CY3672

PTG Programming Kit

Features

- **Supports Field-programmable Clock Generators**
- **CY2077FS, CY2077FZ, CY22050F, CY22150F, CY22381F, CY22392F, CY22393F, CY22394F, CY22395F, CY25100F, CY25200F, CY25701F,CY25702F CY23FP12, CY26049, and CY27EE16**
- **Allows quick and easy prototyping**
- **Compact design for ease of portability**
- **Easy to use Microsoft® Windows® 95, 98, NT, 2K, ME, XP-compatible interface**
- **User-friendly CyberClocks™ or CyberClocks Online software for JEDEC file development**

CY3672-PRG Kit Contents

- Parallel port cable
- AC/DC adapter
- Quick start guide
- User manual

CY3672-FTG Development Kit Contents in Addition to CY3672-PRG Contents

- Three Sockets: CY3695, CY3698, CY3699

CY3672-USB Kit Contents in Addition to CY3672-PRG Contents

- USB Driver CD ROM
- USB Cable

Functional Description

The CY3672 programming kit enables any user with a PC to quickly and easily program Field-programmable Clock Generators. The only set-up requirements are a power connection and either a parallel port or USB port (CY3672-USB) connection with the PC, as shown in *Figure 2*.

Using CyClocksRT™, (embedded in CyberClocks software) or CyberClocks Online, users can configure their parts to a given specification and generate the corresponding JEDEC file. In addition, CyClocksRT software provides PPM optimization and power calculations.

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

Set Up

Hardware

The CY3672 programming kit has a very simple set-up procedure. As shown in *Figure 2*, only two connections are required. The programmer must be connected to a PC through either a parallel port or USB port (CY3672-USB) and must receive power through the AC/DC adapter that gets hooked up to your standard 110V/220V wall outlet. When using the parallel port, make sure the parallel port settings on your computer is ECP or EPP. CY3672-PRG or CY3672-USB are the programming base unit that can be ordered separately with any individual socket adapter.

