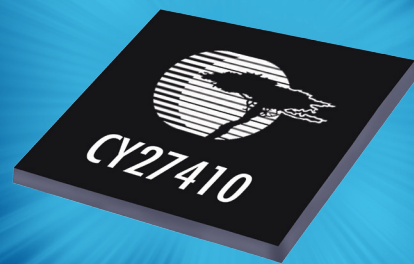


CYPRESS

4-PLL HIGH-PERFORMANCE CLOCK GENERATOR (CY27410)

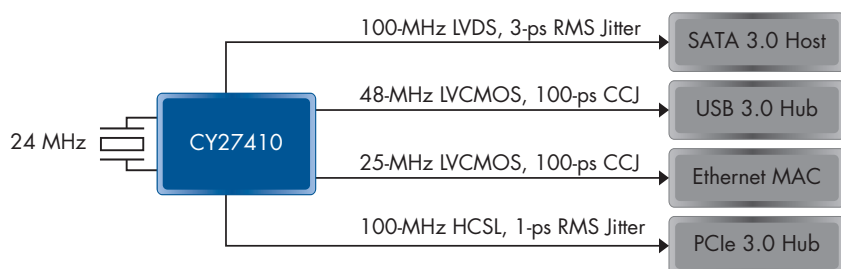
FLEXIBLE, SINGLE-CHIP SOLUTION THAT
SIMPLIFIES SYSTEM DESIGN



PRODUCT OVERVIEW

4-PLL HIGH-PERFORMANCE CLOCK GENERATOR

The CY27410 4-PLL (phase-locked loop) clock generator can create up to 12 programmable output frequencies on a single chip with best-in-class jitter performance. It saves board space and reduces bill-of-material costs by consolidating system components to provide a flexible, high-performance and low-cost solution. With support for frequencies up to 700 MHz and RMS Phase jitter of <0.7ps, CY27410 can support reference clocks for PCIe 1.0/2.0/3.0, SATA 1.0/2.0/3.0, 10 GbE and USB 1.0/2.0/3.0 peripherals.



CY27410 Reference Clocks for Data Transfer Standards

CY27410 FEATURES

- High frequency: 700-MHz differential, 250-MHz single-ended
- Pin select and I²C programming
- 12 outputs:
 - Eight configurable as differential or single-ended
 - Four single-ended
- Reference clock support for PCIe 3.0, SATA 2.0 and 10 GbE
- RMS Phase Jitter <0.7 ps (typical)
- Additional features:
 - Configurable as zero or non-zero delay buffer
 - Glitch-free frequency switching
 - Frequency Select
 - Early/late clocks
 - PLL cascading
 - Voltage controlled frequency synthesis

ADVANTAGES

- High frequency: 700-MHz differential, 250-MHz LVCMOS
- Supports multiple differential output standards: LVPECL, LVDS, HCSL and CML
- 12 outputs:
 - Eight configurable as differential or single-ended
 - Four single-ended
- Best-in-class jitter performance with RMS Phase Jitter <0.7 ps
- Reference clock support for PCIe 3.0, SATA 3.0 and 10 GbE
- Pin select and I²C programming
- Patented Spread Spectrum Technology
- Glitch-free frequency switching

