

Features

- Precision synthesizer generates any clock-rate from 1 Hz to 177.5 MHz with jitter below 1ps
- Programmable digital PLL synchronize to any clock rate from 1 Hz (1 pps) to 750 MHz
- Input reference configurable as single ended LVCMOS (up to 177.5 MHz) or differential LVPECL (up to 750 MHz)
- Flexible two-stage architecture translates between arbitrary data rates, line coding rates and FEC rates
- Programmable Digital PLL loop filter: 30 MHz, 14 Hz, 28 Hz, 56 Hz, 112 Hz, 224 Hz, 448 Hz or 896 Hz
- Two LVCMOS outputs —from 1 Hz (1 pps) to 177.5 MHz

Ordering Information

ZL30159GGG2 64 Pin LPGA* Trays
 *Pb Free Tin/Silver/Copper
-40°C to +85°C

- Operates from a single crystal resonator or clock oscillator
- Configurable via SPI/I2C interface

Applications

- General purpose clock rate translator
- GPS receiver clock synthesizer

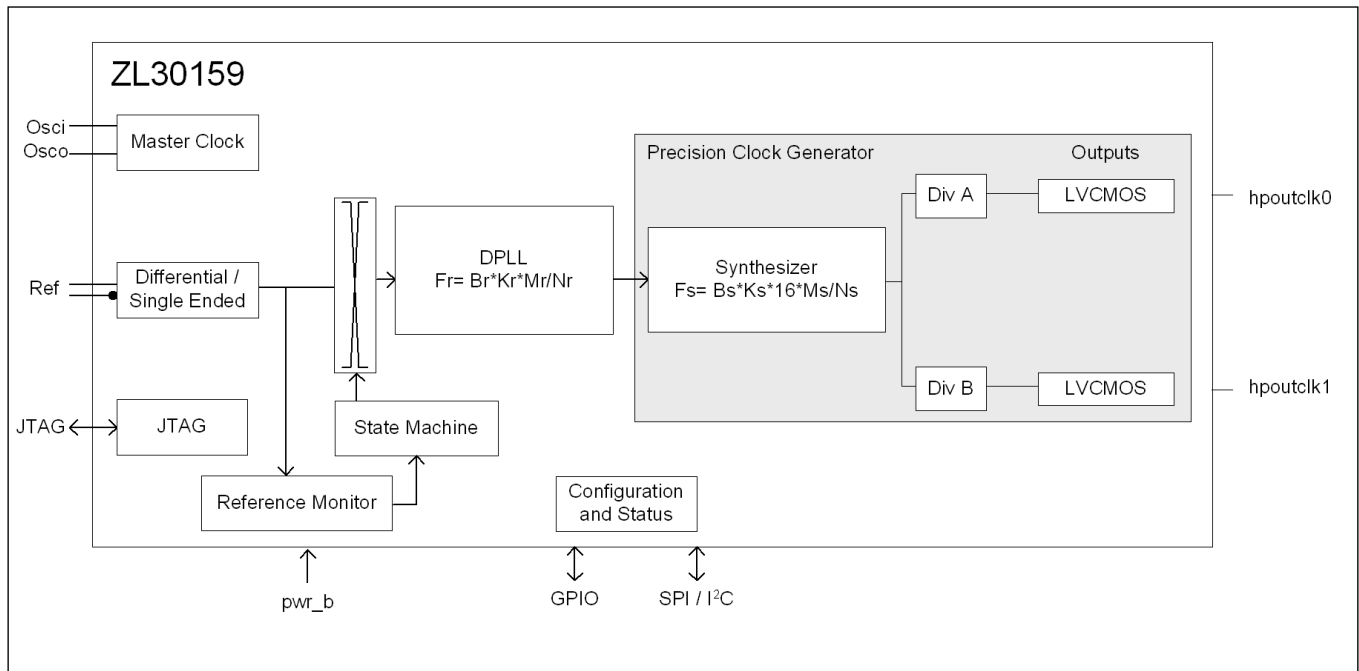
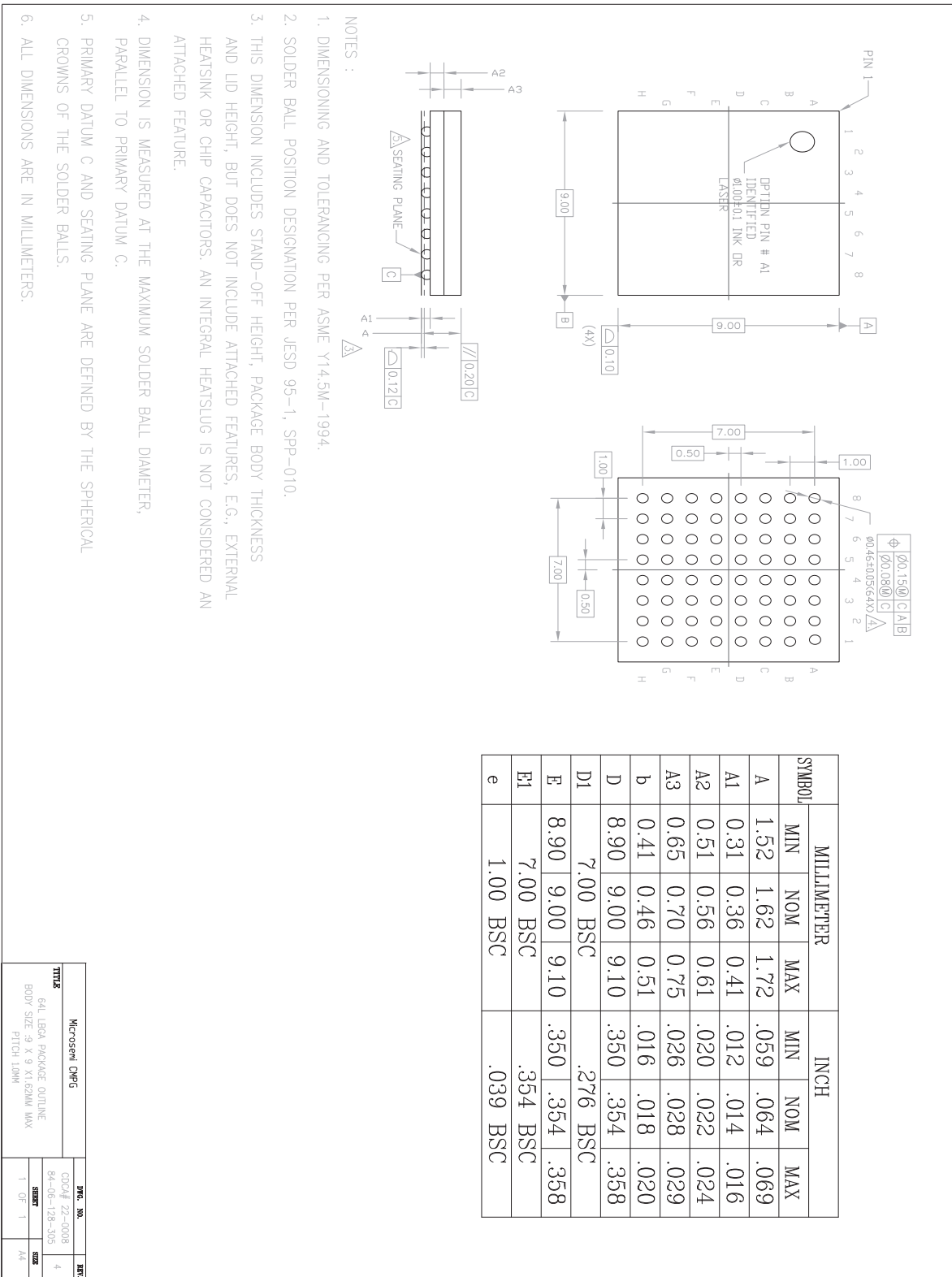


