

Features

- **4 Input Clocks**
 - One crystal/CMOS input
 - Two differential/single-ended inputs
 - One single-ended/CMOS input
 - Any input frequency up to 1035MHz (up to 300MHz for CMOS)
 - Clock selection by pin or register control
- **Up to 3 Differential Outputs (Up to 6 CMOS)**
 - Output frequencies are any integer divisor up to 2^{32} of the input frequency (CMOS 250MHz max)
 - Each output has independent dividers
 - Low additive jitter <200fs RMS (12kHz-20MHz, for input frequencies ≥ 100 MHz)
 - Outputs are CML or 2xCMOS, can interface to LVDS, LVPECL, HSTL, SSTL and HCSL
 - In 2xCMOS mode, the P and N pins can be different frequencies (e.g. 125MHz and 25MHz)*
 - Per-output supply pin with CMOS output voltages from 1.5V to 3.3V
 - Precise output alignment circuitry and per-output skew adjustment
 - Per-output enable/disable and glitchless start/stop (stop high or low)*

Ordering Information

ZL40255LDG1	32 Pin QFN	Trays
ZL40255LDF1	32 Pin QFN	Tape and Reel

Matte Tin

Package size: 5 x 5 mm

-40°C to +85°C

General Features

- Automatic self-configuration at power-up from internal EEPROM; up to four configurations, pin-selectable
- Crystal interface for frequency synthesis up to 60MHz
- Four general-purpose I/O pins, each with many status and control options
- SPI or I²C processor Interface
- Tiny 5x5mm QFN package

Applications

- Frequency synthesis up to 60MHz
- Fanout up to 1035MHz
- Format conversion, frequency division, and skew adjustment in a wide variety of equipment types

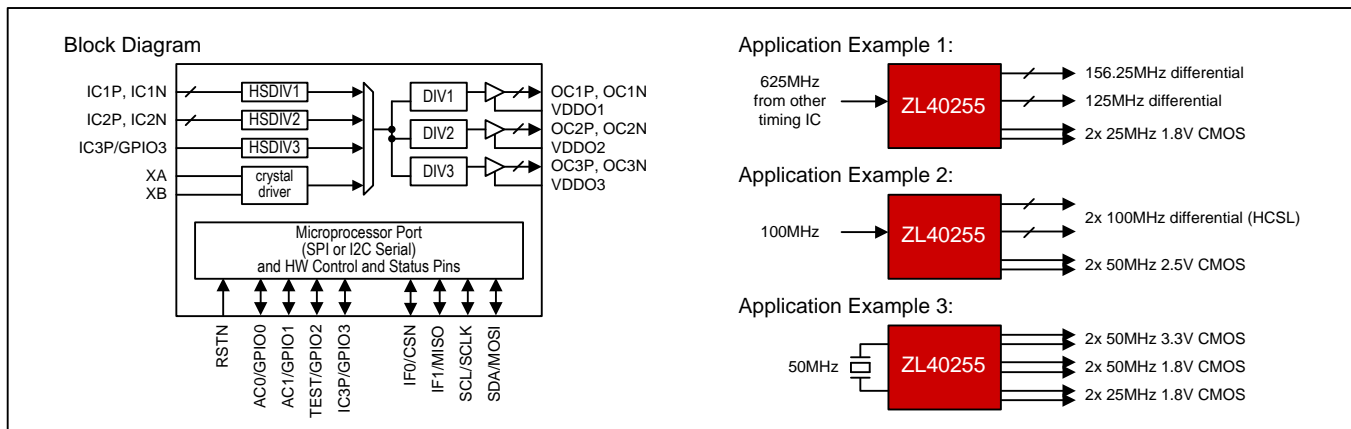


Figure 1 - Functional Block Diagram

* Some features require a higher-frequency input clock and enabling the output dividers.



Microsemi Corporate Headquarters
One Enterprise
Aliso Viejo, CA 92656 USA

Within the USA: +1 (800) 713-4113
Outside the USA: +1 (949) 380-6100
Sales: +1 (949) 380-6136
Fax: +1 (949) 215-4996

E-mail: sales.support@microsemi.com

©2016 Microsemi Corporation. All rights reserved. Microsemi and the Microsemi logo are trademarks of Microsemi Corporation. All other trademarks and service marks are the property of their respective owners.

Microsemi Corporation (Nasdaq: MSCC) offers a comprehensive portfolio of semiconductor and system solutions for communications, defense & security, aerospace and industrial markets. Products include high-performance and radiation-hardened analog mixed-signal integrated circuits, FPGAs, SoCs and ASICs; power management products; timing and synchronization devices and precise time solutions, setting the world's standard for time; voice processing devices; RF solutions; discrete components; security technologies and scalable anti-tamper products; Power-over-Ethernet ICs and midspans; as well as custom design capabilities and services. Microsemi is headquartered in Aliso Viejo, Calif., and has approximately 3,400 employees globally. Learn more at www.microsemi.com.

Microsemi makes no warranty, representation, or guarantee regarding the information contained herein or the suitability of its products and services for any particular purpose, nor does Microsemi assume any liability whatsoever arising out of the application or use of any product or circuit. The products sold hereunder and any other products sold by Microsemi have been subject to limited testing and should not be used in conjunction with mission-critical equipment or applications. Any performance specifications are believed to be reliable but are not verified, and Buyer must conduct and complete all performance and other testing of the products, alone and together with, or installed in, any end-products. Buyer shall not rely on any data and performance specifications or parameters provided by Microsemi. It is the Buyer's responsibility to independently determine suitability of any products and to test and verify the same. The information provided by Microsemi hereunder is provided "as is, where is" and with all faults, and the entire risk associated with such information is entirely with the Buyer. Microsemi does not grant, explicitly or implicitly, to any party any patent rights, licenses, or any other IP rights, whether with regard to such information itself or anything described by such information. Information provided in this document is proprietary to Microsemi, and Microsemi reserves the right to make any changes to the information in this document or to any products and services at any time without notice.