1.0 High Level Overview

The ZL30142 SONET/SDH/GbE Stratum 3 System Synchronizer and SETS device is a highly integrated device that provides all of the functionality that is required for a central timing card in carrier grade network equipment. The basic functions of a central timing card include:

- Input reference monitoring for both frequency accuracy and phase irregularities
- Automatic input reference selection
- Support of both external timing and line timing modes
- Hitless reference switching
- Wander and jitter filtering
- Master/slave crossover for minimizing phase alignment between redundant timing cards
- Independent derived output timing path for support of the SETS functionality

In a typical application, the main timing path uses the DPLL to synchronize to either an external BITS source or to a recovered line timed source. The DPLL monitors the references and automatically selects the best available reference based on configurable priority and revertive properties. the DPLL provides the wander filtering function and the P0 synthesizer generates a jitter filtered clock and frame pulse for the system timing bus which supplies all line cards with a common timing reference.

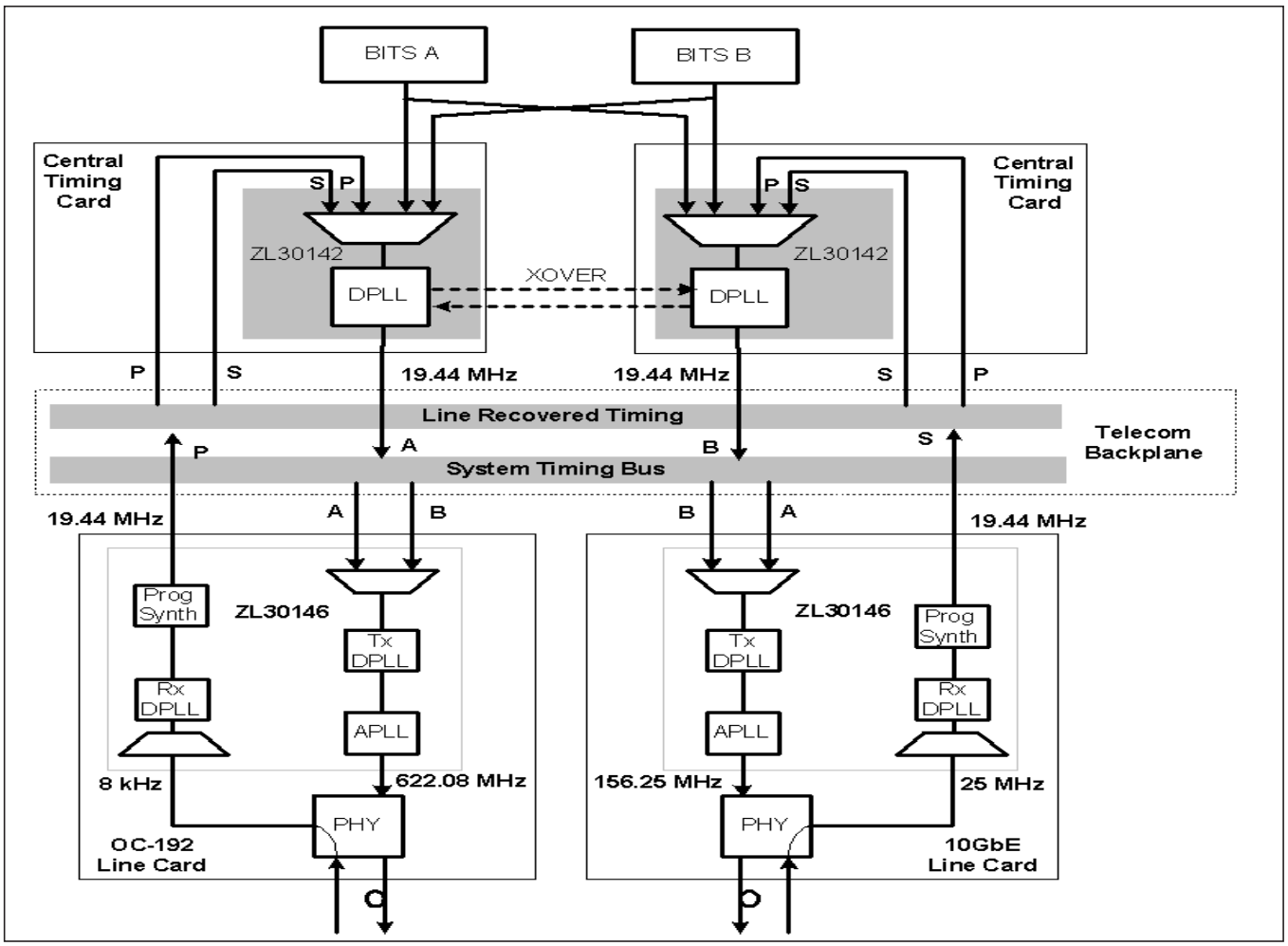
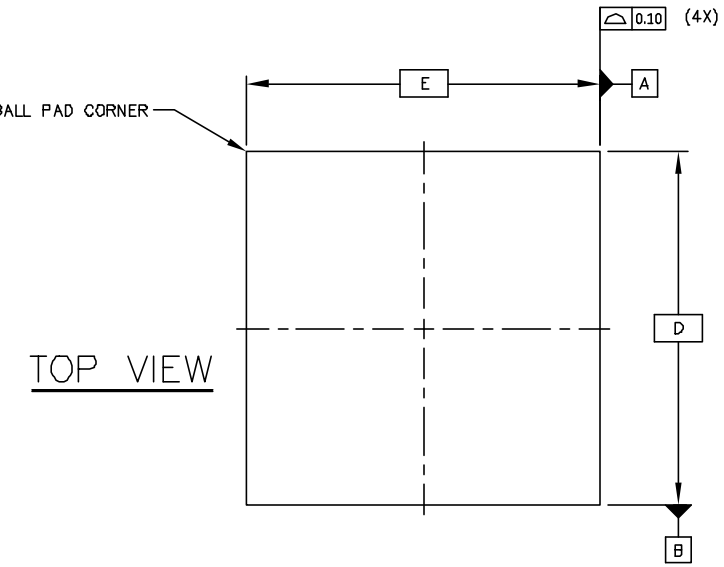
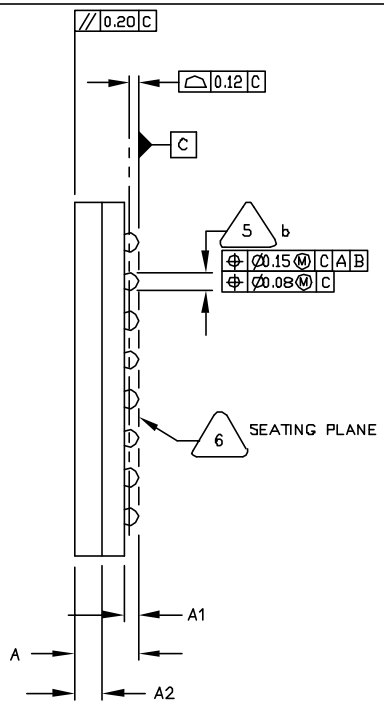


