CY3672-USB

Clock Programming Kit

Features

- Supports these field-programmable clock generators: CY2077FS, CY2077FZ, CY22050KF, CY22150KF, CY22381F, CY22392F, CY22393F, CY22394F, CY22395F, CY23FP12, CY25100ZXCF/IF, CY25100SXCF/IF, CY25200KF, CY25701FLX
- Allows quick and easy prototyping
- Easy to use Microsoft® Windows® 95, 98, NT, 2K, ME, XP-compatible interface
- User-friendly CyClockWizard™ software for JEDEC file development

CY3672-USB Kit Contents

- CY3672 programmer base unit
- CD ROM with CY3672 software and USB driver
- USB cable
- AC/DC power adapter
- User's manual

Functional Description

The CY3672-USB programming kit enables any user with a PC to quickly and easily program Field-programmable Clock Generators. The only setup requirements are a power connection and a USB port connection with the PC, as shown in Figure 2.

Using CyClockWizard software, users can configure their parts to a given specification and generate the corresponding JEDEC file.

The JEDEC file is then loaded into CY3672-USB software that communicates with the programmer. The CY3672-USB software has the ability to read and view the EPROM table from a programmed device. The programming flow is outlined in Figure 1.

Setup

Hardware

The CY3672-USB programming kit has a simple setup procedure. A socket adapter must be inserted into the CY3672 base unit. Available socket adapters are listed in Table 1, and are ordered separately. No socket adapters are included in the CY3672-USB Clock Programming Kit. As shown in Figure 2, only two connections are required. The programmer connects to a PC through a USB cable, and receives power through the AC/DC adapter that connects to a standard 110 V/220 V wall outlet.

