



## Emulation Kits and Accessories

For use with the 428-1583-ND (CY3215-DK) PSoC® Development Kit

### Emulation Kits

**Function:** Provides Connection Between ICE-Cube and Target  
**Contents:** 1 Flexcable, 1 Pod, 2 Pod Feet

For Use With	Digi-Key Part No.	Price Each
CY8C21x23	428-1886-ND	144.47
CY8C21x23 QFN Package	428-1871-ND	144.47
CY8C21x34	428-1887-ND	144.47
CY8C21x34 QFN Package	428-1872-ND	144.47
CY8C24x23A	428-1883-ND	144.47
CY8C24x23A QFN Package	428-1868-ND	144.47
CY8C24x94 QFN Package	428-1867-ND	144.47
CY8C27xxx	428-1884-ND	144.47
CY8C27xxx QFN Package	428-1869-ND	144.47
CY8C29xxx	428-1885-ND	144.47
CY8C29xxx QFN Package	428-1870-ND	144.47
CY8C20334 QFN Package	428-1955-ND	167.71
CY8C20434 QFN Package	428-1957-ND	167.71

◆ RoHS Compliant

### Evaluation Pods

**Function:** Allows evaluation of a device family using 28-DIP connector



Family	Digi-Key Part No.	Price Each
C48C20x34	428-1994-ND	89.30
C48C21x23	428-1995-ND	89.30
C58C21x34	428-1996-ND	89.30

Family	Digi-Key Part No.	Price Each
CY8C24x23	428-1997-ND	89.30
CY8C24x94	428-1998-ND	89.30
CY8C27x43	428-1999-ND	89.30
CY8C29x66	428-2000-ND	89.30

### Foot Kits

**Function:** Replacement Pod Feet **Contents:** 4 Pod Feet

Package	Digi-Key Part No.	Price Each
8-DIP	428-1890-ND	68.96
20-DIP	428-1888-ND	79.13
28-DIP	428-1889-ND	68.96
8-SOIC	428-1894-ND	79.13
16-SOIC	428-1891-ND	79.13
20-SOIC	428-1892-ND	79.13
28-SOIC	428-1893-ND	68.96
20-SSOP	428-1895-ND	68.73
28-SSOP	428-1896-ND	68.96
48-SSOP	428-1897-ND	68.72
44-TQFP	428-1899-ND	79.13
100-TQFP	428-1898-ND	186.04
24-QFN	428-1873-ND	143.02
32-QFN	428-1874-ND	123.41
48-QFN	428-1875-ND	123.41
56-QFN	428-1876-ND	123.41

### Pod Kits

**Function:** Replacement Pod Kit  
**Contents:** 2 Pods

For Use With	Digi-Key Part No.	Price Each
CY8C21x23	428-1904-ND	95.11
CY8C21x23 QFN Package	428-1881-ND	95.11
CY8C21x34	428-1905-ND	82.28
CY8C21x34 QFN Package	428-1882-ND	95.11
CY8C24x23A	428-1901-ND	95.11
CY8C24x94 QFN Package	428-1877-ND	95.11
CY8C27xxx	428-1902-ND	82.27
CY8C27xxx QFN Package	428-1879-ND	95.11
CY8C29xxx	428-1903-ND	95.11
CY8C29xxx QFN Package	428-1880-ND	95.11
CY8C20334 QFN Package	428-1956-ND	95.11
CY8C20434 QFN Package	428-1958-ND	95.11
Replacement Flex Cable for CY3250 Pod Kits	428-1866-ND	72.59

◆ RoHS Compliant

## CPLDs

Cypress offers a wide range of Programmable Logic Devices From PALs with 10 macrocells and 200 gates up to CPLDs with 3072 macrocells and 200,000 gates. Cypress also provides voltages ranging from 2.5V up to the typical 5.0V.

The Ultra37000™ family of CMOS CPLDs provides a range of high-density programmable logic solutions with unparalleled system performance. The Ultra37000 family is designed to bring the flexibility, ease of use, and performance of the 22V10 to high-density CPLDs. The architecture is based on a number of logic blocks that are connected by a Programmable Inter-connect Matrix (PIM). Each logic block features its own product term array, product term allocator, and 16 macrocells. The PIM distributes signals from the logic block outputs and

all input pins to the logic block inputs. All of the Ultra37000 devices are electrically erasable and In-System Reprogrammable (ISR).

The Delta39K™ ISR™ CPLD Family based on a 0.18 µm, six-layer metal CMOS logic process, offers a wide range of high-density solutions at unparalleled system performance. The Delta39K family is designed to combine the high speed, predictable timing, and ease of use of CPLDs with the high densities and low power of FPGAs. With devices ranging from 15,000 to 200,000 usable gates, the family features devices ten times the size of previously available CPLDs. Even at these large densities, the Delta39K family is fast enough to implement a fully synthesizable 64-bit, 66-MHz PCI core.