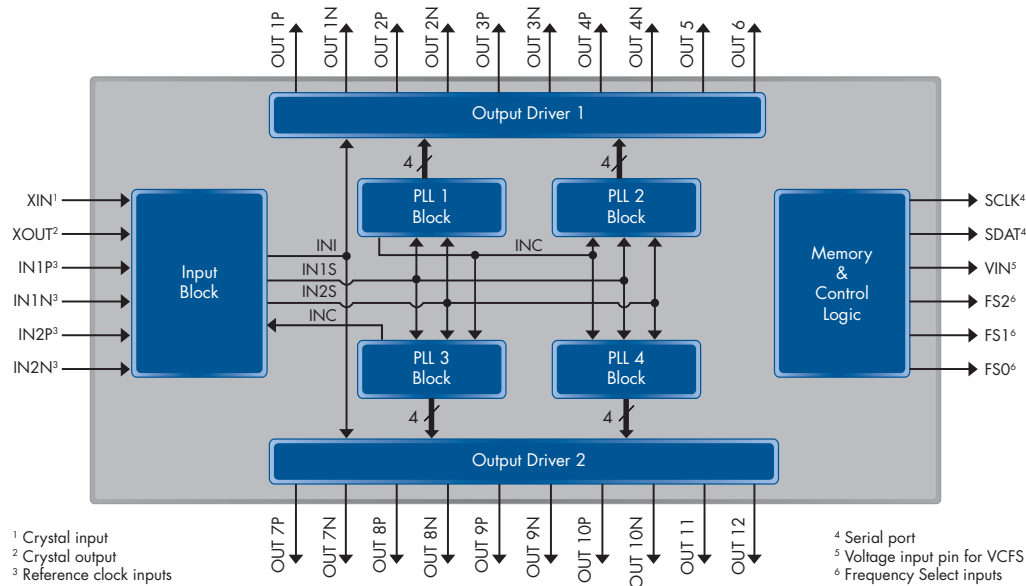
APPLICATIONS

- Multifunction Printers
- Femtocells & Home Gateways
- Car Infotainment Systems
- Routers & Switches



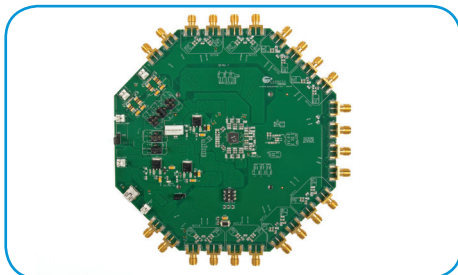
CY27410 ORDERING INFORMATION

Part Number	No. of Outputs	Programmability	Grade	Package
CY27410FLTIXI	12	Field	Industrial	48-QFN
CY27410LTXI - XXX	12	Factory	Industrial	48-QFN

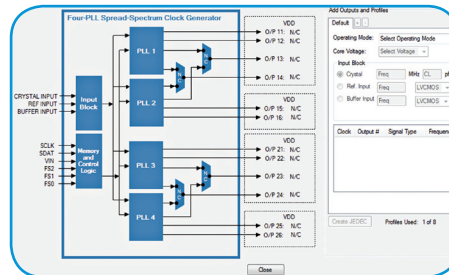


CY27410 Block Diagram

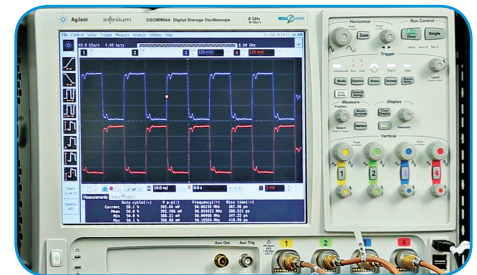
GET STARTED NOW



Buy the CY3679 kit to evaluate CY27410's performance and features including configurability, frequency select, early/late clocks and VCXO



Download the CyClockWizard 2.0 and PSoC Programmer software for free and design different configurations with ease



Generate your desired reference frequencies and replace your entire clock tree with a single-chip solution

FOR FURTHER DETAILS

To learn more about CY27410 and all Cypress Timing products, visit www.cypress.com/go/timing

To purchase CY27410 parts and evaluation/programming kits, visit www.cypress.com/buyonline

To access our timing solutions documentation, visit www.cypress.com/go/TimingAppNotes

Cypress Semiconductor Corporation

198 Champion Court, San Jose CA 95134
phone +1 408.943.2600
toll free +1 800.858.1810 (U.S. only)

© 2014 Cypress Semiconductor Corporation. All rights reserved. All other trademarks are the property of their respective owners.
Doc#001-95015 Rev** 112014/JAVA/NETA/BENY