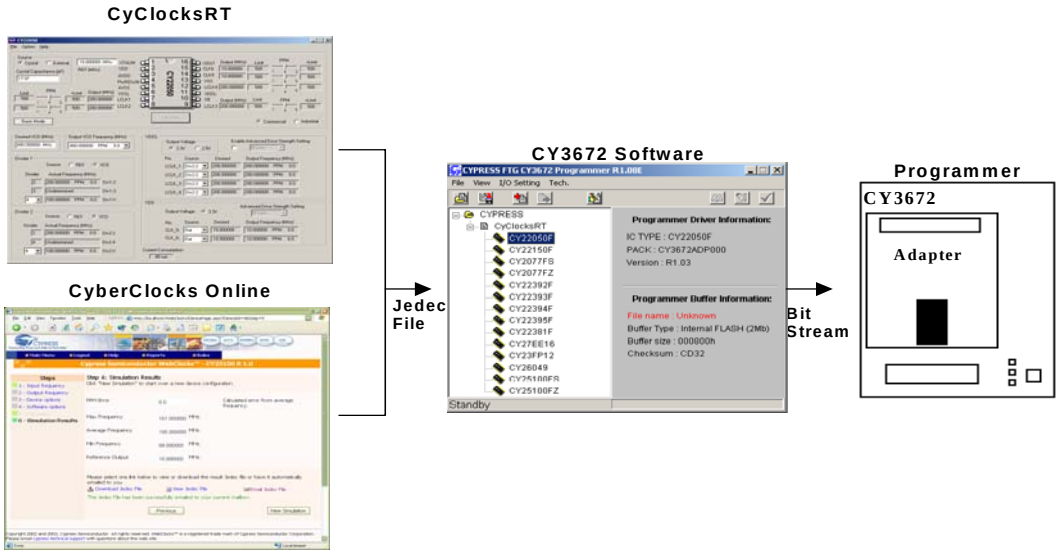


Figure 1. Programming Procedure

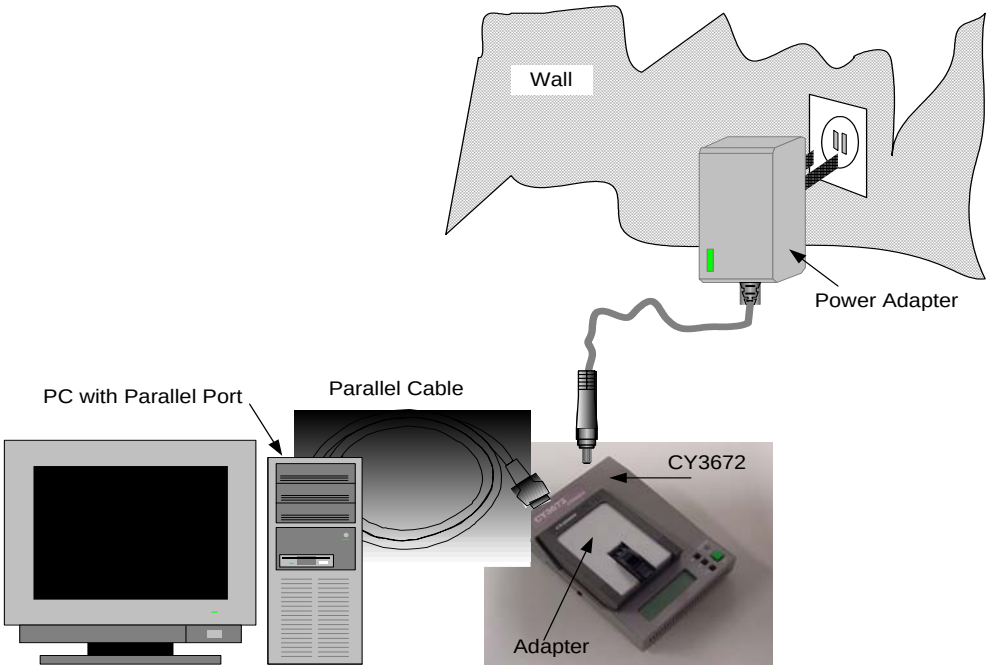


Figure 2. CY3672 Programming Kit Set-up

Figure 2 is a close-up of the socket and illustrates the correct orientation for placing the device into the socket. Pin1 should 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. Download the latest revisions of CyberClocks and CY3672 programmer software off of our web site at www.cypress.com. To install CyberClocks, unzip the file, then simply run the set-up file in the CyberClocks folder. It will prompt the user for a few questions and then self-installs.[1]

CyberClocks Online, which is a web based software, is available on-line through user registration. It configures spread spectrum clock generators, such as CY25100.

To install the CY3672 software, first run SETUP.EXE to install necessary DLLs to the windows registry. Once this is done, run CY3672*.EXE to launch.

When the CY3672 programmer is used for the first time, it is required to be in “TYPE” mode. This mode is set by pushing the arrow keys on the programmer until you see “TYPE” displayed on the LCD screen.

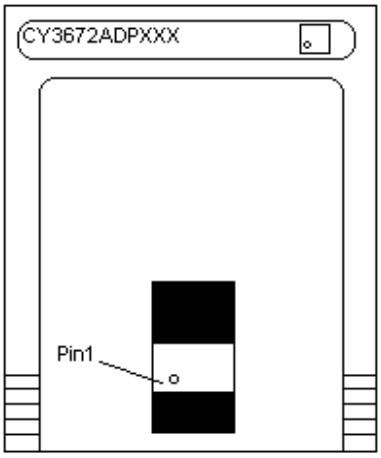


Figure 3. Device Orientation

Note:
1. Be sure to check for software updates at http://www.cypress.com/support.

Quick Start Guide

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

1.
   a. If you are using a parallel port, make sure your parallel port setting is ECP or EPP in your PC Bios settings. Connect the power supply and hook up the parallel port to your computer and programmer.
   b. If you are using a USB port, insert the drive files CD, connect the power supply, and connect the USB cable to the programmer and PC. The PC will detect the new hardware, follow the wizard and search for suitable driver from the CD-ROM.
   c. Use the programmer arrow buttons to set the programmer LCD display to “TYPE”
2.
   a. Install CyberClocks or register on-line for SSCG products configuration software, CyberClocks Online, at www.cyberclocksonline.com[2]
   b. Install the CY3672 software, which is available on Cypress website at www.cypress.com, onto your computer.
3. Use CyberClocks or CyberClocks online 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 CYPRESS->CyClocksRT 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 below).
10. When you see a window with “Socket 1... Program OK.” pop up you have successfully programmed a device.[3]

