



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Features

- Four independent clock channels
- Four programmable digital PLLs/Numerically Controlled Oscillators (NCOs)
- Programmable synthesizers generate any clock-rate from 1 kHz to 750 MHz
- Four precision synthesizers generate clocks with low jitter of 0.63 ps RMS for 10 G PHYs
- 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 at 5.2 Hz, 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
- Eight reference inputs configurable as single ended or differential

Ordering Information

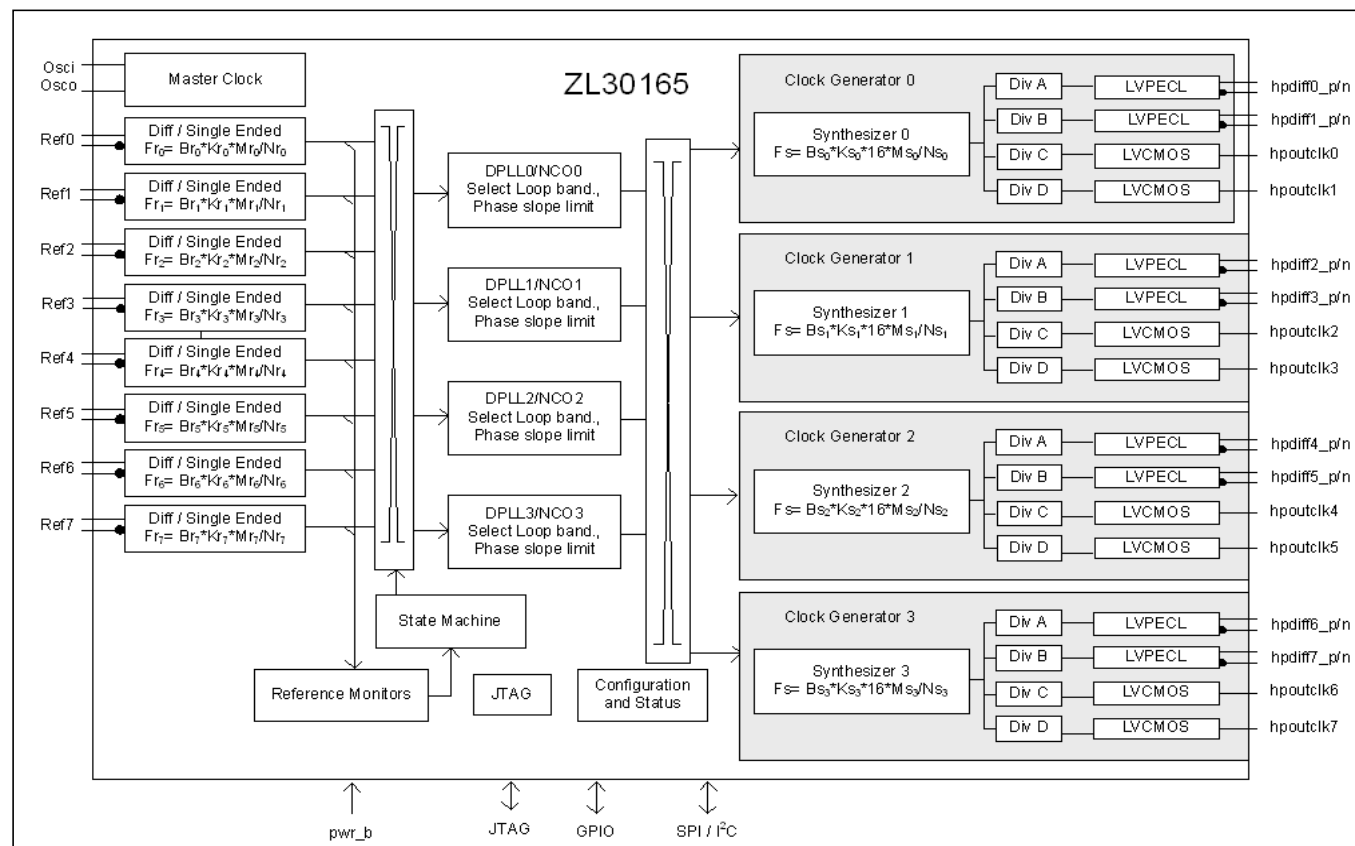
ZL30165GDG2 144 Pin LPGA Trays

Pb Free Tin/Silver/Copper
-40°C to +85°C
 Package Size: 13 x 13 mm

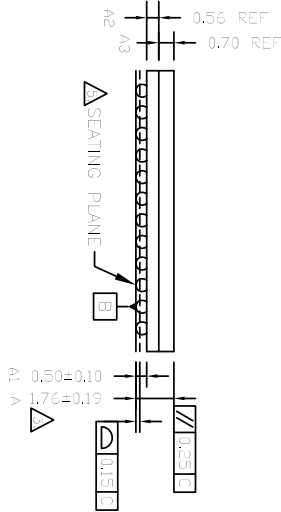
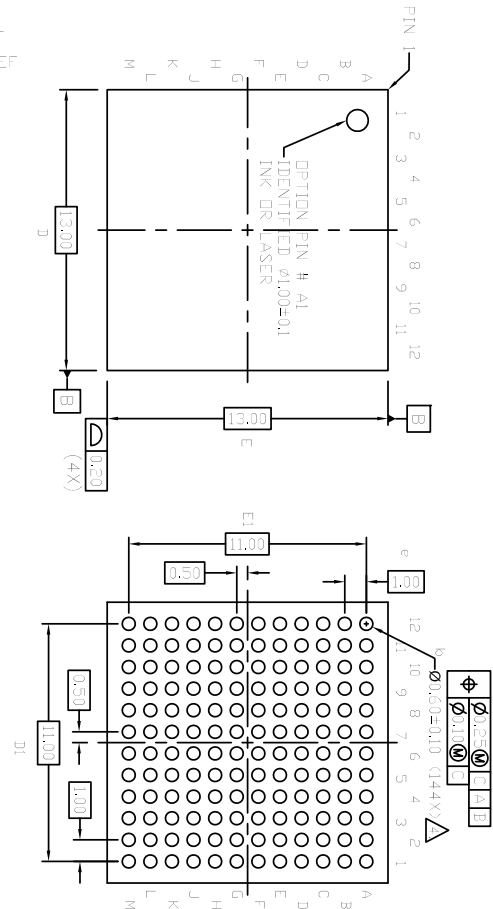
- Eight LVPECL outputs and eight LVCMOS outputs
- Operates from a single crystal resonator or clock oscillator
- Field programmable via SPI/I²C interface

Applications

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



1.0 Mechanical Drawing



NOTES :

1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
2. SOLDER BALL POSITION DESIGNATION PER JEDEC 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	1.57	1.76	1.95	.062	.069	.076
A1	0.4	0.5	0.6	.016	.020	.024
A2		0.56			.022	
A3		0.70			.028	
b	0.5	0.6	0.7	.020	.024	.028
D	12.90	13.00	13.10	.508	.512	.516
D1		11.00 BSC			.433 BSC	
E	12.90	13.00	13.10	.508	.512	.516
E1		11.00 BSC			.433 BSC	
e		1.00 BSC			.039 BSC	

Microsemi Corp				DATE	REV.
TITLE				22-0017	4
144L LEGA PACKAGE OUTLINE				84-06-128-228	
BODY SIZE :13 X 13 X1.76MM MAX				SIZE	44
PITCH: 1.0MM				1 OF 1	



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www.microsemi.com

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