



Application Note AN6036

Clock Multiplier for Consumer & Communication Applications

This document describes the programmed values and functions of CY22800FXC-011A. Refer to the CY22800 data sheet for detailed product description and specifications.

Features

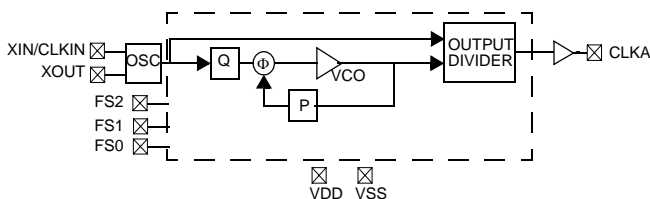
- Wide input and output frequency ranges
- Low cycle-to-cycle jitter

Table 1. Device Specifications

Code Number	Input Frequency Range (MHz)	Output Frequency Range (MHz)	Number of Outputs	Special Function
CY22800FXC-011A	See Frequency Table	See Frequency Table	1	Clock Multiplier

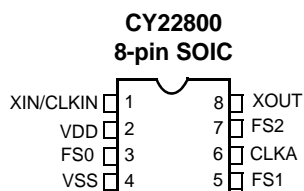
Architecture

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	25	33.33	9–30	1.3333	12–40
001	25	66.66	8–30	2.6667	21.3–80
010	25	50	10–30	2	20–60
011	25	75	9–30	3	27–90
100	25	80	8–30	3.2	25.6–96
101	25	100	9–30	4	36–120
110	25	133.33	10–30	5.3333	53.3–160
111	OFF	OFF	OFF	OFF	OFF

AC/DC Parameters

Table 3. AC/DC Parameters

Parameter ^[1]	Description	Typical Value	Unit
t ₁	Cycle-to-cycle Jitter	60 ^[2]	ps
t ₂	Period Jitter	63 ^[2]	ps
I _{DD}	Current Consumption	20 ^[3]	mA

Ordering Information

Table 4. Ordering Information

Part Number ^[4]	Package Type	Product Flow
CY22800FXC-011A	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] = 010.
3. Measurements made under nominal conditions (VDD = 3.3V, room temperature, no load) with FS[2:0] = 010.
4. When ordering from a distributor, use CY22800FXC with the specific code number (011A).

July 13, 2006

Revision **

- 1 -

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