ZL30150
Two Channel Clock Translator / NCO
Short Form Data Sheet

Februaury 2012

Features

- Generates any Telecom or SyncE frequencyindependent of the input frequency rate
- Two general purpose synthesizers generate a wide range of digital bus clocks
- Programmable digital PLLs synchronizes to any Telecom (N * 8 kHz) or any Synchronized Ethernet (SyncE) frequencies.
- 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
- Four programmable Numerically Controlled Oscillators (NCOs) available where two NCOs can be used at the time
- Automatic hitless reference switching and digital holdover on reference fail
- Four reference inputs configurable as single ended or differential
- 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

Ordering Information

ZL30150GGG	100 Pin LBGA	Trays
ZL30150GGG2	100 Pin LBGA*	Trays

*Pb Free Tin/Silver/Copper

-40°C to +85°C

Applications

- 10 Gigabit line cards
- Synchronous Ethernet, 10 GBASE-R and 10 GBASE-W
- SONET/SDH

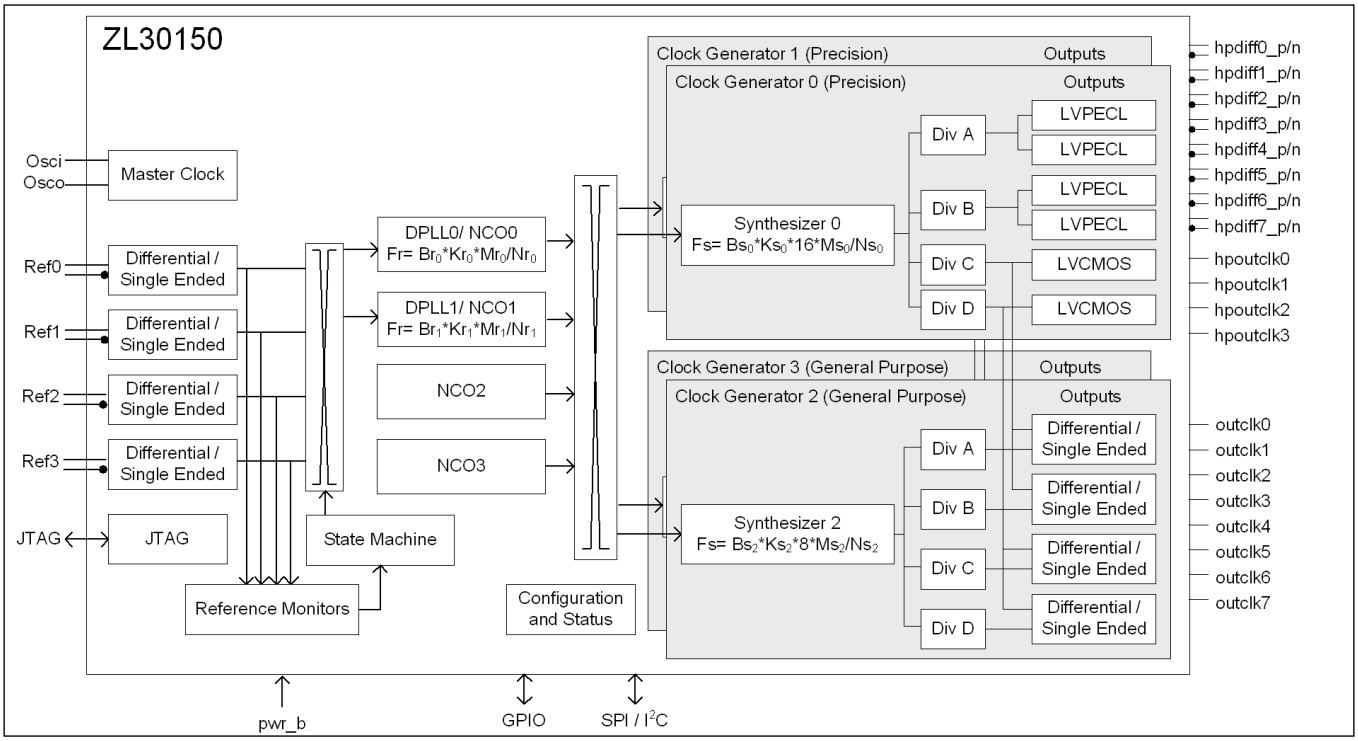
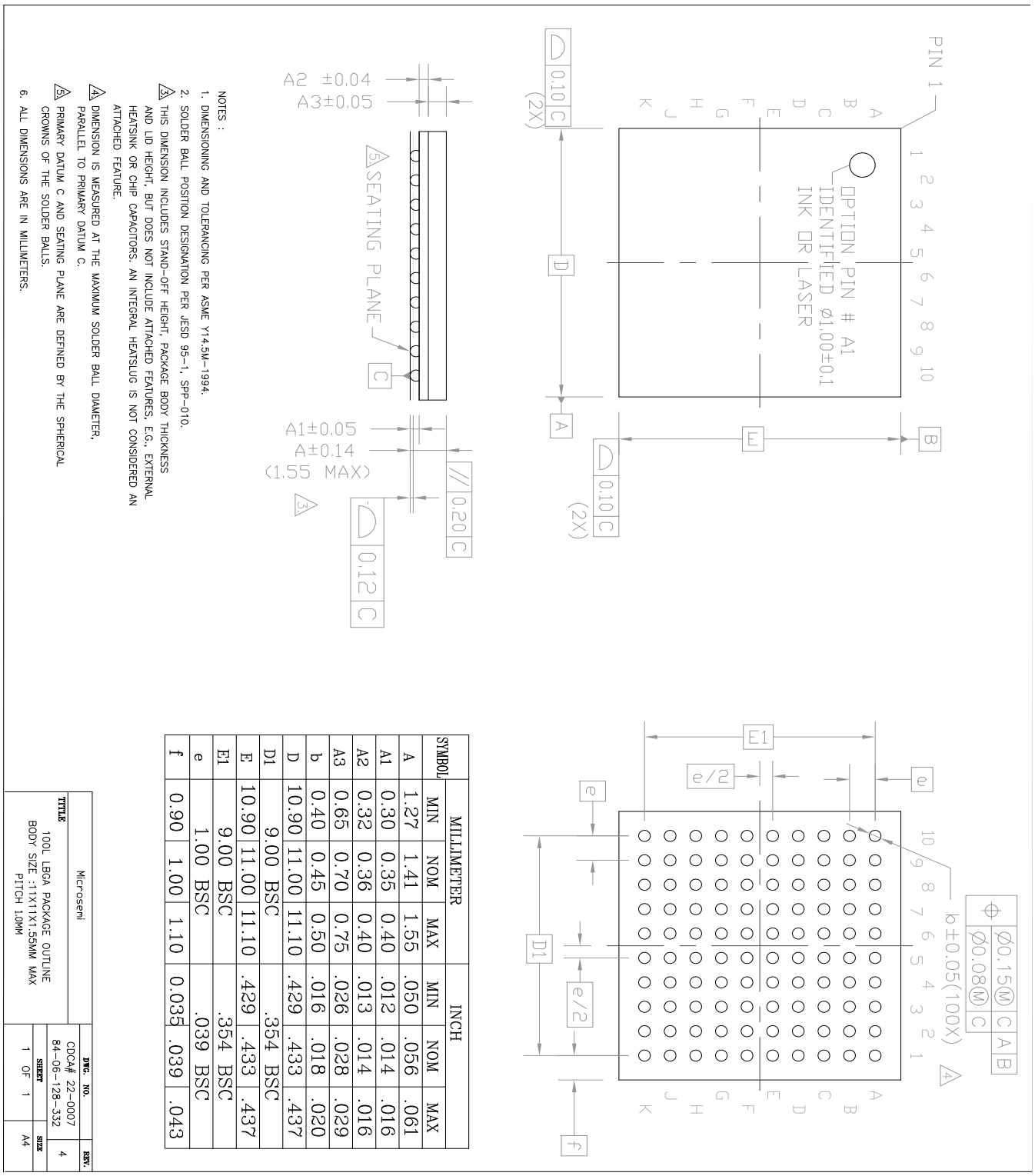


Figure 1 - Functional Block Diagram

Mechanical Drawing



SYMBOL	MILLIMETER			INCH		
	MIN	NOM	MAX	MIN	NOM	MAX
A	1.27	1.41	1.55	.050	.056	.061
A1	0.30	0.35	0.40	.012	.014	.016
A2	0.32	0.36	0.40	.013	.014	.016
A3	0.65	0.70	0.75	.026	.028	.029
b	0.40	0.45	0.50	.016	.018	.020
D	10.90	11.00	11.10	.429	.433	.437
D1	9.00 BSC			.354 BSC		
E	10.90	11.00	11.10	.429	.433	.437
E1	9.00 BSC			.354 BSC		
e	1.00 BSC			.039 BSC		
f	0.90	1.00	1.10	0.035	.039	.043

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.

Microsemi		DWG. NO.	REV.
		CDCA# 22-0007	4
TITLE	100L LBGA PACKAGE OUTLINE BODY SIZE :11X11X1.55MM MAX PITCH 1.0MM	84-06-128-332	
		SHEET	SIZE
		1 OF 1	A4

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www.microsemi.com