Figure 1 - Functional Block Diagram

Mechanical Drawing



NOTES :

1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
2. SOLDER BALL POSITION DESIGNATION PER JESD 95-1, SPP-010.
3. THIS DIMENSION INCLUDES STAND-OFF HEIGHT, PACKAGE BODY THICKNESS AND LID HEIGHT, BUT DOES NOT INCLUDE ATTACHED FEATURES, E.G., EXTERNAL HEATSINK OR CHIP CAPACITORS. AN INTEGRAL HEATSLUG IS NOT CONSIDERED AN ATTACHED FEATURE.
4. DIMENSION IS MEASURED AT THE MAXIMUM SOLDER BALL DIAMETER, PARALLEL TO PRIMARY DATUM C.
5. PRIMARY DATUM C AND SEATING PLANE ARE DEFINED BY THE SPHERICAL CROWNS OF THE SOLDER BALLS.
6. ALL DIMENSIONS ARE IN MILLIMETERS.

SYMBOL	MILLIMETER			INCH		
	MIN	NOM	MAX	MIN	NOM	MAX
A	1.52	1.62	1.72	.059	.064	.069
A1	0.31	0.36	0.41	.012	.014	.016
A2	0.51	0.56	0.61	.020	.022	.024
A3	0.65	0.70	0.75	.026	.028	.029
b	0.41	0.46	0.51	.016	.018	.020
D	8.90	9.00	9.10	.350	.354	.358
D1	7.00	BSC		.276	BSC	
E	8.90	9.00	9.10	.350	.354	.358
E1	7.00	BSC		.354	BSC	
e	1.00	BSC		.039	BSC	

Microsemi Chip		DWG. NO.		REV.	
TTTT8		CDA# 22-0008		4	
64L LEGA PACKAGE OUTLINE		84-06-128-305		SIZE	
BODY SIZE : 9 X 9 X1.62MM MAX		1 OF 1		REV	
PITCH 1.0MM					

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.

© 2013 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.

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- ⊖ [View ZL30159GGG2 on WIN SOURCE](#)
- ⊖ [Microchip Technology Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management