliant									
456-FBGA	6K	752	248	1.5	122-1451-ND	126.00	113.00	99.11	XC2VP4-5FGG456C
672-FCBGA	11K	1232	396	1.5	122-1370-ND	215.00	192.00	169.00	XC2VP7-5FFG672C
672-FCBGA	11K	1232	396	1.5	122-1452-ND	301.00	269.00	237.01	XC2VP7-6FFG672C
676-FBGA	20K	2320	404	1.5	122-1361-ND	304.00	272.00	239.00	XC2VP20-5FGG676C
896-FCBGA	20K	2320	556	1.5	122-1362-ND	511.00	457.00	402.01	XC2VP20-6FFG896C
676-FBGA	30K	3424	416	1.5	122-1363-ND	516.00	462.00	405.00	XC2VP30-5FGG676C
896-FCBGA	30K	3424	556	1.5	122-1365-ND	867.00	775.01	681.00	XC2VP30-6FFG896C
1152-FCBGA	30K	3424	644	1.5	122-1364-ND	903.00	808.01	710.00	XC2VP30-6FFG1152C
1704-FCBGA	100K	11024	1040	1.5	122-1359-ND	7937.02	7101.01	6238.01	XC2VP100-8FFG1704C
Virtex-II Series — RoHS Compliant									
256-FBGA	250K	384	172	1.5	122-1352-ND	80.65	72.10	63.36	XC2V250-4FGG256C
256-FBGA	500K	768	172	1.5	122-1356-ND	136.00	122.00	107.01	XC2V500-4FGG256C
456-FBGA	500K	768	264	1.5	122-1357-ND	150.00	134.01	118.00	XC2V500-4FGG456C
575-BGA	1M	1280	328	1.5	122-1343-ND	227.00	204.00	178.00	XC2V1000-4BGG575C
896-FBGA	1M	1280	432	1.5	122-1344-ND	257.00	230.00	201.00	XC2V1000-4FFG896C
256-FBGA	1M	1280	172	1.5	122-1345-ND	198.00	177.00	155.01	XC2V1000-4FGG256C
456-FBGA	1M	1280	324	1.5	122-1346-ND	217.00	194.00	170.01	XC2V1000-4FGG456C
456-FBGA	1M	1280	324	1.5	122-1348-ND	304.00	272.00	238.00	XC2V1000-5FGG456C
676-FBGA	1.5M	1920	392	1.5	122-1349-ND	306.00	274.01	241.00	XC2V1500-4FGG676C
896-FCBGA	2M	2688	624	1.5	122-1350-ND	522.00	467.00	410.00	XC2V2000-4FFG896C
1152-FCBGA	3M	3584	720	1.5	122-1353-ND	803.00	718.00	631.01	XC2V3000-4FFG1152C
676-FBGA	3M	3584	484	1.5	122-1354-ND	669.00	598.01	526.01	XC2V3000-4FGG676C
676-FBGA	3M	3584	484	1.5	122-1355-ND	937.00	837.00	736.01	XC2V3000-5FGG676C
1152-FCBGA	6M	8448	824	1.5	122-1358-ND	2983.99	2669.01	2345.01	XC2V6000-4FFG1152C
Virtex-E Series									
240-PQFP	71K	384	158	1.8	122-1215-ND	52.05	47.10	40.90	XCV50E-7PQ240C
Virtex Series									
256-BGA	57K	384	180	2.5	122-1212-ND	66.45	59.50	51.40	XCV50-5BG256C
240-PQFP	57K	384	166	2.5	122-1213-ND	66.45	59.50	51.40	XCV50-5PQ240C
240-PQFP	108K	600	166	2.5	122-1214-ND	125.00	112.00	96.35	XCV100-5PQ240C

◆ RoHS Compliant

Starter Kits and Evaluation Platforms

The **CoolRunner-II Starter Kit** includes: • X-Board with XC2C256-TQ144 • Resource CD • USB 2.0 cable • ISE WebPACK™ CD • Three peripheral modules

The **CoolRunner-II Starter Kit Peripheral Module Bundle** contains the following modules: • PMod-AD1 • PMod-DA2 • PMod-HB3 • PMod-CO3 • PMod-AMP1 • PMod-SF • PMod-OC1 • PMod-RS232