Figure 1. Programming Procedure

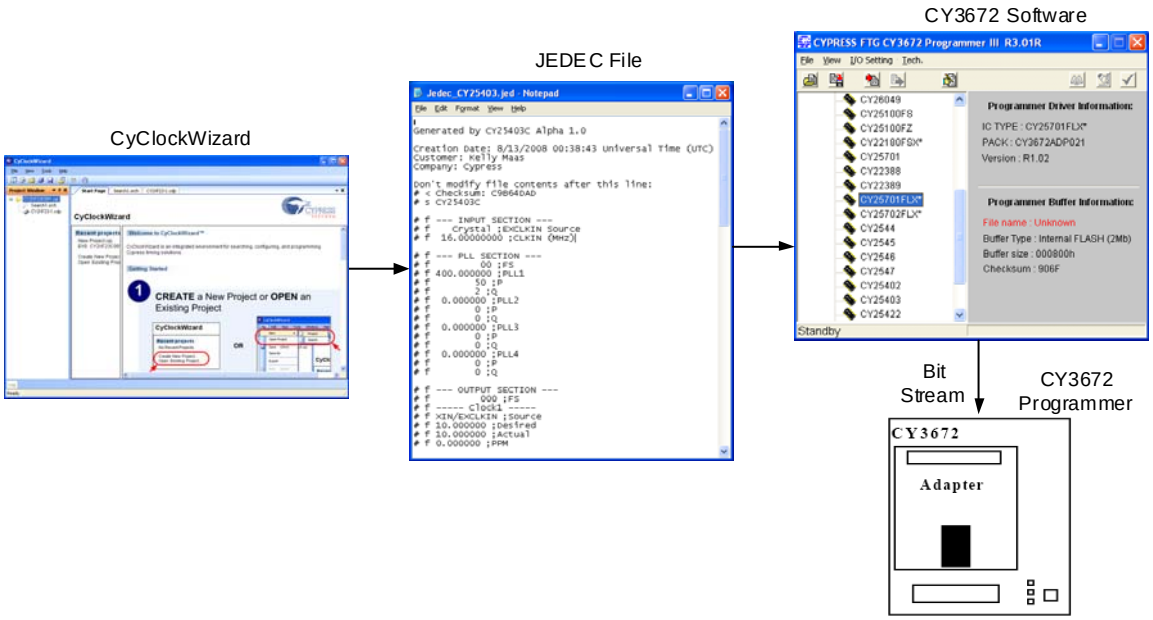


Figure 2. CY3672 Programming Kit Setup

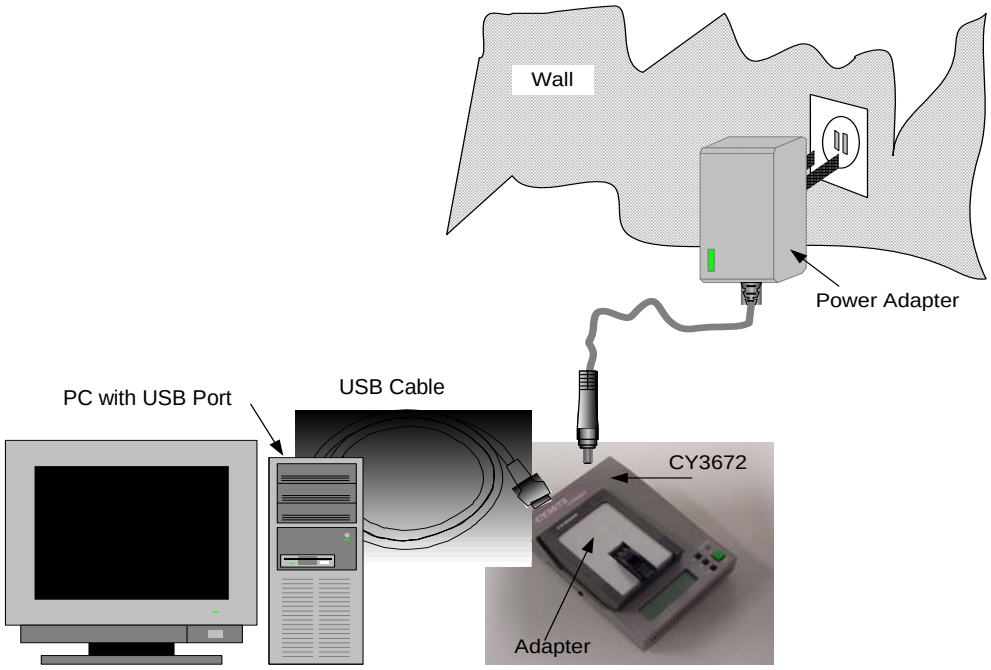


Figure 3 is a close-up of the socket adapter and illustrates the correct orientation for placing the device into the socket. Pin1 must always be in the lower left corner, as shown in Figure 3.

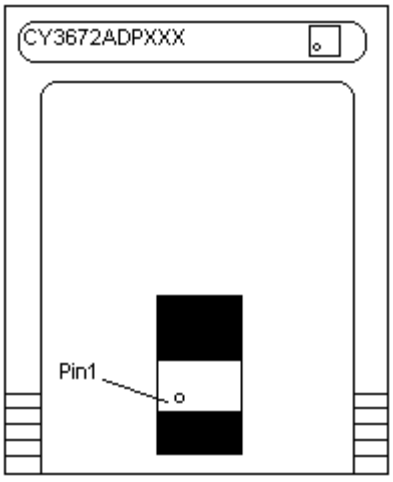
Software

Setting up the software is just as easy as setting up the hardware. It is important to note that the CY3672 programmer software is separate and distinct from the software used to configure devices and generate the JEDEC format programming file.

The CY3672 programmer software is included on the CD that ships with the programmer. The latest revision can also be downloaded from the Cypress web site www.cypress.com. A USB driver is included as part of the installation package. See the next section for setup details.

CyClockWizard configuration software is also downloadable from the Cypress web site.