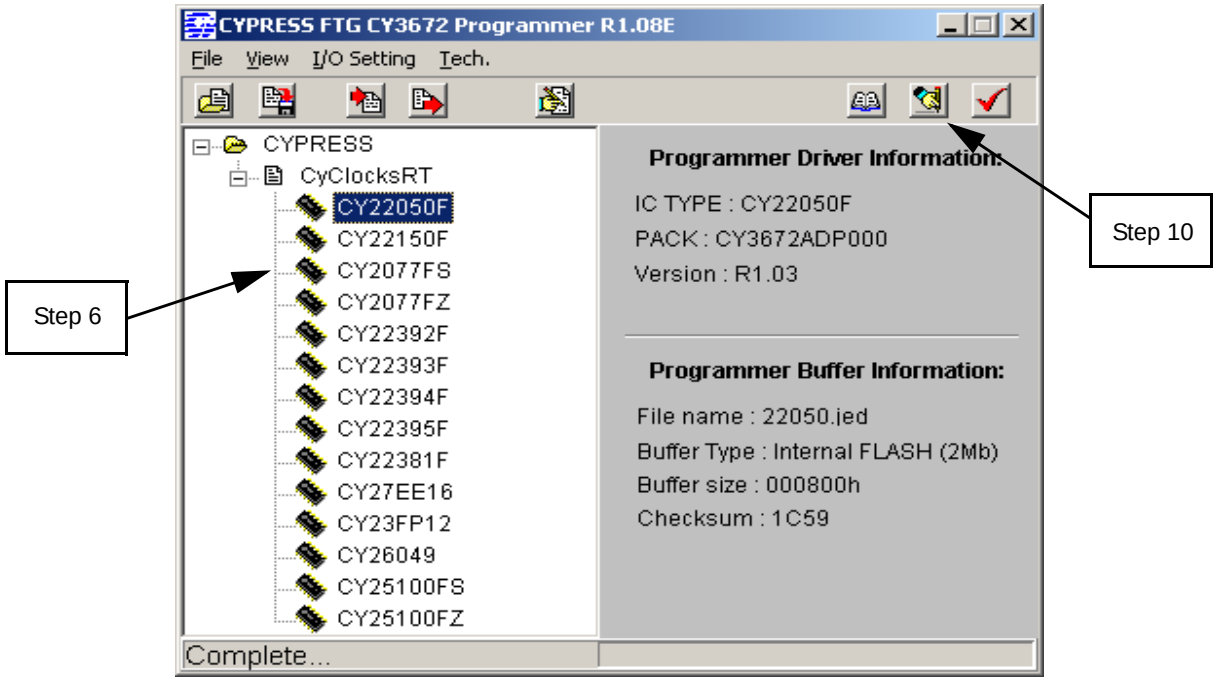


Figure 4. CY3672 Software, Device Selection Page

Note:
2. Registration process for the CyberClocks Online:
   a. Go to CyberClocks Online website
   b. Fill out the registration form. You need to have a valid e-mail address consists of a work-related e-mail.
   c. Make sure to check the “non-standard devices” box in the registration form
   d. Enter your cypress contact person.
   e. The approval process can take up to 48 hours.
   f. Upon the approval, the user will receive an e-mail indicating that the request has been successfully processed.
3. For more detailed information on all the functions of the software and programmer, please see the user manual.