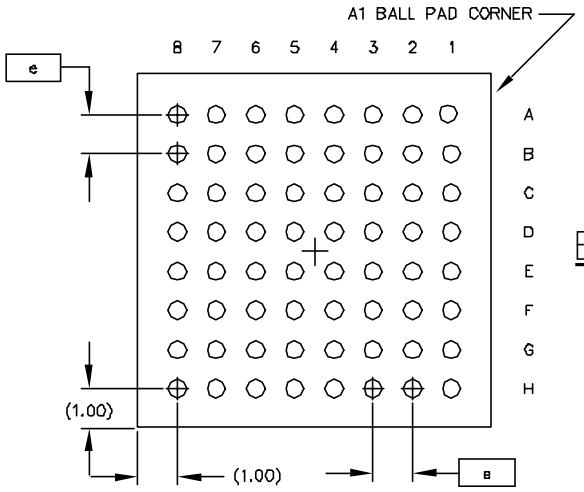
Figure 2 - Typical Application of the ZL30142



TOP VIEW



SIDE VIEW



BOTTOM VIEW

64 SOLDER BALLS

SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	1.52	1.62	1.72
A1	0.31	0.36	0.41
A2	0.65	0.70	0.75
b	0.46 Typ.		
D	9.00 REF.		
E	9.00 Ref.		
e	1.0 Ref		
n	64		

6. PRIMARY DATUM C AND SEATING PLANE ARE DEFINED BY THE SPHERICAL CROWNS OF THE SOLDER BALLS.

5. DIMENSION b IS MEASURED AT THE MAXIMUM SOLDER BALL DIAMETER, PARALLEL TO PRIMARY DATUM C.

4. THE MAXIMUM ALLOWABLE NUMBER OF SOLDER BALLS IS 64.

3. Not to Scale.

2. THE BASIC SOLDER BALL GRID PITCH IS 1.00mm.

1. ALL DIMENSIONS AND TOLERANCES CONFORM TO ASME Y14.5M–1994.

NOTES: UNLESS OTHERWISE SPECIFIED

	1			
	CDCA			
	15April05			

Microsemi

	Package Code GG
Previous package codes N/A	Package Outline for 64ball 9x9mm, 1.0 mm Pitch, 4 layer, CABGA
	111039

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