Figure 3. Device Orientation

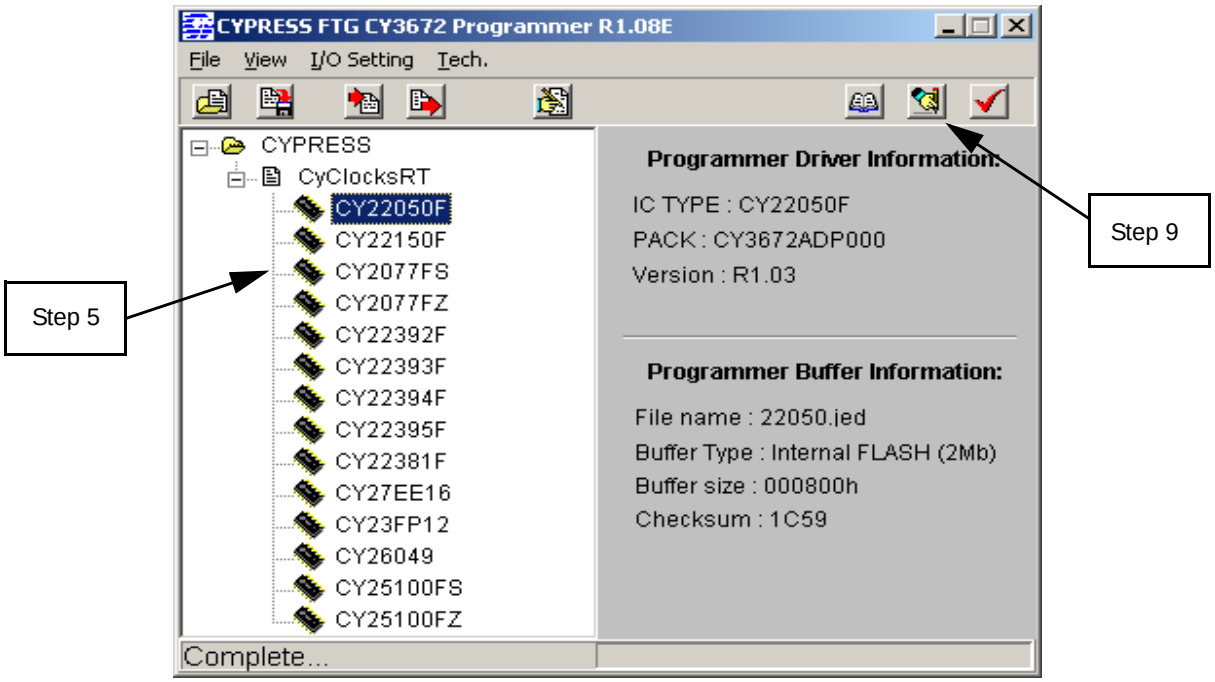


Quick Start Guide

Go through the following steps to properly configure and use the CY3672.