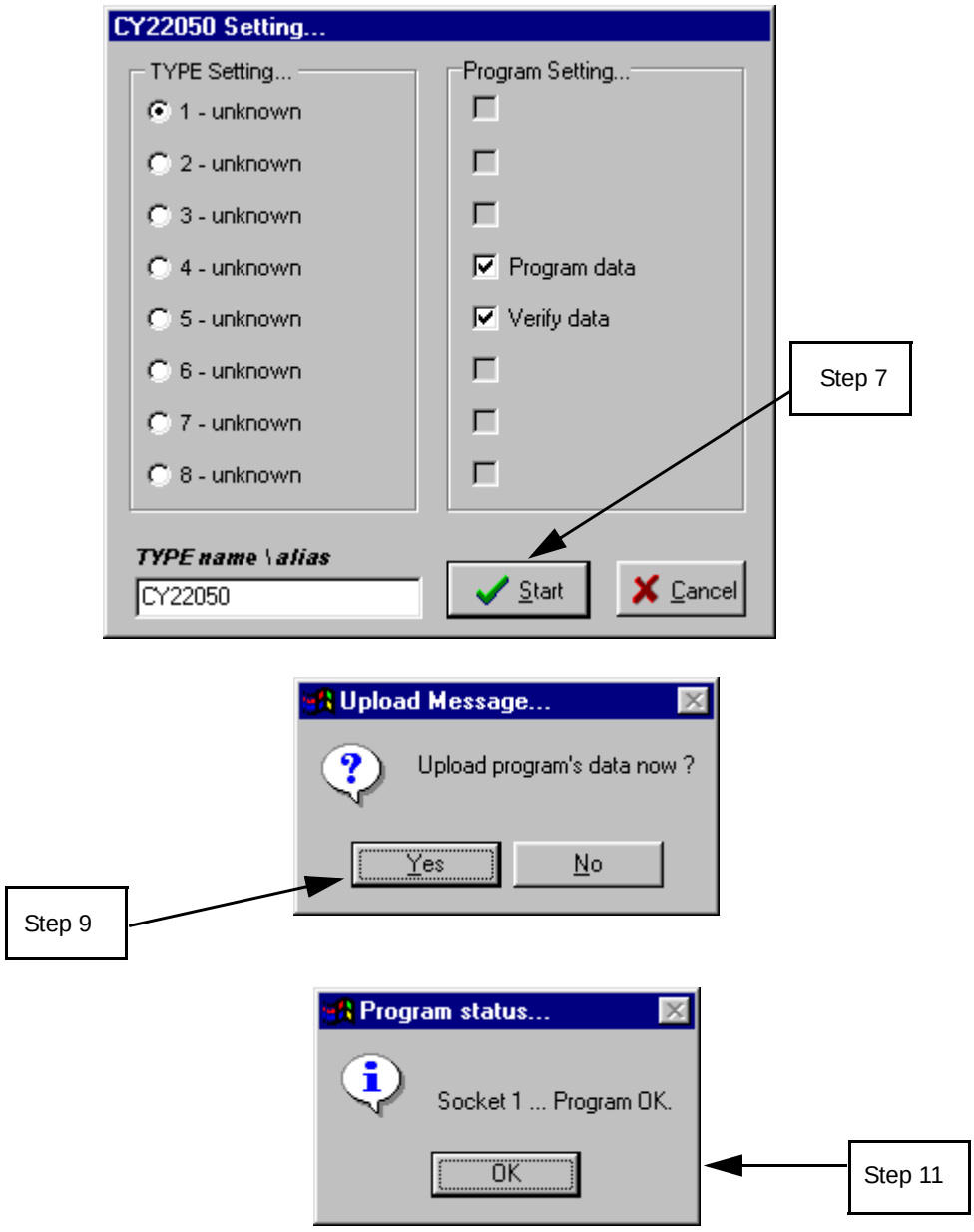


Figure 5. CY3672 Software, Programming Sequence

Sockets

To order additional sockets for the other devices listed below, please contact your local Cypress FAE or go to http://www.onfulfillment.com/cypressstore and click on “Timing Technology.” *Table 1* below lists the available sockets and their corresponding devices and configuration software.

Table 1. Available Sockets

Socket Part Number	Socket Label	Programming Device	Configuration Software
CY3695	CY3672ADP000	CY22050F, CY22150F	CyberClocks
		CY25200F	CyberClocks Online
CY3696	CY3672ADP001	CY2077FS	CyberClocks
CY3697	CY3672ADP002	CY2077FZ	CyberClocks
CY3698	CY3672ADP003	CY22392F, CY22393F, CY22394F, CY22395F	CyberClocks
CY3699	CY3672ADP004	CY22381F	CyberClocks
CY3690	CY3672ADP008	CY25100ZCF	CyberClocks Online
CY3691	CY3672ADP009	CY25100SCF	CyberClocks Online
CY3692	CY3672ADP006	CY23FP12	CyberClocks
CY3693	CY3672ADP007	CY26049	CyberClocks
CY3694	CY3672ADP005	CY27EE16	CyberClocks
CY3613	CY3672ADP013	CY25701FJXC	CyberClocks Online
CY3724	CY3672ADP021	CY25701FLXC	CyberClocks Online
CY3617	CY3672ADP016	CY25702FJXC	CyberClocks Online
CY3618	CY3672ADP017	CY25702FXCT	CyberClocks Online

Ordering Information

Ordering Code	Package description	Operating Voltage
CY3672	FTG Development Kit	110V/220V
CY3672-PRG	FTG Programmer	110V/220V
CY3672-USB	FTG Programmer with USB Support	110V/220V
CY3690	CY25100ZCF Socket Adapter (TSSOP)	N/A
CY3691	CY25100SCF Socket Adapter (SOIC)	N/A
CY3692	CY23FP12	N/A
CY3693	CY26049	N/A
CY3694	CY27EE16	N/A
CY3695	CY22050F, CY22150F, CY25200F	N/A
CY3696	CY2077FS	N/A
CY3697	CY2077FZ	N/A
CY3698	CY22392F, CY22393F, CY22394F, CY22395F	N/A
CY3699	CY22381F	N/A
CY3613	CY25701FJXC	N/A
CY3724	CY25701FLXC	N/A
CY3617	CY25702FJXC	N/A
CY3618	CY25702FXCT	N/A

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Document History Page

Document Title: CY3672 PTG Programming Kit Document Number: 38-07409				
REV.	**ECN NO.**	**Issue Date**	**Orig. of Change**	**Description of Change**
**	114456	07/24/02	CKN	New data sheet
*A	118435	12/05/02	CKN	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	09/05/03	RGL	Added CY3690, CY3691, CY3692, CY3693 and CY3694 socket adapters Added Quick Start Guide
*C	223822	See ECN	RGL	Added the registration process for the CyberClocks Online Fixed the ordering information to match the DevMaster
*D	270030	See ECN	RGL	Added CY25200F Socket Adapter Added CY3613 Socket for CY25701F Device
*E	390555	See ECN	RGL	Added CY3617 socket for CY25702FJXC Added CY3618 socket for CY25702FXCT Added CY3672-USB Programmer Information
*F	404668	See ECN	RGL	Added CY3724 Socket Adapter for CY25701FLXC