Clock Multiplier for Consumer & Communication Applications

This document describes the programmed values and functions of CY22800FXC-013A. Refer to the CY22800 data sheet for detailed product description and specifications.
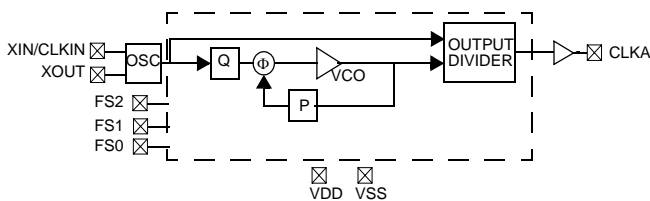
Features
- Wide input and output frequency ranges
- Low cycle-to-cycle jitter

Table 1. Device Specifications

Code Number	Input Frequency Range (MHz)	Output Frequency Range (MHz)	Number of Outputs	Special Function
CY22800FXC-013A	See Frequency Table	See Frequency Table	1	Clock Multiplier

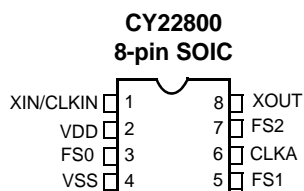## Architecture

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	33.33	9–30	1.234567901	11.1–37
001	27	66.66	8–27	2.469135802	19.7–66.6
010	27	50	9–30	1.851851852	16.6–55.5
011	27	75	9–30	2.777777778	25–83.3
100	27	80	9–30	2.962962963	26.6–88.8
101	27	100	9–30	3.703703704	33.3–111.1
110	27	133.33	8–27	4.938271605	39.5–133.3
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	85[2]	ps
t_2	Period Jitter	85[2]	ps
I_{DD}	Current Consumption	20[3]	mA

Ordering Information

Table 4. Ordering Information

Part Number[4]	Package Type	Product Flow
CY22800FXC-013A	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] = 001.
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 (013A).