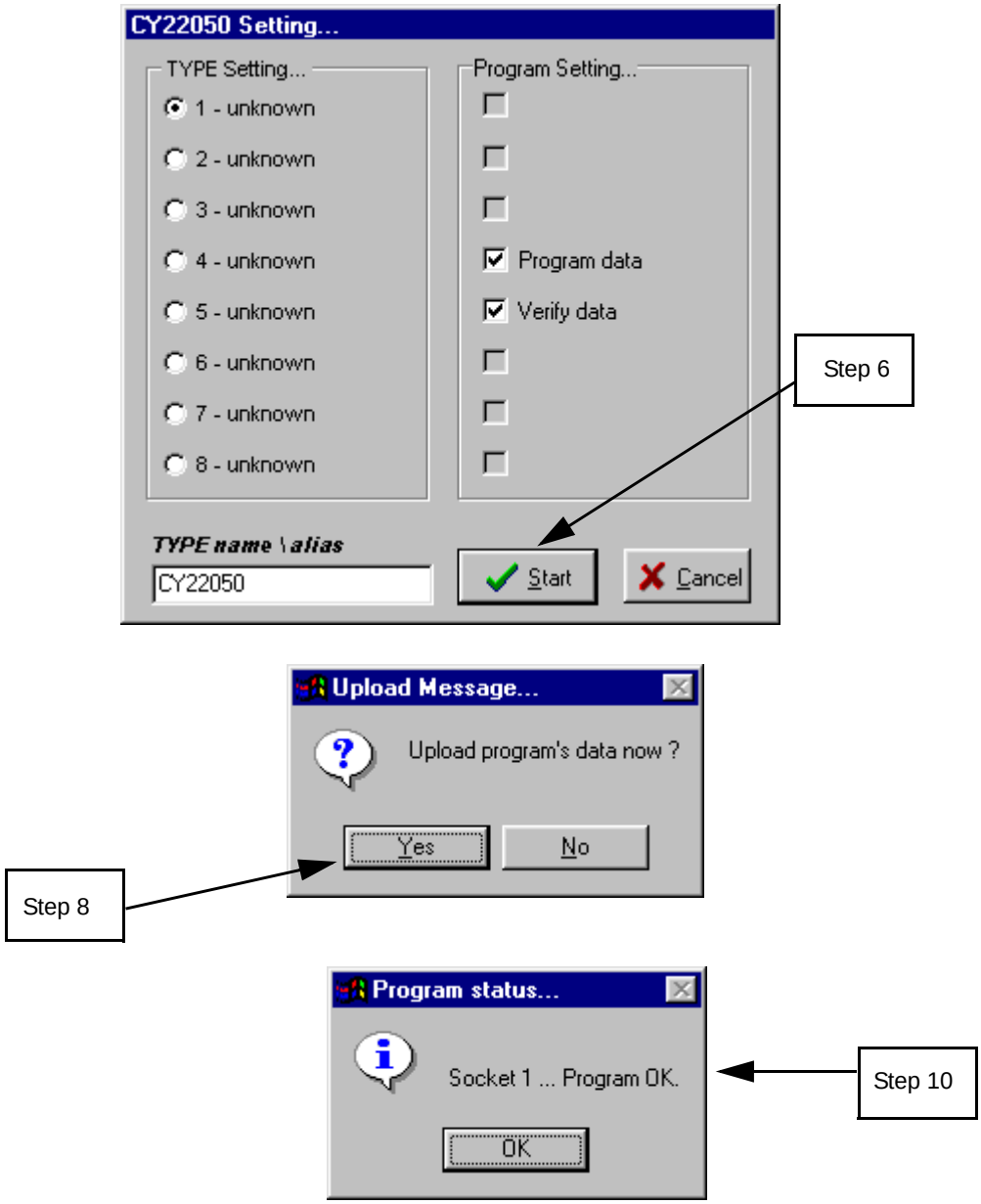
1.
   a. Insert the CY3672 software CD, or download and unzip the CY3672 from the website. Connect the CY3672 power supply, connect the USB cable to the programmer and PC, and turn on the power switch. When the PC detects the new hardware, follow the wizard and search for the suitable driver either from the CD-ROM or from the USB unzipped CY3672 software folder.
   b. Use the programmer arrow buttons to set the programmer LCD display to “TYPE”
2.
   a. Install CyClockWizard configuration software, available at www.cypress.com
   b. Install the CY3672 software onto your computer by running SETUP.EXE.
3. Use CyClockWizard to generate a JEDEC file for the device you wish to program.
4. Open up the CY3672 software: go to Start Menu > Programs > Cypress > CY3672 or the location where the software was installed.
5. Double click on the device that you wish to program under the menu on the left side of the screen, see Figure 4.
6. Click on the “Start” button at the bottom of the popup window, see Figure 5.
7. Browse to and select the JEDEC file which you created earlier in step 4 and click on “Open”.
8. Click “Yes” when the Upload Message screen pops up.
9. Once you see “Complete...” on the status bar at the bottom of the window click on the “Program IC” icon at the top right of the window (see Figure 4).
10. When you see a window with “Socket 1... Program OK.” pop up you have successfully programmed a device.[1]

Figure 4. CY3672 Software, Device Selection Page



Note
1. For more detailed information on all the functions of the software and programmer, please see the user manual.

