



## Application Note AN6039

### Clock Multiplier for Consumer & Communication Applications

This document describes the programmed values and functions of CY22800FXC-014A. Refer to the CY22800 data sheet for detailed product description and specifications.

## Features

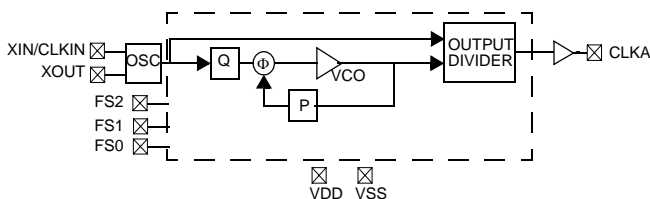
- Wide input and output frequency ranges
- Low cycle-to-cycle jitter

Table 1. Device Specifications

Code Number	Input Frequency Range (MHz)	Output Frequency Range (MHz)	Number of Outputs	Special Function
CY22800FXC-014A	See Frequency Table	See Frequency Table	1	Clock Multiplier

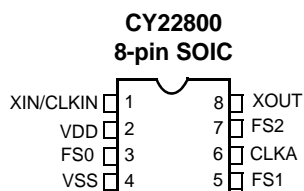
## Architecture

Figure 1. Logic Block Diagram



## Pinouts

Figure 2. Pin Configuration



## Frequency

Table 2. Frequency Table

FS[2:0]	CLKIN (MHz)	CLKA (MHz)	CLKIN/Xtal Range (MHz)	Multiplying Factor	CLKA Range (MHz)
000	27	12	9–30	0.444444444	4–13.3
001	27	24	9–30	0.888888889	8–26.6
010	27	48	9–30	1.777777778	16–53.3
011	27	60	9–30	2.222222222	20–66.6
100	27	62.5	8–28	2.314814815	18.5–64.8
101	27	106.25	9–30	3.935185185	35.4–118.1
110	27	125	8–28	4.62962963	37.0–129.6
111	OFF	OFF	OFF	OFF	OFF

## AC/DC Parameters

Table 3. AC/DC Parameters

Parameter <sup>[1]</sup>	Description	Typical Value	Unit
t <sub>1</sub>	Cycle-to-cycle Jitter	80 <sup>[2]</sup>	ps
t <sub>2</sub>	Period Jitter	90 <sup>[2]</sup>	ps
I <sub>DD</sub>	Current Consumption	15 <sup>[3]</sup>	mA

## Ordering Information

Table 4. Ordering Information

Part Number <sup>[4]</sup>	Package Type	Product Flow
CY22800FXC-014A	8-pin SOIC - Lead Free	Commercial, 0 to 70°C

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### Notes

1. Refer to the CY22800 generic data sheet for a complete list of AC/DC parameters.
2. Measurements made under nominal conditions (VDD = 3.3V, room temperature, 15 pF load cap.) with FS[2:0] = 110.
3. Measurements made under nominal conditions (VDD = 3.3V, room temperature, no load) with FS[2:0] = 000.
4. When ordering from a distributor, use CY22800FXC with the specific code number (014A).

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Revision \*\*

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