

Short Form Data Sheet

Features

- Four independent clock channels
- Programmable synthesizers generate any clockrate from 1 kHz to 750 MHz
- Two precision synthesizers generate clocks with jitter below 0.7 ps RMS for 10 G PHYs
- Two general purpose synthesizers generate a wide range of digital bus clocks
- Programmable digital PLLs synchronize to any clock rate from 1 kHz to 750 MHz
- Flexible two-stage architecture translates between arbitrary data rates, line coding rates and FEC rates
- Digital PLLs filter jitter from 14 Hz, 28 Hz, 56 Hz, 112 Hz, 224 Hz, 448 Hz or 896 Hz
- Automatic hitless reference switching and digital holdover on reference fail
- Four reference inputs configurable as single ended or differential

Ordering Information

ZL30160GGG 100 Pin LBGA ZL30160GGG2 100 Pin LBGA*

Trays Trays

January 2012

*Pb Free Tin/Silver/Copper -40°C to +85°C

- Eight LVPECL outputs and four LVCMOS outputs
- Eight outputs configurable as LVCMOS or LVDS/LVPECL/HCSL
- Operates from a single crystal resonator or clock oscillator
- Configurable via SPI/I2C interface

Applications

- 10 Gigabit line cards
- Synchronous Ethernet, 10 GBASE-R and 10 GBASE-W
- OTN multiplexers and transponders
- SONET/SDH, Fibre Channel, XAUI

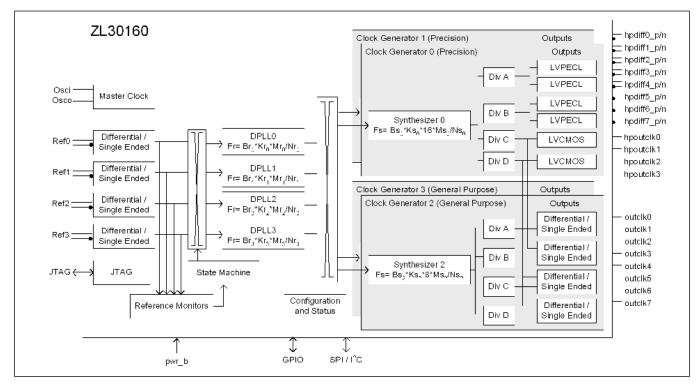
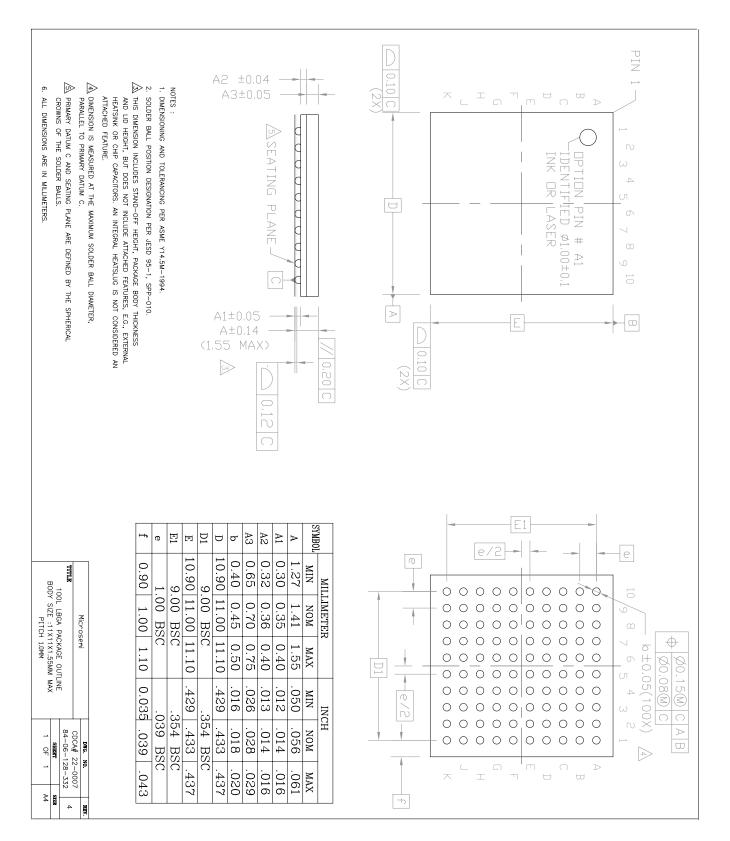


Figure 1 - Functional Block Diagram



ZL30160

Mechanical Drawing



Information relating to products and services furnished herein by Microsemi Corporation or its subsidiaries (collectively "Microsemi") is believed to be reliable. However, Microsemi assumes no liability for errors that may appear in this publication, or for liability otherwise arising from the application or use of any such information, product or service or for any infringement of patents or other intellectual property rights owned by third parties which may result from such application or use. Neither the supply of such information or purchase of product or service conveys any license, either express or implied, under patents or other intellectual property rights owned by Microsemi or licensed from third parties by Microsemi, whatsoever. Purchasers of products are also hereby notified that the use of product in certain ways or in combination with Microsemi, or non-Microsemi furnished goods or services may infringe patents or other intellectual property rights owned by Microsemi.

This publication is issued to provide information only and (unless agreed by Microsemi in writing) may not be used, applied or reproduced for any purpose nor form part of any order or contract nor to be regarded as a representation relating to the products or services concerned. The products, their specifications, services and other information appearing in this publication are subject to change by Microsemi without notice. No warranty or guarantee express or implied is made regarding the capability, performance or suitability of any product or service. Information concerning possible methods of use is provided as a guide only and does not constitute any guarantee that such methods of use will be satisfactory in a specific piece of equipment. It is the user's responsibility to fully determine the performance and suitability of any equipment using such information and to ensure that any publication or data used is up to date and has not been superseded. Manufacturing does not necessarily include testing of all functions or parameters. These products are not suitable for use in any medical and other products whose failure to perform may result in significant injury or death to the user. All products and materials are sold and services provided subject to Microsemi's conditions of sale which are available on request.

For more information about all Microsemi products visit our website at www.microsemi.com

TECHNICAL DOCUMENTATION - NOT FOR RESALE



Microsemi Corporate Headquarters One Enterprise, Aliso Viejo CA 92656 USA Within the USA: +1 (949) 380-6100 Sales: +1 (949) 380-6136 Fax: +1 (949) 215-4996 Microsemi Corporation (NASDAQ: MSCC) offers a comprehensive portfolio of semiconductor solutions for: aerospace, defense and security; enterprise and communications; and industrial and alternative energy markets. Products include high-performance, high-reliability analog and RF devices, mixed signal and RF integrated circuits, customizable SoCs, FPGAs, and complete subsystems. Microsemi is headquartered in Aliso Viejo, Calif. Learn more at **www.microsemi.com**.

© 2011 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.