Figure 5. CY3672 Software, Programming Sequence



Socket Adapters

Socket adapters and the CY3672-USB Programming Kit can be ordered at http://www.cypress.com, where they are categorized as development kits. Table 1 lists the available socket adapters and their corresponding devices and configuration software.

Table 1. Available Socket Adapters

Adapter Part Number	Adapter Label	Programmable Device	Configuration Software
CY3690	CY3672ADP009	CY25100SXCF / SXIF (SOIC)	CyClockWizard[2]
CY3691	CY3672ADP008	CY25100ZXCF / ZXIF (TSSOP)	CyClockWizard[2]
CY3692	CY3672ADP006	CY23FP12	CyClockWizard[3]
CY3695	CY3672ADP000	CY22050KF, CY22150KF	CyClockWizard[3]
		CY25200KF	CyClockWizard[2]
CY3696	CY3672ADP001	CY2077FS (SOIC)	CyClockWizard[4]
CY3697	CY3672ADP002	CY2077FZ (TSSOP)	CyClockWizard[4]
CY3698	CY3672ADP003	CY22392F, CY22393F, CY22394F, CY22395F	CyClockWizard[3]
CY3699	CY3672ADP004	CY22381F	CyClockWizard[3]
CY3724	CY3672ADP021	CY25701FLX	CyClockWizard[2]

Ordering Information

Ordering Code	Description	Operating Voltage
CY3672-USB	Clock programming kit with base unit	110 V/220 V
CY3690	Socket adapter for CY25100SXCF / SXIF (SOIC)	N/A
CY3691	Socket adapter for CY25100ZXCF / ZXIF (TSSOP)	N/A
CY3692	Socket adapter for CY23FP12	N/A
CY3695	Socket adapter for CY22050KF, CY25150KF, CY25200KF	N/A
CY3696	Socket adapter for CY2077FS (SOIC)	N/A
CY3697	Socket adapter for CY2077FZ (TSSOP)	N/A
CY3698	Socket adapter for CY22392F, CY22393F, CY22394F, CY22395F	N/A
CY3699	Socket adapter for CY22381F	N/A
CY3724	Socket adapter for CY25701FLX	N/A

Notes
2. The legacy configuration software for this device is CyberClocks Online.
3. The legacy configuration software for this device is CyClocksRT, which is an application embedded within CyberClocks software.
4. The legacy configuration software for this device is CyClocks, which is an application embedded within CyberClocks software.

Document History Page

Document Title: CY3672-USB Clock Programming Kit Document Number: 38-07409				
Revision	**ECN**	**Orig. of Change**	**Submission Date**	**Description of Change**
**	114456	CKN	07/24/02	New data sheet
*A	118435	CKN	12/05/02	Removed CD containing CyClocksRT software, CY3672 programmer interface software, data sheet Added Quick Start Guide under kit contents Updated paragraph two of Functional Description to include information on new software CyberClocks
*B	127454	RGL	09/05/03	Added CY3690, CY3691, CY3692, CY3693 and CY3694 socket adapters Added Quick Start Guide
*C	223822	RGL	05/11/04	Added the registration process for the CyberClocks Online Fixed the ordering information to match the DevMaster
*D	270030	RGL	10/11/04	Added CY25200F Socket Adapter Added CY3613 Socket for CY25701F Device
*E	390555	RGL	08/25/05	Added CY3617 socket for CY25702FJXC Added CY3618 socket for CY25702FXCT Added CY3672-USB Programmer Information
*F	404668	KVM	11/03/05	Added CY3724 Socket Adapter for CY25701FLXC
*G	2897245	KVM	03/22/10	Changed title Removed Kits CY3672 and CY3672-PRG Removed references to parallel port interface and cable Swapped adapter Labels CY3672ADP008 and CY3672ADP009 Removed socket adapters CY3693, CY3694, CY3613, CY3617 and CY3618 Changed configuration software to CyClockWizard
*H	3287649	BASH	06/20/11	Corrected the description of CY3690 and CY3691.

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