The **CPLD Design Kit** with AA Battery Holder supports the CoolRunner-II and XC9500XL Device Families. **Kit Includes:** • Prototyping board • XC2C256-7TQ144 CoolRunner-II CPLD • XC9572XL-10V044 CPLD • JTAG Cable • ISE WebPACK™ CD • Programmable Logic Handbook • Resource CD

The **Spartan-3 Starter Kit** brings high-volume designs to reality quicker, at a lower cost and on schedule. **Kit Includes:** • JTAG3 Programming Cable • Universal AC/DC Power Supply (100 - 220V, 50 - 60Hz) • Application Notes/User's Guide • XC3S200 FT256 Xilinx Spartan-3 FPGA • XCFO2S Xilinx Platform Flash

The **Spartan-3A Starter Kit** is a complete development solution giving designers instant access to the capabilities of the Spartan-3A family. **Kit Includes:** • Development board • Power Supply (100 - 240V, 50 - 60Hz) with universal plug adaptors • Evaluation software: ISE™ WebPACK™ or ISE Foundation™ Evaluation • Quickstart Guide • Programming Cable • Product Collateral

The **Spartan-3A DDR2 SDRAM Development Kit** includes: • Spartan-3A development board • Universal Power supply with plug adaptors • Evaluation software: ISE WebPACK™ or ISE Foundation™ ChipScope Pro • Quickstart guide • Programming cable

The **Spartan-3AN Starter Kit** is non-volatile FPGA platform evaluation board includes 10/100 Ethernet/PHY, ADC/DAC circuitry, and connectivity options. **Kit Includes:** • Development board • Universal power supply with plug adaptors • Evaluation software: ISE™ WebPACK™ or ISE Foundation™ • Quickstart guide • Programming cable

The **Spartan-3E Starter Kit** is a complete development board solution giving designers instant access to the capabilities of the Spartan-3E family. **Kit Includes:** • Board • Power Supply • Evaluation Software • Resource CD

The **Spartan-3 PCI Express Starter Kit** provides a PCI Express interface through a two-chip solution consisting of the Xilinx Spartan-3 FPGA and the Philips PX1011A-EL1 PCI Express PHY (PXX1011A)

The **Virtex-4™ Kit** is a feature rich evaluation platform which provides easy access to resources available on the Virtex-4 FPGA device. **Kit Includes:** • Evaluation platform including power supply • 32MB Compact-Flash card • Built-in demonstrations

The **Virtex™-5 Kit** is a feature-rich and low-cost evaluation/development platform which provides easy and practical access to resources available in the on-board Virtex-5 LX50 FPGA device. **Kit Includes:** • Xilinx Virtex-5 ML501 Evaluation platform • System ACE CompactFlash card • DVI to VGA adapter (Development tools and PC download cable are not included and must be ordered separately)

The **MultiPRO Desktop Tool** is a multi-function programming and configuration cable. Designed for use in a desktop environment, it interfaces to a PC using the industry standard IEEE 1284 parallel port. An external AC power brick provides +5V DC to the pod.

Description	Digi-Key Part No.	Price Each	Xilinx Part No.
CoolRunner-II Starter Kit	122-1533-ND◆	55.14	HW-CRII-SK-G
CoolRunner-II Starter Kit Bundle	122-1534-ND◆	109.32	HW-CRII-PM-ACC-G
CPLD Design Kit	122-1512-ND◆	55.20	DO-CPLD-DK-G
Spartan-3 Starter Kit	122-1521-ND◆	164.40	HW-SPAR3-SK-UNI-G
Spartan-3A Starter Kit	122-1514-ND◆	208.80	HW-SPAR3A-SK-UNI-G
Spartan-3A DDR2 Development Kit	122-1531-ND◆	225.00	HW-SPAR3DDR2-DK-UNI-G-PROMO1
Spartan-3AN Starter Kit	122-1528-ND◆	228.75	HW-SPAR3AN-SK-UNI-G
Spartan-3E Starter Kit	122-1536-ND◆	164.40	HW-SPAR3E-SK-UNI-G
Spartan-3 PCI Express Starter Kit	122-1502-ND	385.20	HW-SP3PCI-E-DK
Virtex-4 ML401 Evaluation Platform	122-1523-ND	546.00	HW-V4-ML401-UNI-G
Virtex-5 Evaluation Platform Kit	122-1508-ND◆	1098.00	HW-V5-ML501-UNI-G
MultiPRO Desktop Tool	122-1503-ND	460.57	HW-MULTIPRO

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