Voltage	Memory Type	Tpd (ns)	Macrocells	Gates	Option Power	I/O	Package	Digi-Key Part No.	Price Each			Cypress Part No.
									1	25	100	
<b>ULTRA 37000 CPLDs</b>												
5.0	Flash	6	64	2,000	Standard	69	100-TQFP	428-1722-ND	7.14	6.43	5.70	CY37064P100-125AXC
		6	64	2,000	Standard	37	44-TQFP	428-1723-ND	5.81	4.65	3.93	CY37064P44-125AXC
		7.5	192	5,700	Standard	125	160-TQFP	428-1724-ND	16.44	15.35	14.26	CY37192P160-125AXC
		7.5	256	7,700	Standard	133	160-TQFP	428-1725-ND	23.52	21.96	20.39	CY37256P160-125AXC
		6	64	200	Standard	69	100-TQFP	428-1936-ND	7.80	7.03	6.23	CY37064P100-125AXI
3.3	Flash	8.5	64	200	Standard	37	44-TQFP	428-1937-ND	5.81	4.65	3.93	CY37064VP44-100AXC
<b>DELTA 39K ISR CPLDs</b>												
2.5 - 3.3	Flash	7.2	512	30K	Lp	136	208-PQFP	428-1939-ND	35.68	33.30	30.92	CY39030V208-125NTXC

## Delta39K/Ultra37000 ISR Programming Kit

The Delta39K/Ultra37000 ISR Programming Kit enables users to program Ultra37000, Ultra37000V, Delta39K, and PSI CPLDs on board with our ISR Programming Software, the USBISR Programming Cable, and a personal computer. The USBISR Programming Cable connects to a USB 1.1/USB 2.0 of a PC into a standard 10-pin male connector mounted on the user's board. The ISR software provides an easy-to-use Graphical User Interface that accepts JEDEC or hex files as input. The JEDEC/hex files are used to compose platform independent STAPL.SVF files. STAPL/SVF files contain all the information needed to program the device. The ISR software is used to define how many devices are in the daisy chain and what operation is to be done on each Cypress device. The same chain can be used with other JTAG-compliant devices. The ISR User's Guide describes the operation of the ISR software. The application notes included with the kit describe all system design considerations for programming with this Programming Kit.

**Features:** • Supports Cypress' Ultra37000™, Ultra37000V™, Delta39K™, and PSI™ families of products • STAPL (chain dependent and chain independent) programming language support • SVF programming language support • Standard JTAG programming interface • Multi-device programming • Easy to use interface that is compatible with Windows XP™, Windows 2000™, Windows ME™, Windows 98™, and Windows NT™ • Elimination of programming insertion which improves manufacturing efficiency, ability to program in the lab, on the manufacturing floor and at remote sites • Automatic test equipment (ATE) support via STAPL on ATE platforms.

**CY3950L Includes:** UltraISR™ Programming Cable for use with Ultra37000, Delta39K, and PSI CPLD families, ISR Programming, ISR Application Notes, and a Delta39K/Ultra37000™ Prototype Board.

**428-2019-ND** ISR Programming Kit..... 74.78

## FTG Programming Kits

### CY3670

The CY3670 FTG programming kit provides users with a PC the ability to program Cypress EPROM Field-Programmable Clock Generators quickly and easily. The two setup requirements are a power connection and a serial port connection with the PC.

**Features:** • Supports multiple Cypress EPROM Field Programmable Clock Generators: CY2071AF, CY2291F, CY2292F, CY2292FZ, CY2907F8, and CY2907F14 • Separate device-specific socket adapters • Allows quick and easy prototyping • Compact design for ease of portability • Easy to use interface: Windows compatible • User-friendly CYClocks™ software for JEDEC file development

**Kit Includes:** • Programmer Unit • Serial Port Cable • AC/DC Adapter • CD containing • CyClocks Software • CY\_FTG\_V2 Programmer Software • Data sheets of supported devices • Device-specific socket adapters for the CY2071AF and CY2292F (socket adapters for the other devices are ordered separately)

**428-1457-ND** FTG Programming Kit..... 279.51  
**428-2042-ND** Socket Adapter for CY2071AF..... 95.11

### CY3672-USB

The CY3672 programming kit enables any user with a PC the ability to program Field Programmable Clock generators quickly and easily. The only two setup requirements are a power connection and a parallel port connection with the PC.

**Features:** • Supports Field Programmable Clock Generators: CY2077FS, CY2077FZ, CY22050F, CY22150F, CY22381F, CY22392F, CY22393F, CY22394F, and CY22395F • Allows quick and easy prototyping • Compact design for ease of portability • Easy to use Windows 95, 98, NT, 2K, ME, XP compatible interface • User friendly CYClocksRT™ software for JEDEC file development

**Kit Includes:** • Parallel Port cable • AC/DC adapter • CD containing: CyClocksRT, CY3672 programmer interface software, and data sheets

**428-1918-ND** FTG Programming Kit..... 279.51

**Free shipping on orders over £50! All prices are in British pound sterling and include duties.**

650 (UK091)

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